# **MICS**

Multiple Indicator Cluster Survey 2011







unite for children



| The Belize Multiple Indicator Cluster Survey (MICS) was carried out in 2011 by Statistical Institute of Belize (SIB). Financial and technical support was provided by the United Nations Children's Fund (UNICEF).  |
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| MICS is an international household survey programme developed by UNICEF. The Belize MICS was conducted as part of the fourth global round of MICS surveys (MICS4). MICS provides up-to-date information on the situation of children and women and measures key indicators that allow countries to monitor progress towards the Millennium Development Goals (MDGs) and other internationally agreed upon commitments. Additional information on the global MICS project may be obtained from <a href="https://www.childinfo.org">www.childinfo.org</a> . |
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# Belize Multiple Indicator Cluster Survey 2011

The Statistical Institute of Belize

UNICEF
United Nations Children's Fund

## **SUMMARY TABLE OF FINDINGS**

## Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Belize, 2011

| Topic                             | MICS4<br>Indicator<br>Number | MDG<br>Indicator<br>Number | Indicator   | Value                        |
|-----------------------------------|------------------------------|----------------------------|---|------------------------------|
| CHILD MORTALITY                   |                              |                            |   |                              |
| Child mortality                   | 1.1                          | 4.1                        | Under-five mortality rate   | 17 per 1,000                 |
| oaortanty                         | 1.2                          | 4.2                        | Infant mortality rate   | 14 per 1,000                 |
| NUTRITION                         |                              |                            |   |                              |
| Nutritional status                |                              | 1.8                        | Underweight prevalence  |                              |
|                                   | 2.1a                         |                            | Moderate and Severe (- 2 SD)  | 6.2 percent                  |
|                                   | 2.1b                         |                            | Severe (- 3 SD)   | 1.3 percent                  |
|                                   | 2.2a                         |                            | Stunting prevalence  Moderate and Severe (- 2 SD)                                       | 19.3 percent                 |
|                                   | 2.2b                         |                            | Severe (- 3 SD)   | 5.4 percent                  |
|                                   |                              |                            | Wasting prevalence  |                              |
|                                   | 2.3a                         |                            | Moderate and Severe (- 2 SD)  | 3.3 percent                  |
| Breastfeeding and                 | 2.3b<br>2.4                  |                            | Severe (- 3 SD) Children ever breastfed   | 1.2 percent<br>91.9 percent  |
| infant feeding                    | 2.4                          |                            | Early initiation of breastfeeding   | 61.5 percent                 |
| Ü                                 | 2.6                          |                            | Exclusive breastfeeding under 6 months  | 14.7 percent                 |
|                                   | 2.7                          |                            | Continued breastfeeding at 1 year   | 62.1 percent                 |
|                                   | 2.8                          |                            | Continued breastfeeding at 2 years  | 34.9 percent                 |
|                                   | 2.9                          |                            | Predominant breastfeeding under 6 months  | 34.3 percent                 |
|                                   | 2.10<br>2.11                 |                            | Duration of breastfeeding  Bottle feeding   | 16.1 months<br>57.8 percent  |
|                                   | 2.11                         |                            | Introduction of solid, semi-solid or soft foods   | 67.4 percent                 |
|                                   | 2.13                         |                            | Minimum meal frequency  | 67.6 percent                 |
|                                   | 2.14                         |                            | Age-appropriate breastfeeding   | 38.2 percent                 |
|                                   | 2.15                         |                            | At least 2 milk feeds   | 84.4 percent                 |
| Vitamin A                         | 2.17                         |                            | Vitamin A supplementation (children under age 5)  | 65.1 percent                 |
| Low birth weight                  | 2.18                         |                            | Low-birth weight infants  | 11.1 percent                 |
|                                   | 2.19                         |                            | Infants weighed at birth  | 95.0 percent                 |
| CHILD HEALTH                      | 2.1                          |                            | The same to the improvement in a second of  | 075                          |
| Vaccinations                      | 3.1<br>3.2                   |                            | Tuberculosis immunization coverage Polio immunization coverage                          | 97.5 percent<br>75.2 percent |
|                                   | 3.2                          |                            | Immunization coverage Immunization coverage for diphtheria, pertussis and tetanus (DPT) | 67.8 percent                 |
|                                   | 3.4                          | 4.3                        | Measles immunization coverage   | 84.9 percent                 |
|                                   | 3.5                          |                            | Hepatitis B immunization coverage   | 73.7 percent                 |
| Tetanus toxoid                    | 3.7                          |                            | Neonatal tetanus protection   | 52.4 percent                 |
| Care of illness                   | 3.8                          |                            | Oral rehydration therapy with continued feeding   | 42.5 percent                 |
|                                   | 3.9                          |                            | Care seeking for suspected pneumonia  | 82.2 percent                 |
| 0 11 16 1                         | 3.10                         |                            | Antibiotic treatment of suspected pneumonia   | 70.7 percent                 |
| Solid fuel use                    | 3.11<br>3.21                 |                            | Solid fuels Child disability  | 17.7 percent                 |
| Child Disability WATER AND SANITA |                              |                            | Child disability  | 36.4 percent                 |
| Water and                         | 4.1                          | 7.8                        | Use of improved drinking water sources  | 97.7 percent                 |
| sanitation                        | 4.2                          |                            | Water treatment   | 31.2 percent                 |
|                                   | 4.3                          | 7.9                        | Use of improved sanitation facilities   | 89.2 percent                 |
|                                   | 4.4                          |                            | Safe disposal of child's faeces   | 25.6 percent                 |
|                                   | 4.5                          |                            | Water and soap available  | 94.4 percent                 |
| REPRODUCTIVE HEA                  | 4.6                          |                            | Soap anywhere in dwelling   | 93.2 percent                 |
|                                   |                              | E 4                        | Adalaceant fartility rate   | 64 no. 1 000                 |
| Contraception and<br>unmet need   | 5.1<br>5.2                   | 5.4                        | Adolescent fertility rate Early childbearing  | 64 per 1,000<br>16.9 percent |
|                                   | 5.2                          | 5.3                        | Contraceptive prevalence rate   | 55.2 percent                 |
|                                   | 5.4                          | 5.6                        | Unmet need  | 15.9 percent                 |
| Maternal and                      |                              | 5.5                        | Antenatal care coverage   |                              |
| newborn health                    | 5.5a                         |                            | At least four times by any provider   | 96.2 percent                 |
|                                   | 5.5b<br>5.6                  |                            | At least four times by any provider  Content of antenatal care                          | 83.1 percent<br>96.6 percent |
|                                   | 5.0                          |                            |   |                              |
|                                   | 5.7                          | 5.2                        | Skilled attendant at delivery   | 96.2 percent                 |
|                                   | 5.7<br>5.8                   | 5.2                        | Skilled attendant at delivery Institutional deliveries                                  | 96.2 percent<br>93.8 percent |

| Торіс                                  | MICS4<br>Indicator<br>Number | MDG<br>Indicator<br>Number | Indicator  | Value                        |
|--|------------------------------|----------------------------|--|------------------------------|
| Post-natal health checks               | 5.10                         |                            | Post-partum stay in health facility  | 92.3 percent                 |
|  | 5.11<br>5.12                 |                            | Post-natal health check for the newborn Post-natal health check for the mother | 97.3 percent<br>94.6 percent |
| CHILD DEVELOPMEN                       | IT                           |                            |  |                              |
| Child development                      | 6.1                          |                            | Support for learning   | 85.6 percent                 |
| ·                                      | 6.2                          |                            | Father's support for learning  | 50.0 percent                 |
|  | 6.3                          |                            | Learning materials: children's books   | 39.6 percent                 |
|  | 6.4                          |                            | Learning materials: playthings   | 57.3 percent                 |
|  | 6.5                          |                            | Inadequate care  | 2.4 percent                  |
|  | 6.6<br>6.7                   |                            | Early child development index Attendance to early childhood education          | 87.5 percent<br>31.7 percent |
| EDUCATION                              | 0.7                          |                            | - Mondanie is suri, simunosa saasansii   | 0 III porooiii               |
| Literacy and                           | 7.1                          | 2.3                        | Literacy rate among young women  | 91.1 percent                 |
| education                              | 7.2                          |                            | School readiness   | 32.9 percent                 |
|  | 7.3                          |                            | Net intake rate in primary education   | 85.3 percent                 |
|  | 7.4                          | 2.1                        | Primary school net attendance rate (adjusted)                                  | 94.4 percent                 |
|  | 7.5                          | 2.2                        | Secondary school net attendance rate (adjusted)                                | 55.4 percent                 |
|  | 7.6<br>7.7                   | 2.2                        | Children reaching last grade of primary Primary completion rate                | 96.5 percent<br>92.9 percent |
|  | 7.7                          |                            | Transition rate to secondary school  | 90.9 percent                 |
|  | 7.9                          |                            | Gender parity index (primary school)   | 1.00 ratio                   |
|  | 7.10                         |                            | Gender parity index (secondary school)   | 1.23 ratio                   |
| CHILD PROTECTION                       |                              |                            |  |                              |
| Birth registration                     | 8.1                          |                            | Birth registration   | 95.2 percent                 |
| Child labour                           | 8.2                          |                            | Child labour   | 10.0 percent                 |
|  | 8.3                          |                            | School attendance among child labourers  | 90.4 percent                 |
| Obital allerate the a                  | 8.4                          |                            | Child labour among students  | 9.7 percent                  |
| Child discipline<br>Early marriage and | 8.5<br>8.6                   |                            | Violent discipline Marriage before age 15                                      | 70.5 percent<br>4.8 percent  |
| polygyny                               | 8.7                          |                            | Marriage before age 18   | 29.4 percent                 |
| , , , ,                                | 8.8                          |                            | Young women age 15-19 currently married or in union                            | 15.2 percent                 |
|  | 8.9                          |                            | Polygyny   | 3.4 percent                  |
|  | 8.10a                        |                            | Spousal age difference - 10+ years older (women age 15 – 19)                   | 17.0 percent                 |
|  | 8.10b                        |                            | Spousal age difference - 10+ years older (women age 20 – 24)                   | 15.4 percent                 |
| Domestic violence                      | 8.14                         |                            | Attitudes towards domestic violence  | 8.6 percent                  |
| HIV/AIDS, SEXUAL B                     | EHAVIOUR,                    | AND ORPHANED               | AND VULNERABLE CHILDREN  |                              |
| HIV/AIDS                               | 9.1                          |                            | Comprehensive knowledge about HIV prevention                                   | 44.5 percent                 |
| knowledge and attitudes                | 9.2                          | 6.3                        | Comprehensive knowledge about HIV prevention among young people                | 42.9 percent                 |
|  | 9.3                          |                            | Knowledge of mother- to-child transmission of HIV                              | 55.7 percent                 |
|  | 9.4                          |                            | Accepting attitude towards people with HIV                                     | 19.3 percent                 |
|  | 9.5                          |                            | Women who know where to be tested for HIV                                      | 86.6 percent                 |
|  | 9.6                          |                            | Women who have been tested for HIV and know the results                        | 28.4 percent                 |
|  | 9.7                          |                            | Sexually active young women who have been tested for HIV and know the results  | 40.8 percent                 |
|  | 9.8                          |                            | HIV counselling during antenatal care  | 59.4 percent                 |
| Carried had                            | 9.9                          |                            | HIV testing during antenatal care  | 71.8 percent                 |
| Sexual behaviour                       | 9.10<br>9.11                 |                            | Young women who have never had sex   | 68.7 percent                 |
|  | 9.11                         |                            | Sex before age 15 among young women Age-mixing among sexual partners           | 5.3 percent<br>15.9 percent  |
|  | 9.13                         |                            | Sex with multiple partners   | 2.1 percent                  |
|  | 9.14                         |                            | Condom use during sex with multiple partners                                   | 28.6 percent                 |
|  | 9.15                         |                            | Sex with non-regular partners  | 41.6 percent                 |
|  | 9.16                         | 6.2                        | Condom use with non-regular partners   | 64.6 percent                 |
|  | 9.18                         |                            | Prevalence of children with at least one parent dead                           | 3.8 percent                  |
| SUBJECTIVE WELL-B                      |                              |                            |  |                              |
| Subjective well-                       | SW.1                         |                            | Life satisfaction - women age 15-24  | 73.7 percent                 |
| being                                  | SW.2<br>SW.3                 |                            | Happiness - women age 15-24 Perception of a better life - women age 15-24      | 91.3 percent                 |
|  | ٥٧٧.٥                        |                            | i erception of a better life - women age 10-24                                 | 65.5 percent                 |

## TABLE OF CONTENTS

| Summary Table of Findings   | 2   |
|---|-----|
| Table of Contents   | 6   |
| List of Tables  | 8   |
| List of Figures   |     |
| List of Abbreviations   |     |
| Acknowledgements  |     |
| Executive Summary   | 16  |
| I. Introduction   | 22  |
| Background  | 22  |
| Survey Objectives   | 23  |
| II. Sample and Survey Methodology   | 24  |
| Sample Design   | 24  |
| Questionnaires  | 24  |
| Training and Fieldwork  |     |
| Data Processing   | 26  |
| III. Sample Coverage and the Characteristics of Households and Respondents    | 27  |
| Sample Coverage   |     |
| Characteristics of Households   |     |
| Characteristics of Female Respondents 15-49 Years of Age and Children Under-5 | 32  |
| IV. Child Mortality   | 35  |
| V. Nutrition  |     |
| Nutritional Status  | 37  |
| Breastfeeding and Infant and Young Child Feeding                              | 41  |
| Children's Vitamin A Supplementation  | 52  |
| Low Birth Weight  | 55  |
| VI. Child Health  | 58  |
| Vaccinations  | 58  |
| Neonatal Tetanus Protection   | 61  |
| Oral Rehydration Treatment  |     |
| Care Seeking and Antibiotic Treatment of Pneumonia                            | 66  |
| Solid Fuel Use  |     |
| Child Disability  | 72  |
| VII. Water and Sanitation   |     |
| Use of Improved Water Sources   | 75  |
| Use of Improved Sanitation Facilities   | 83  |
| Handwashing   | 88  |
| VIII. Reproductive Health   | 91  |
| Fertility   |     |
| Contraception   | 93  |
| Unmet Need  | 96  |
| Antenatal Care  |     |
| Assistance at Delivery  |     |
| Place of Delivery   |     |
| Post-natal Health Checks  | 109 |

| IX. Child Development  | 118 |
|--|-----|
| Early Childhood Education and Learning   |     |
| Early Childhood Development  |     |
| X. Literacy and Education  | 126 |
| Literacy among Young Women   | 126 |
| School Readiness   |     |
| Primary and Secondary School Participation   | 127 |
| XI. Child Protection   | 141 |
| Birth Registration   | 141 |
| Child Labour   | 143 |
| Child Discipline   | 148 |
| Early Marriage and Polygyny  |     |
| Attitudes toward Domestic Violence   | 155 |
| XII. HIV/AIDS, Sexual Behaviour, and Orphans                                       | 157 |
| Knowledge about HIV Transmission and Misconceptions about HIV/AIDS                 | 157 |
| Attitudes toward People Living with HIV/AIDS                                       | 164 |
| Knowledge of a Place for HIV Testing, Counselling and Testing during Antenatal Car |     |
| Sexual Behaviour Related to HIV Transmission                                       | 169 |
| Orphanhood   | 174 |
| XIII. Subjective Well-being  | 177 |
| Appendix A. Sample Design  | 183 |
| Appendix B. Budget   | 188 |
| Appendix C. Sensitization Campaign   | 191 |
| Appendix D. List of Personnel Involved in the Survey                               | 194 |
| Appendix E. Estimates of Sampling Errors   |     |
| Appendix F. Data Quality Tables  | 210 |
| Appendix G. MICS4 Indicators: Numerators and Denominators                          | 221 |
| Appendix H. Household Questionnaire  |     |
| Appendix I. Questionnaire For Individual Women                                     |     |
| Appendix J. Questionnaire For Children Under Five                                  | 270 |
| Annandiy K. Quaetiannaira Form For Child Disability                                | 227 |

#### LIST OF TABLES

#### **Characteristics of Households**

Table HH.1: Results of household, women's, and under-5 interviews.

Table HH.2: Household age distribution by sex.

Table HH.3: Household composition.

Table HH.4: Women's background characteristics.

Table HH.5: Under-5's background characteristics.

#### **Child Mortality**

Table CM.1: Children ever born, children surviving and proportion dead.

Table CM.2: Child mortality.

#### **Nutrition**

Table NU.1: Nutritional status of children.

Table NU.2: Initial breastfeeding.

Table NU.3: Breastfeeding.

Table NU.4: Duration of breastfeeding.

Table NU.5: Age-appropriate breastfeeding.

Table NU.6: Introduction of solid, semi-solid or soft food.

Table NU.7: Minimum meal frequency.

Table NU.8: Bottle feeding.

Table NU.10: Children's vitamin A supplementation.

Table NU.11: Low birth weight infants.

#### **Child Health**

Table CH.1: Vaccinations in first year of life.

Table CH.2: Vaccinations by background characteristics.

Table CH.3: Neonatal tetanus protection.

Table CH.4: Oral rehydration solutions and recommended homemade fluids.

Table CH.5. Feeding practices during diarrhoea.

Table CH.6: Oral rehydration therapy with continued feeding and other treatments.

Table CH.7: Care seeking for suspected pneumonia and antibiotic use during suspected pneumonia

Table CH.8: Knowledge of the two danger signs of pneumonia.

Table CH.9: Solid fuel use.

Table CH.10: Solid fuel use by place of cooking.

Table CH.11: Children at increased risk of disability.

#### **Water and Sanitation**

Table WS.1: Use of improved water sources.

Table WS.2: Household water treatment.

Table WS.3: Time to source of drinking water.

Table WS.4: Person collecting water.

Table WS.5: Types of sanitation facilities.

Table WS.6: Use and sharing of sanitation facilities.

Table WS.7: Disposal of child's faeces.

Table WS.8: Drinking water and sanitation ladders.

Table WS.9: Water and soap at place for hand washing.

Table WS.10: Availability of soap.

#### **Reproductive Health**

Table RH.1: Adolescent birth rate and total fertility rate.

Table RH.2: Early childbearing.

Table RH.3: Trends in early childbearing.

Table RH.4: Use of contraception.

Table RH.5: Unmet need for contraception.

Table RH.6: Antenatal care provider.

Table RH.7: Number of antenatal care visits.

Table RH.8: Content of antenatal care.Table RH.9: Assistance during delivery.

Table RH.10: Place of delivery.

Table RH.11: Post-partum stay in health facility.

Table RH.12: Post-natal health checks for newborns.

Table RH.13: Post-natal care (PNC) visits for newborns within one week of birth

Table RH.14: Post-natal health checks for mothers

Table RH.15: Post-natal care (PNC) visits for mothers within one week of birth

Table RH.16: Post-natal health checks for mothers and newborns

#### **Child Development**

Table CD.1: Early childhood education.

Table CD.2: Support for learning.Table CD.3: Learning materials.Table CD.4: Inadequate care.

Table CD.5: Early child development index

#### **Education**

Table ED.1: Literacy among young women.

Table ED.2: School readiness.

Table ED.3: Primary school entry.

Table ED.4A: Primary school attendance.

Table ED.4B: Primary school attendance (ISCED).

Table ED.5A: Secondary school attendance.

Table ED.5B: Secondary school attendance (ISCED).

Table ED.6: Children reaching last grade of primary school.

Table ED.7A: Primary school completion and transition to secondary school.

Table ED.7B: Primary school completion and transition to secondary school (ISCED).

Table ED.8A: Education gender parity.

Table ED.8B: Education gender parity (ISCED).

#### **Child Protection**

Table CP.1: Birth registration.
Table CP.2: Child labour.

Table CP.3: Child labour and school attendance.

Table CP.4: Child discipline.

Table CP.5: Early marriage and polygyny
Table CP.6: Trends in early marriage.

Table CP.7: Spousal age difference.

Table CP.11: Attitudes toward domestic violence.

#### **HIV/AIDS**

Table HA.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive

knowledge about HIV transmission.

Table HA.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive

knowledge about HIV transmission among young women.

Table HA.3: Knowledge of mother-to-child HIV transmission .

Table HA.4: Accepting attitudes toward people living with HIV/AIDS.

Table HA.5: Knowledge of a place for HIV testing.

Table HA.6: Knowledge of a place for HIV testing among sexually active young women.

Table HA.7: HIV counselling and testing during antenatal care.

Table HA.8: Sexual behaviour that increases the risk of HIV infection.

Table HA.9: Sex with multiple partners.

Table HA.10: Sex with multiple partners among young women.

Table HA.11: Sex with non-regular partners.

Table HA.12: Children's living arrangements and orphanhood. Table HA.13: School attendance of orphans and non-orphans.

#### **Life Satisfaction**

Table SW.1: Domains of life satisfaction.

Table SW.2: Life satisfaction and happiness.

Table SW.3: Perception of a better life.

#### **Sampling Errors**

Table SE.1: Indicators selected for sampling error calculations

Table SE.2: Sampling errors: Total sample
Table SE.3: Sampling errors: Urban areas
Table SE.4: Sampling errors: Rural areas

Table SE.5: Sampling errors: Corozal
Table SE.6: Sampling errors: Orange Walk

Table SE.7: Sampling errors: Belize Excluding Belize City South Side

Table SE.8: Sampling errors: Belize City South Side

Table SE.9: Sampling errors: Belize District

Table SE.10: Sampling errors: Cayo

Table SE.11: Sampling errors: Stann Creek
Table SE.12: Sampling errors: Toledo

#### **Data Quality**

Table DQ.1: Age distribution of household population

Table DQ.2: Age distribution of eligible and interviewed women

Table DQ.3: Age distribution of under-5s in household and under-5 questionnaires

Table DQ.4: Women's completion rates by socio-economic characteristics of households

Table DQ.5: Completion rates for under-5 questionnaires by socio-economic characteristics of households

Table DQ.6: Completeness of reporting

Table DQ.7: Completeness of information for anthropometric indicators

Table DQ.8: Heaping in anthropometric measurements
 Table DQ.9: Observation of women's health cards
 Table DQ.10: Observation of under-5s birth certificates

Table DQ.11: Observation of vaccination cards

Table DQ.12: Presence of mother in the household and the person interviewed for the under-5 questionnaire

Table DQ.13: Selection of children age 2-14 years for the child discipline module

Table DQ.14: School attendance by single age

Table DQ.15: Sex ratio at birth among children ever born and living

#### LIST OF FIGURES

Figure HH.1. Population pyramid, MICS, Belize 2011 Figure HH.2. Population pyramid, Belize Census 2011

Figure CM.1. Under-5 mortality rates by sex, region and ethnicity, Belize, 2011

Figure CM.1. Trend in under-5 mortality rates, Belize, 2011

Figure NU.1. Anthropometric indicators by wealth, Belize, 2011
Figure NU.2. Anthropometric indicators by region, Belize, 2011
Figure NU.3. Anthropometric indicators by ethnicity, Belize, 2011

Figure NU.4. Breastfeeding by wealth, Belize, 2011 Figure NU.5. Breastfeeding by ethnicity, Belize, 2011

Figure NU.6. Breastfeeding by place of delivery, Belize, 2011

Figure NU.7. Breastfeeding by region, Belize, 2011

Figure NU.8. Age-appropriate breastfeeding by wealth and education, Belize, 2011 Figure NU.9. Fed with a bottle with nipple by wealth and education, Belize, 2011

Figure NU.10. Infants below 2500 grams at birth by wealth, Belize, 2011

| Figure CH.1.   | Polio and DPT vaccinations, Belize, 2011  |
|--|---|
| Figure RH.1.<br>Figure RH.2.<br>Figure RH.3.<br>Figure RH.4.<br>Figure RH.5. | Trends in early childbearing by age and area, Belize, 2011 Unmet need for contraception by age and wealth, Belize, 2011 Met need for contraception by age and wealth, Belize, 2011 Met need for spacing and limiting by age, Belize, 2011 Demand for contraception satisfied by wealth, education, age and area, Belize, 2011 |
| Figure ED.1.<br>Figure ED.2.<br>Figure ED.3<br>Figure ED.4.                  | Primary net attendance ratio by education of mother and sex, Belize, 2011 Primary net attendance ratio by wealth and sex, Belize, 2011 Secondary net attendance ratio by mother's education and wealth, Belize, 2011 Children reaching last grade of primary school by wealth index, Belize, 2011                             |
| Figure CP.1. Figure CP.2. Figure CP.3. Figure CP.4. Figure CP.5.             | Child labour by wealth index and education, Belize, 2011 Labour force participation by ethnicity, Belize, 2011 Child discipline by education, Belize, 2011 Trends in early marriage by age and area, Belize, 2011 Domestic violence justified by area, age of respondent, education and wealth index, Belize, 2011            |
| Figure HA.1.   | Percentage of women with comprehensive knowledge of HIV by education and wealth index, Belize 2011  |
| Figure HA.2.   | Accepting attitudes towards people living with AIDS by education and wealth index, Belize 2011  |
| Figure HA.4.<br>Figure HA.5.<br>Figure HA.6.                                 | Sexual behavior that increases the risk of HIV infection, Belize 2011  Never married women age 14-24 who have never had sex by wealth, Belize, 2011  Sex with non-cohabiting partner by wealth index and area, Belize, 2011  Children's living arrangements by ethnicity, Belize, 2011  |
| Figure SW.1.   | Percentage of women age 15-24 years who are very or somewhat satisfied by age, area and education, Belize, 2011   |
| Figure SW.2.   | Life improved last year and will get better next year by wealth index, Belize, 2011   |

## LIST OF ABBREVIATIONS

| AIDS         | Acquired Immune Deficiency Syndrome    |
|--------------|--|
| ANC          | Antenatal Care                         |
| BCG          | Bacillis-Cereus-Geuerin (Tuberculosis) |
| CDC          | Center for Disease Control             |
| CRC          | Convention on the Right of the Child   |
| <b>CSPro</b> | Census and Survey Processing System    |
| deff         | Design Effect                          |
| DHS          | Demographic Health Surveys             |
| DPT          | Diphteria, Pertussis, Tetanus          |
| ECDI         | Early Child Development Index          |
| ED           | Enumeration District                   |
| EPI          | Expanded Programme on Immunization     |

FHS Family Health Survey
GPI Gender Parity Index

HepB Hepetitis

HIB Haemophilus Influenzae B
HIV Human Immunodeficiency Virus

IMR Infant Mortality Rate

ISCED International Standard Classification of Education

IUD Intrauterine Device

JMP Joint Monitoring Programme
LAM Lactational Amenorrhea Method
MDG Millennium Development Goals
MICS Multiple Indicator Cluster Survey

MICS4 Fourth global round of Multiple Indicator Cluster Survey Programme

MoH Ministry of Health
NAR Net Attendance Rate

NCFC National Committee for Families and Children

NCHS National Centre for Health Statistics

PNHC Post Natal Health Check
NPA National Plan of Action

ng0 Probability of Dying Before Year n

ORS Oral Rehydration Solution
ORT Oral Rehydration Treatment

PNC Post Natal Care

pps Probability Proportional to Size

PSU Primary Sampling Unit
RHF Recommended Home Fluid
SIB Statistical Institute of Belize
STIs Sexually Transmitted Infections

SPSS Statistical Package for Social Sciences

TSFB Time Since First Birth U5MR Under-5 Mortality Rate

UN United Nations

UNAIDS United Nations Programme on HIV/AIDS

UNCT United Nations Country Team

UNDAF United Nations Development Framework

**UNFPA** United Nations Population Fund

UNIGASS United Nations General Assembly Special Session on HIV/AIDS

UNICEF United Nations Children's Fund

WFFC World Fit For Children
WHO World Health Organization

#### **FOREWORD**

Programme of Cooperation to monitor the progress of boys and girls development in Belize. MICS provides updated statistically sound and internationally comparable estimates of a range of indicators in the areas of health, education, child protection (including disabilities), water and sanitation and HIV and AIDS. The survey provides information on the prevalence of child mortality, stunting, wasting, underweight, and obesity; breastfeeding and supplementary feeding practices, including the immunization status of children. Information is also provided on the prevalence of diarrhea and pneumonia among young children and treatment sought. Valuable data on health practices, including access to improved drinking water sources and sanitation, and knowledge about HIV and Aids are made available. Belize would also have data on child development, child protection and life satisfaction. The findings from the MICS are one of the most important sources of data used as a basis for policy decisions and programme interventions, and for influencing public opinion on the situation of children and women.

#### **A**CKNOWLEDGEMENT

The Multiple Indicator Cluster Survey 2011 is another land mark achievement of Belize and it is with great pride that the Government of Belize and it's Statistical Institute and UNICEF make public this report. The report provides vital information on a wide range of social indicators related to the situation of children and women of Belize.

The Statistical Institute of Belize and the MICS team, head by Director General Glenn Avilez merit special appreciation for their professionalism, dedication, and effort in undertaking this enormous task. We acknowledge the hard work done by the data collection and enumeration teams whose work in the field was vital to the success of this survey. We are indebted to the women of Belize who participated in this initiate and to the men who provided the support when requested.

We would also like to convey special gratitude to the Steering Committee who played an instrumental role in the successful completion of the survey and report. We remain thankful for the technical support of Dr.Nathalia Largaespada Beer (Ministry of Health), Ms.Yuvone Flowers (Ministry of Education, Youth and Sport), Mr. John Flowers, Mark Antrobus (Ministry of Human Development, Social Transformation and Poverty Alleviation), Ms. Ann Marie Williams (National Aids Commission), Mr. Dylan Williams (National Committee for Families and Children), Mariana Mansur (UNDP Belize), Joe Hendrix (University of Belize, Policy Observatory).

Special attention goes to the UNICEF MICS Global (Head Quarters, NewYork) and Regional (TACRO) teams for the technical and financial support. We are highly indebted to Dr. Shane Khan (MICS Regional Coordinator), Dr Attila Hancioglu (Senior Advisor/Global MICS Coordinator), Dr Ivana Bjelic (Statistics Specialist), and Dr. Claudia Cappa (Statistics and Monitoring Specialist) for their unflagging support and guidance to the entire process. Similarly the technical group at UNICEF Belize, Ms Christine Norton (Representative), Ms Paulette Wade (Planning Monitoring and Evaluation Specialist) and Dr. Leopold Perriott (MICS Belize Coordinator) for their untiring support throughout the survey process.

Finally to Mr. Peter Wingfield-Digby and Mr. Martin Wulfe who provided technical support and training to SIB for the sample design and data processing phases of the survey.

### **E**XECUTIVE **S**UMMARY

ICS is an international household survey programme developed by UNICEF. The Belize MICS was conducted as part of the fourth global round of MICS surveys (MICS4). MICS provides up-to-date information on the situation of children and women and measures key indicators that allow countries to monitor progress towards the Millennium Development Goals (MDGs) and other internationally agreed upon commitments.

The Belize Multiple Indicator Cluster Survey (MICS) was conducted in 2011 by The Statistical Institute of Belize. Fieldwork was carried out between July, 2011 and August, 2011. Financial and technical support was provided by the United Nations Children's Fund (UNICEF).

#### **Findings**

#### **Child Mortality**

 MICS 2011 estimated that the infant mortality rate was 14 per thousand, and the under-5 mortality rate (U5MR) was 17 per thousand.

#### **Nutritional Status**

- The key indicators for monitoring the nutritional status of a child under the age of five are underweight (weight-for-age), stunting (height-for- age) and wasting (weight-for-height). In Belize 6.2 percent of children under age five are underweight, 19.3 percent are stunted and 3.3 percent are wasted.
- 7.9 percent of children under age five are overweight.

#### **Breastfeeding**

- About 15 percent of 0-1 month old children are exclusively breastfed.
- Continued breastfeeding at one year is 62 percent and declines to 34 percent in the second year of life.

#### **Vitamin A Supplements**

• 65.1 percent of children aged 6-59 months received a high dose Vitamin A supplement in the six months prior to the MICS4.

#### **Low Birth Weight**

• 11.1 percent of children who were weighed had a birth weight of less than 2,500 grams at birth.

#### **Immunization**

- 97.5 percent of children have received BCG vaccinations.
- Diphteria, Whooping Cough and Tetanus (DPT) immunization are obtained through the Pentavalent and the DTaP P vaccines: 68.7 percent have received three doses of DPT.

- Immunization against Polio is obtained through the Polio and the DTaP P vaccines: 75.2 percent have received three doses of polio vaccine.
- By 18 months of age 84.9 percent of children were immunized against measles.

#### **Tetanus Toxoid**

- Overall, 52.4 percent of the women in Belize received vaccines against tetanus during pregnancy.
- 34.5 percent of the women received at least two doses during their last pregnancy.

#### **Oral Rehydration Treatment (ORT)**

- 7.9 percent of the children under age five had diarrhoea in the two weeks preceding the survey.
- The recommended treatment for diarrhoea in children is oral rehydration therapy (ORS packet or recommended homemade fluid or increased fluids) with continued feeding: 42.5 percent of children with diarrhoea received this treatment.

#### **Care Seeking and Antibiotic Treatment of Pneumonia**

- About three percent of children under age five had symptoms consistent with pneumonia during the two weeks preceding the survey.
- Overall, 70.7 percent of children with suspected pneumonia received antibiotics.
- Antibiotic treatment of suspected pneumonia is lower in rural areas than in urban areas, only 63.7
  percent, compared to 90.1 percent in urban areas, received antibiotic treatment.
- Solid Fuel Use
- 17.7 percent of all households in Belize are using solid fuels for cooking.

#### **Water and Sanitation**

- Most of the population of Belize (97.7 %) use an improved source of drinking water.
- Both the urban (99.5 percent) and rural (96.2 percent) areas display a high access to improved sources of drinking water.
- The main improved source of drinking water in Belize is bottled water (47.8 percent) followed by water piped into dwelling (17.9 percent).
- One in ten households (9.7 percent ) in the Toledo District have no sanitary facility but use the bush or field to dispose of excreta.

#### **Fertility**

- Adolescent birth rate is 64 per thousand and twice as high in rural areas (85 per thousand) than in urban areas (39 per thousand).
- The percentage of women age 20-24 years who have had a live birth before age 18 is 16.9.

#### **Contraception**

- Use of contraception was reported by 55.2 percent of women currently married or in a union.
- The most popular method is female sterilization which is used by 20.7 percent of married women in Belize. The next most popular method is the pill (12.5 percent).
- Contraceptive use in urban and rural married women age 15-49 years was 57.7 percent (urban) and 53.3 percent (rural).
- Contraceptive prevalence is highest in Corozal District at 61.8 percent.
- In the Cayo District, contraceptive use is relatively rare; only 28.3 percent of married women reported using any method.

#### **Unmet Need**

- The unmet need for contraception is 15.9 percent (spacing 8.4% and limiting 7.5%).
- Antenatal Care
- 96.2 percent of women age 15-49 years with a live birth in the two years preceding the survey received antenatal care (ANC) at least once by skilled personnel and 83.1 percent received ANC at least 4 times by any provider.
- The lowest level of antenatal care is found in the Toledo District (91.5 percent) and in the Belize District (91.7 percent).
- In the Belize District the lowest level of antenatal care is in the Belize (Excluding Belize City South Side) (86.9 percent). In Belize City South Side the rate is 96.4 percent.

#### **Assistance at Delivery**

- About 96.2 percent of births occurring in the two years preceding the MICS survey were delivered by skilled personnel.
- This percentage is highest in Orange Walk at 99.3 percent and lowest in Toledo at 87.8 percent.
- Delivery by C-section occurred in 28.1 percent of births.
- Doctors delivered almost twice as many babies in private sector health facilities than in public sector health facilities (47.1 percent to 79.2 percent) and were most active in urban areas (urban 56.9 percent, rural 45.3 percent).
- Nurses or midwives delivered most frequently in rural areas (urban 41.3 percent to rural 47.9 percent), in public health facilities (public 52.5 percent to private 17.1 percent) and in poorer families (poorest 55.4 percent, richest 33.9 percent).
- Both mother and newborn had post natal health checks within 2 days of birth at a rate of 92.7 percent.

#### **Child Development**

- 31.7 percent of children aged 36-59 months are attending pre-school. Urban-rural and regional differentials are observed the figure is as high as 40.4 percent in urban areas, compared to 26.4 percent in rural areas.
- For 85.6 percent of under-five children, an adult household member engaged in more than four activities that promote learning and school readiness during the 3 days preceding the survey.

- The average number of activities in the 3 days preceding the survey that adults engaged with children was 5.1.
- Father's involvement with one or more activities was 50.0 percent.
- In Belize, 39.6 percent of children 0-59 months old live in households where at least 3 children's books are present. The percentage of children with 10 or more books declines to 19.5percent.
- 57.3 percent of children aged 0-59 months had 2 or more playthings to play with in their homes.
- 2.4 percent of children were left with inadequate care during the week preceding the survey, either by being left alone or in the care of another child.
- Physical growth, literacy and numeracy skills, socio-emotional development and readiness to learn are vital domains of a child's overall development. In Belize, 87.5 percent of children aged 36-59 months are developmentally on track.

#### **Pre-School Attendance and School Readiness**

 Overall, 32.9 percent of children who are currently attending the infant 1 of primary school were attending pre-school the previous year.

#### **Primary and Secondary School Participation by National Educational Levels**

- The majority of children of primary school age are attending school (94.4 percent).
- In urban areas 98.0 percent of children attend primary school while in rural areas attendance is only 92.2 percent.
- The majority of all children starting infant one in primary school (97.6 percent) will eventually reach the last grade (standard 6).
- Only half of the children of secondary school age are attending secondary school (55.4 percent).
- Gender parity index (GPI) for primary school is 1.00.
- Gender parity increases to 1.21 for secondary education.
- The disadvantage of boys is particularly pronounced in urban areas and Garifuna headed households.

#### **Adult Literacy**

• Over ninety percent (91.1 percent) of women in Belize are literate and that literacy status varied considerably by place of residence. The most literate women are found in Belize District (98.5 percent) and the least literate in the Orange Walk District (82.0 percent).

#### **Birth Registration**

- The births of 95.2 percent of children under-five years in Belize have been registered.
- Only 87.3 percent of children 0 to 11 months have been registered as compared to older children who
  have been registered at rates in the mid ninety percentages.
- Children in the Corozal (93.3 percent) and Cayo (94.8 percent) Districts are somewhat less likely to have their births registered than other children and children from Garifuna households are registered at slightly less rates (91.9 percent) than children from other ethnic backgrounds.

#### **Child Labour**

- In Belize, 10 percent of children age 5 14 are involved in child labour.
- 12.1 percent of children 5 to 11 years and 4.8 percent of children 12 to 14 years are engaged in child labour.
- For the 5 to 11 years group child labour rates are males 14.6 percent and females 9.7 percent while for the 12 to 14 years group 7.0 percent of males and 2.8 percent of females engage in child labour.
- Most of the child labour occurs in rural areas. The rates are 4.1 percent urban and 13.8 percent rural.
- Of the 93.4 percent of the children 5-14 years of age attending school, 9.7 percent are also involved in child labour activities.
- On the other hand, out of the children who are involved in child labour, the majority of them are also attending school (90.4 percent).

#### **Child Discipline**

- In Belize, 70.5 percent of children age 2-14 years were subjected to at least one form of psychological or physical punishment by their mothers/caretakers or other household members.
- 5.2 percent of children were subjected to severe physical punishment.
- 26.2 percent of mothers/caretakers believed that children should be physically punished.

#### **Domestic Violence**

- Overall, 8.6 percent of women in Belize feel that their husband/partner has a right to hit or beat them for at least one of a variety of reasons.
- 6.8 percent of women justify violence in instances when they neglect the children.
- Acceptance is more present among rural dwellers.
- Women living in poorest households, less educated and Mayan households are more accepting of domestic violence.

#### **Child Disability**

- In Belize, 2011 more than a third (36.4 percent) of children 2 to 9 years was at risk for one or more disabilities as reported by the mother or primary caretaker.
- The Cayo District recorded the highest at risk percentage (59.3 percent) and the Belize City South Side the lowest (23.0 percent).
- Rural children are at higher risk for disabilities than urban children (urban 28.3 percent, rural 41.5 percent).

#### **Knowledge of HIV Transmission and Condom Use**

- 94.7 percent of women in Belize had heard of AIDS.
- About eighty percent (77.9 percent) of women know of having one faithful uninfected sex partner, 72.9
  percent know of using a condom every time, and 64.4 percent know both main ways of preventing HIV

transmission.

- Comprehensive knowledge about HIV among women age 15 to 49 years is low at only 44.5.
- Only 42.9 percent of women aged 15 to 24 years have comprehensive knowledge of HIV.
- Urban women have a higher rate of knowledge (56.4 percent) than rural women (34.0 Percent).
- Overall, 90.2 percent of women know that HIV can be transmitted from mother to child.
- The percentage of women who know all three ways of mother-to-child transmission is 55.7 percent, while 4.5 percent of women did not know of any specific means of mother-to-child transmission.
- In Belize 96.5 percent of women who have heard of AIDS agree with at least one accepting statement.
- The most common accepting attitude is willingness to care for a family member with the AIDS virus in their own home (85.0 percent).
- Women in rural areas tend to be less accepting of people with the AIDS virus. In urban areas, 23.4 percent express accepting attitudes on all four indicators while the rate is 15.4 percent in rural areas.
- 86.6 percent of women 15 to 49 years knew where to be tested for HIV, while 62.9 percent had actually been tested ever, and only 29.9 percent had been tested in the last year.

#### **Sexual Behaviour Related to HIV Transmission**

- 68.7 percent of women 15 to 24 years had never had sex while 5.3 percent had sex before age 15.
- 15.9 percent had sex with a man 10 years or older in the last 12 months.
- 2.1 percent of women 15-49 years of age report having sex with more than one partner. Of those women, only 28.6 percent report using a condom the last time they had sex (this is sex in the last 12 months).

#### **Orphaned Children**

- 65.4 percent of children aged 0-17 years in Belize live with both the parents.
- About one in fifteen children (6.9 percent) is living with neither parent.
- In Belize, 0.4 percent of children aged 10-14 have lost both parents.
- Among the children age 10-14 who have not lost a parent and who live with at least one parent, 95.0
  percent are attending school.



#### I. Introduction

#### **Background**

his report is based on the Belize Multiple Indicator Cluster Survey (MICS), conducted in 2011 by the Statistical Institute of Belize. The survey provides valuable information on the situation of children and women in Belize, and was based, in large part, on the needs to monitor progress towards goals and targets emanating from recent international agreements: the Millennium Declaration, adopted by all 191 United Nations Member States in September 2000, and the Plan of Action of A World Fit For Children, adopted by 189 Member States at the United Nations Special Session on Children in May 2002. Both of these commitments build upon promises made by the international community at the 1990 World Summit for Children.

In signing these international agreements, governments committed themselves to improving conditions for their children and to monitoring progress towards that end. UNICEF was assigned a supporting role in this task (see table below).

A Commitment to Action: National and International Reporting Responsibilities

The governments that signed the Millennium Declaration and the World Fit for Children Declaration and Plan of Action also committed themselves to monitoring progress towards the goals and objectives they contained:

"We will monitor regularly at the national level and, where appropriate, at the regional level and assess progress towards the goals and targets of the present Plan of Action at the national, regional and global levels. Accordingly, we will strengthen our national statistical capacity to collect, analyse and disaggregate data, including by sex, age and other relevant factors that may lead to disparities, and support a wide range of child-focused research. We will enhance international cooperation to support statistical capacity-building efforts and build community capacity for monitoring, assessment and planning." (A World Fit for Children, paragraph 60)

"...We will conduct periodic reviews at the national and sub-national levels of progress in order to address obstacles more effectively and accelerate actions...." (A World Fit for Children, paragraph 61)

The Plan of Action (paragraph 61) also calls for the specific involvement of UNICEF in the preparation of periodic progress reports:

"... As the world's lead agency for children, the United Nations Children's Fund is requested to continue to prepare and disseminate, in close collaboration with Governments, relevant funds, programmes and the specialized agencies of the United Nations system, and all other relevant actors, as appropriate, information on the progress made in the implementation of the Declaration and the Plan of Action."

Similarly, the Millennium Declaration (paragraph 31) calls for periodic reporting on progress:

"...We request the General Assembly to review on a regular basis the progress made in implementing the provisions of this Declaration, and ask the Secretary-General to issue periodic reports for consideration by the General Assembly and as a basis for further action."

The National Plan of Action (NPA) for children and adolescents in Belize 2004 – 2015 was adopted by the Government of Belize to ensure the wellbeing of Belize's children. This plan was conceptualized within the framework of national development agencies, the International Convention on the Rights of the Child (CRC) and the Millennium Development goals (MDG).

Promoting, monitoring and evaluation of the implementation of the Convention on the Rights of the Child (CRC) are responsibilities assigned to the National Committee for Families and Children (NCFC). The NCFC advocates on behalf of children and adolescents with the Government to meet its obligations as signatory to the Convention and also with local agencies which provide services to families and children.

Six main areas are addressed in the NPA: Education, Health, Child Protection, HIV & AIDS, Families and Culture. The Multiple Indicator Cluster Survey (MICS) captures information on many of the MDG indicators and also provides information in many additional areas. The MICS programme is designed to review and monitor targets defined in the NPA and to evaluate the extent to which targets are being realized to achieve compliance with the Convention on the Rights of the Child and with the Millennium Development Goals. This final report presents the results of the indicators and topics covered in the survey.

#### **Survey Objectives**

The 2011 Belize Multiple Indicator Cluster Survey has as its primary objectives:

- To provide up-to-date information for assessing the situation of children and women in Belize;
- To furnish data needed for monitoring progress toward goals established in the Millennium Declaration and other internationally agreed upon goals, as a basis for future action;
- To contribute to the improvement of data and monitoring systems in Belize and to strengthen technical expertise in the design, implementation, and analysis of such systems.
- To generate data on the situation of children and women, including the identification of vulnerable groups and of disparities, to inform policies and interventions.



#### **Sample Design**

he sample for the Belize Multiple Indicator Cluster Survey (MICS) was designed to provide estimates for a large number of indicators on the situation of children and women at the national level, for urban and rural areas, and for seven regions: Corozal District, Orange Walk District, Belize District (excluding Belize City South Side), Belize City South Side, Cayo District, Stann Creek District and Toledo District. The tables present figures for all seven regions and a combined figure for Belize District, composed of Belize District (excluding Belize City South Side) and Belize City South Side. The urban and rural areas within each region were identified as the main sampling strata and the sample was

selected in two stages. Within each stratum, twenty eight census enumeration districts (ED) were selected systematically with probability proportional to size. After a household listing was carried out within the selected enumeration areas, a systematic sample of twenty five households was drawn in each sample enumeration district. Each ED was visited during the fieldwork period. The sample was stratified by region, urban and rural areas, and is not self-weighting. For reporting national level results, sample weights are used. A more detailed description of the sample design can be found in Appendix A.

#### Questionnaires

Three sets of questionnaires were used in the survey: 1) a household questionnaire which was used to collect information on all *de jure* household members (usual residents), the household, and the dwelling; 2) a women's questionnaire administered in each household to all women aged 15-49 years; and 3) an under-5 questionnaire, administered to mothers or caretakers for all children under 5 living in the household. The questionnaires included the following modules:

#### The Household Questionnaire included the following modules:

- Household Information Panel
- Household Listing Form
- o Education
- Water and Sanitation
- Household Characteristics
- Insecticide Treated Nets
- Child Labour
- Child Discipline
- Hand washing

The Questionnaire for Individual Women was administered to all women aged 15-49 years living in the households, and included the following modules:

- Women Information Panel
- Women's Background

- Child Mortality
- Desire for Last Birth
- Maternal and Newborn Health
- Post Natal Health Checks
- Illness Symptoms
- Contraception
- Unmet Need
- Attitudes Towards Domestic Violence
- Marriage/Union
- Sexual Behaviour
- O HIV/AIDS
- Life Satisfaction

The Questionnaire for Children Under-Five was administered to mothers or caretakers of children under 5 years of age¹ living in the households. Normally, the questionnaire was administered to mothers of under-5 children; in cases when the mother was not listed in the household roster, a primary caretaker for the child was identified and interviewed. The questionnaire included the following modules:

- Under Five Information Panel
- o Age
- Birth Registration
- Early Childhood Development
- Breastfeeding
- Care of Illness
- o Immunization
- Anthropometry

A Questionnaire for Child Disability was also administered to mothers or primary caretakers of children between the ages of 2 and 9 years. This questionnaire contained two modules.

- o Child Disability Questionnaire Form
- Child Disability

Questionnaires are based on the MICS4 model questionnaire<sup>2</sup>. The MICS4 model English versions of the questionnaires were pre-tested in the Orange Walk District in the rural villages of Shipyard, August Pine Ridge and Trinidad and in the urban areas of San Jose Palmar and Orange Walk Town on Wednesday 26th January 2011 and Thursday 27th January 2011. Based on the results of the pre-test, modifications were made to the wording of the questionnaires. A copy of the Belize MICS questionnaires is provided in Appendix F.

In addition to the administration of questionnaires, fieldwork teams observed the place for handwashing and measured the weights and heights of children age under 5 years. Details and findings of these measurements are provided in the respective sections of the report.

<sup>1</sup> The terms "children under 5", "children age 0-4 years", and "children aged 0-59 months" are used interchangeably in this report.

The model MICS4 questionnaires can be found at <a href="https://www.childinfo.org">www.childinfo.org</a>

#### **Training and Fieldwork**

Training for the fieldwork was conducted in two phases. The training of trainers was conducted from 30<sup>th</sup> May to 8<sup>th</sup> June, 2011 in Belmopan City and the ten day main training of field staff was conducted from 13<sup>th</sup> June to 24<sup>th</sup> June, 2011 in Belize City at a centralized location. Training included lectures on interviewing techniques and the contents of the questionnaires, and mock interviews between trainees to gain practice in asking questions. Time was spent becoming familiar with the various vaccination cards in use and all field staff were trained in the use of the anthropomorphic measuring tools. Towards the end of the training period, trainees spent one day in practice interviewing in several enumeration districts in Belize City.

The data were collected by seven teams; each was comprised of four interviewers, one driver, one editor and one field supervisor. Even though the MICS programme requires the use of a dedicated Measurer as part of each data collection team, in Belize MICS 2011 measuring was done by the field supervisor with assistance as needed from the editor. One standby interviewer was provided for each team in the event that an interviewer was unable to continue working. Fieldwork began on 13<sup>th</sup> June, 2011 and concluded on 5<sup>th</sup> August, 2011.

#### **Data Processing**

Data were entered using the CSPro software. The data were entered on six microcomputers and carried out by six data entry operators and two data entry supervisors. In order to ensure quality control, all questionnaires were double entered and internal consistency checks were performed. Procedures and standard programs developed under the global MICS4 programme and adapted to the Belize questionnaire were used throughout. Data processing began simultaneously with data collection in June, 2011 and was completed in September, 2011. Data were analysed using the Statistical Package for Social Sciences (SPSS) software program, Version 18, and the model syntax and tabulation plans developed by UNICEF were used for this purpose.

## II. Sample Coverage and the Characteristics of Households and Respondents

#### **Sample Coverage**

f the 4,900 households selected for the sample, 4,608 were found to be occupied. Of these, 4,424 were successfully interviewed for a household response rate of 96.0 percent. In the interviewed households, 4,485 women (age 15-49 years) were identified. Of these, 4,096 were successfully interviewed, yielding a response rate of 91.3 percent within interviewed households. In addition, 1,982 children under age five were listed in the household questionnaire. Questionnaires were completed for 1,946 of these children, which corresponds to a response rate of 98.2 percent within interviewed households. A total of 3,287 children between the ages of 2 and 11 years were identified and Disability Questionnaires were completed for 3,234 of these children yielding a response rate of 98.4 percent. Overall response rates of 87.8 percent and 94.3 percent are calculated for the women's and under-5's interviews respectively (Table HH.1).

Table HH.1: Results of household, women's and under-5 interviews

Number of households, womenand children under 5 by results of the household, women's and under-5's interviews,
and household, women's and under-5's response rates, Belize, 2011

|   | AR    | EA    | REGION  |                |  |      |                |        |                           |                    |       |
|---|-------|-------|---------|----------------|--|------|----------------|--------|---------------------------|--------------------|-------|
|   | Urban | Rural | Corozal | Orange<br>Walk | Belize<br>(Excluding<br>Belize City<br>South Side) | Cayo | Stann<br>Creek | Toledo | Belize City<br>South Side | Belize<br>District | Total |
| Households Sampled  | 2245  | 2655  | 700     | 699            | 700  | 701  | 700            | 700    | 700                       | 1400               | 4900  |
| Households Occupied   | 2101  | 2507  | 655     | 673            | 635  | 651  | 646            | 686    | 662                       | 1297               | 4608  |
| Households Interviewed                                      | 2004  | 2420  | 642     | 662            | 581  | 626  | 605            | 670    | 638                       | 1219               | 4424  |
| Household response rate                                     | 95.4  | 96.5  | 98.0    | 98.4           | 91.5   | 96.2 | 93.7           | 97.7   | 96.4                      | 94.0               | 96.0  |
| Women Eligible  | 1950  | 2535  | 722     | 738            | 511  | 702  | 547            | 613    | 652                       | 1163               | 4485  |
| Women Interviewed   | 1772  | 2324  | 648     | 688            | 448  | 605  | 493            | 602    | 612                       | 1060               | 4096  |
| Women's response rate                                       | 90.9  | 91.7  | 89.8    | 93.2           | 87.7   | 86.2 | 90.1           | 98.2   | 93.9                      | 91.1               | 91.3  |
| Women's overall response rate                               | 86.7  | 88.5  | 88.0    | 91.7           | 80.2   | 82.9 | 84.4           | 95.9   | 90.5                      | 85.7               | 87.7  |
| Children under 5 Eligible                                   | 698   | 1284  | 318     | 329            | 161  | 299  | 256            | 362    | 257                       | 418                | 1982  |
| Children under 5 Mother/Caretaker<br>Interviewed            | 681   | 1265  | 314     | 320            | 153  | 295  | 251            | 361    | 252                       | 405                | 1946  |
| Under-5's response rate                                     | 97.6  | 98.5  | 98.7    | 97.3           | 95.0   | 98.7 | 98.0           | 99.7   | 98.1                      | 96.9               | 98.2  |
| Under-5's overall response rate                             | 93.1  | 95.1  | 96.8    | 95.7           | 86.9   | 94.9 | 91.8           | 97.4   | 94.5                      | 91.1               | 94.3  |
| Children aged 2-9 Eligible for Disability<br>Questionnaire  | 1147  | 2140  | 494     | 528            | 293  | 481  | 438            | 647    | 406                       | 699                | 3287  |
| Children aged 2-9 Mother/Caretaker<br>Interviewed           | 1121  | 2113  | 488     | 513            | 281  | 478  | 432            | 643    | 399                       | 680                | 3234  |
| Aged 2-9 for Disability Questionnaire response rate         | 97.7  | 98.7  | 98.8    | 97.2           | 95.9   | 99.4 | 98.6           | 99.4   | 98.3                      | 97.3               | 98.4  |
| Aged 2-9 for Disability Questionnaire overall response rate | 93.2  | 95.3  | 96.8    | 95.6           | 87.7   | 95.6 | 92.4           | 97.1   | 94.7                      | 91.4               | 94.5  |

Lowest household response rate occurred in Belize (Excluding Belize City South Side) (91.5 percent) but this is within the design specification of 10 percent non-response allowed by the sample. Non-response rates for the women questionnaire were more than 10 percent for Corozal (10.2 percent), Belize (Excluding Belize City South Side) (12.3 percent) and Cayo (13.8 percent). The response rates for these regions are not excessively higher than the targets set and it is expected that results obtained for these regions should be reliable. Urban and rural response rates are above 90 percent for all questionnaires.

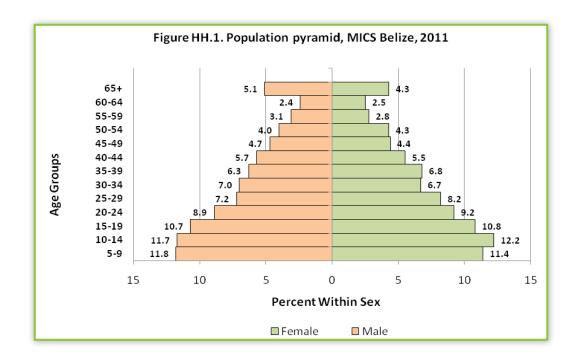
#### **Characteristics of Households**

The age and sex distribution of survey population is provided in Table HH.2. The distribution is also used to produce the population pyramids in Figure HH.1 and Figure HH.2. In the 4,424 households successfully interviewed in the survey, 17,288 household members were listed. Of these, 8,582 were males, and 8,705 were females. The average household size of 3.9 obtained from this MICS is precisely that obtained from the Belize 2010 Census.

Table HH.2: Household age distribution by sex
Percent and frequency distribution of the household population by
five-year age groups, dependency age groups, and
by child (age 0-17 years) and adult populations (age 18 or more), by sex, Belize, 2011

|                   |                         | NAA    | LES     | FEN/   | IALES   | TOTAL  |         |  |
|-------------------|-------------------------|--------|---------|--------|---------|--------|---------|--|
|                   |                         | IVIA   | ILLU    | ILIV   | IALLS   | 101    | AL      |  |
|                   |                         | Number | Percent | Number | Percent | Number | Percent |  |
| Age               | 0-4                     | 961    | 11.2    | 941    | 10.8    | 1902   | 11.0    |  |
|                   | 5-9                     | 1016   | 11.8    | 988    | 11.3    | 2004   | 11.6    |  |
|                   | 10-14                   | 1002   | 11.7    | 1066   | 12.2    | 2068   | 12.0    |  |
|                   | 15-19                   | 919    | 10.7    | 939    | 10.8    | 1858   | 10.7    |  |
|                   | 20-24                   | 765    | 8.9     | 801    | 9.2     | 1565   | 9.1     |  |
|                   | 25-29                   | 615    | 7.2     | 714    | 8.2     | 1329   | 7.7     |  |
|                   | 30-34                   | 604    | 7.0     | 587    | 6.7     | 1191   | 6.9     |  |
|                   | 35-39                   | 537    | 6.3     | 587    | 6.7     | 1125   | 6.5     |  |
|                   | 40-44                   | 488    | 5.7     | 475    | 5.5     | 963    | 5.6     |  |
|                   | 45-49                   | 399    | 4.6     | 379    | 4.4     | 778    | 4.5     |  |
|                   | 50-54                   | 348    | 4.1     | 376    | 4.3     | 724    | 4.2     |  |
|                   | 55-59                   | 265    | 3.1     | 243    | 2.8     | 508    | 2.9     |  |
|                   | 60-64                   | 203    | 2.4     | 217    | 2.5     | 419    | 2.4     |  |
|                   | 65-69                   | 143    | 1.7     | 121    | 1.4     | 264    | 1.5     |  |
|                   | 70-74                   | 120    | 1.4     | 111    | 1.3     | 231    | 1.3     |  |
|                   | 75-79                   | 75     | 0.9     | 58     | 0.7     | 132    | 0.8     |  |
|                   | 80-84                   | 62     | 0.7     | 46     | 0.5     | 108    | 0.6     |  |
|                   | 85+                     | 32     | 0.4     | 39     | 0.4     | 71     | 0.4     |  |
|                   | Missing/DK              | 29     | 0.3     | 19     | 0.2     | 47     | 0.3     |  |
| Dependency age    | 0-14                    | 2979   | 34.7    | 2995   | 34.4    | 5974   | 34.6    |  |
| groups            | 15-64                   | 5143   | 59.9    | 5317   | 61.1    | 10460  | 60.5    |  |
|                   | 65+                     | 432    | 5.0     | 375    | 4.3     | 807    | 4.7     |  |
|                   | Missing/DK              | 29     | 0.3     | 19     | 0.2     | 47     | 0.3     |  |
| Children and      | Children age 0-17 years | 3532   | 41.2    | 3561   | 40.9    | 7094   | 41.0    |  |
| adult populations | Adults age 18+ years    | 5021   | 58.5    | 5125   | 58.9    | 10147  | 58.7    |  |
|                   | Missing/DK              | 29     | 0.3     | 19     | 0.2     | 47     | 0.3     |  |
| Total             |                         | 8582   | 100.0   | 8705   | 100.0   | 17288  | 100.0   |  |

The population trends obtained from MICS clearly follow the trends as obtained from the Belize Census 2010 (Figure HH.1 and Figure HH.2). In general rates for MICS in the 0 to 14 age group is lower for both males and females than the rates obtained from the census. However, differences are small: for MICS 34.7 percent of the males are 0 – 14 years old while 34.4 percent of the females lie in this age group. Corresponding rates from the 2010 census are males 36 percent and females 35.3 percent. Rates for the 15 to 49 years age group agree well between the MICS and the Belize Census 2010. For the MICS, 50.4 percent of males are 15 to 49 years old while 51.5 percent of females are 15 to 49 years old.



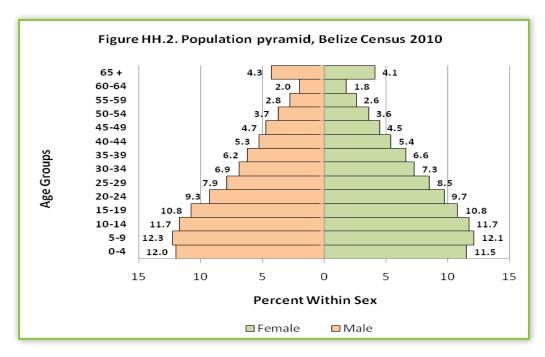


Table HH.3 provides basic background information on the households. Within households, the sex of the household head, region, area, number of household members, education of household head, religion and ethnicity of the household head are shown in the table. These background characteristics are used in subsequent tables in this report; the figures in the table are also intended to show the numbers of observations by major categories of analysis in the report.

There are about three times as many male heads of households as female heads (73.5 percent to 26.5 percent). MICS indicates that there are almost equal numbers of urban and rural households (urban 49.0 percent and rural 51.0 percent). Cayo is the region with the largest number of households (20.7 percent) while the regions with the second largest numbers of households are the Orange Walk and Belize City South Side regions at 13.7 and 13.9 percent respectively. If the two regions of Belize (excluding Belize City South Side) and Belize City South Side are combined then this district, the Belize District, far outstrip the other districts with 33.3 percent of the households. Most household heads are Mestizo (46.5 percent) followed by the Creole at 26.7 percent. The Belize Census 2010 puts the rates of Mestizo and Creole heads at 48.8 percent and 21.1 percent respectively. Most household heads have at least a primary school education (90.5 percent). On average households have about 3.9 members with 17.8 percent of households having 4 members.



Table HH.3: Household composition
Percent distribution of households by selected characteristics, Belize, 2011

|                             |   |          |          | BER OF<br>EHOLDS |
|-----------------------------|---|----------|----------|------------------|
|                             |   | Weighted | 110031   | 110103           |
|                             |   | percent  | Weighted | Un-weighted      |
| Sex of household head       | Male                                      | 73.5     | 3250     | 3291             |
|                             | Female                                    | 26.5     | 1174     | 1133             |
| Region                      | Corozal                                   | 11.7     | 519      | 642              |
|                             | Orange Walk                               | 13.7     | 607      | 662              |
|                             | Belize (Excluding Belize City South Side) | 19.4     | 860      | 581              |
|                             | Belize City South Side                    | 13.9     | 614      | 638              |
|                             | Belize District                           | 33.3     | 1474     | 1219             |
|                             | Cayo                                      | 20.7     | 918      | 626              |
|                             | Stann Creek                               | 11.0     | 488      | 605              |
|                             | Toledo                                    | 9.4      | 417      | 670              |
| Area                        | Urban                                     | 49.0     | 2170     | 2004             |
|                             | Rural                                     | 51.0     | 2254     | 2420             |
| Number of household         | 1   | 15.1     | 666      | 677              |
| members                     | 2   | 15.8     | 699      | 667              |
|                             | 3   | 16.9     | 747      | 737              |
|                             | 4   | 17.8     | 789      | 770              |
|                             | 5   | 13.3     | 589      | 593              |
|                             | 6   | 8.9      | 393      | 410              |
|                             | 7   | 5.2      | 229      | 233              |
|                             | 8   | 2.6      | 117      | 124              |
|                             | 9   | 2.0      | 88       | 92               |
|                             | 10+                                       | 2.4      | 106      | 121              |
| Education of household      | None                                      | 7.0      | 311      | 349              |
| head                        | Primary/Infant                            | 47.6     | 2104     | 2201             |
|                             | Secondary +                               | 41.8     | 1851     | 1722             |
|                             | CET/ITVET/VOTEC                           | 1.1      | 47       | 41               |
|                             | Missing/DK                                | 1.3      | 58       | 50               |
|                             | Other                                     | 1.2      | 52       | 61               |
| Ethnicity of household head | Creole                                    | 26.7     | 1182     | 1083             |
| ,                           | Mestizo                                   | 46.5     | 2058     | 2010             |
|                             | Garifuna                                  | 6.5      | 286      | 308              |
|                             | Maya                                      | 9.0      | 399      | 528              |
|                             | Other                                     | 9.2      | 409      | 409              |
|                             | Missing/DK                                | 2.0      | 91       | 86               |
| Total                       |   | 100.0    | 4424     | 4424             |
| Households with at least    |   |          |          |                  |
| One child age 0-4 years     |   | 31.6     | 4424     | 4424             |
| One child age 0-17 years    |   | 63.7     | 4424     | 4424             |
| One woman age 15-49 yea     | rs  | 72.4     | 4424     | 4424             |
| Mean household size         |   | 3.9      | 4424     | 4424             |

In Table HH.3 the weighted and un-weighted numbers of households are equal, since sample weights were normalized (See Appendix A). The table also shows the proportions of households with at least one child under 18, at least one child under 5, and at least one eligible woman age 15-49 along with the weighted average household size estimated by the survey.

#### Characteristics of Female Respondents 15-49 Years of Age and Children Under-5

Tables HH.4 and HH5 provide information on the background characteristics of female respondents 15-49 years of age and of children under age 5. In both tables, the total numbers of weighted and unweighted observations are equal, since sample weights have been normalized (standardized). In addition to providing useful information on the background characteristics of women and children, the tables are also intended to show the numbers of observations in each background category. These categories are used in the subsequent tabulations of this report.

Table HH.4: Women's background characteristics
Percent and frequency distribution of women age 15-49 years by selected characteristics, Belize, 2011

|                            |   | Weighted | NUMBER OF WOMEN |             |  |  |
|----------------------------|---|----------|-----------------|-------------|--|--|
|                            |   | percent  | Weighted        | Un-weighted |  |  |
| Region                     | Corozal                                   | 13.0     | 534             | 64          |  |  |
|                            | Orange Walk                               | 15.1     | 618             | 68          |  |  |
|                            | Belize (Excluding Belize City South Side) | 16.8     | 687             | 44          |  |  |
|                            | Belize City South Side                    | 14.0     | 573             | 61:         |  |  |
|                            | Belize District                           | 30.8     | 1260            | 106         |  |  |
|                            | Cayo                                      | 22.8     | 933             | 60          |  |  |
|                            | Stann Creek                               | 9.9      | 404             | 49          |  |  |
|                            | Toledo                                    | 8.5      | 347             | 60          |  |  |
| Area                       | Urban                                     | 47.0     | 1926            | 177         |  |  |
|                            | Rural                                     | 53.0     | 2170            | 232         |  |  |
| Age                        | 15-19                                     | 20.6     | 844             | 85          |  |  |
|                            | 20-24                                     | 17.6     | 720             | 72          |  |  |
|                            | 25-29                                     | 15.9     | 651             | 65          |  |  |
|                            | 30-34                                     | 13.3     | 544             | 55          |  |  |
|                            | 35-39                                     | 13.1     | 537             | 51          |  |  |
|                            | 40-44                                     | 10.8     | 442             | 43          |  |  |
|                            | 45-49                                     | 8.8      | 359             | 35          |  |  |
| /larital/Union status      | Currently married/in union                | 58.3     | 2386            | 239         |  |  |
|                            | Widowed                                   | 1.1      | 44              | 4           |  |  |
|                            | Divorced                                  | 0.8      | 35              | 2           |  |  |
|                            | Separated                                 | 10.0     | 410             | 41          |  |  |
|                            | Never married/in union                    | 29.8     | 1219            | 121         |  |  |
|                            | Missing                                   | 0.0      | 1               |             |  |  |
| Notherhood status          | Ever gave birth                           | 66.6     | 2728            | 273         |  |  |
|                            | Never gave birth                          | 33.4     | 1368            | 136         |  |  |
| irths in last two years    | Had a birth in last two years             | 16.7     | 685             | 70          |  |  |
|                            | Had no birth in last two years            | 83.3     | 3411            | 339         |  |  |
| ducation                   | None                                      | 3.6      | 148             | 15          |  |  |
|                            | Primary/Infant                            | 39.3     | 1608            | 170         |  |  |
|                            | Secondary +                               | 55.2     | 2259            | 214         |  |  |
|                            | CET/ITVET/VOTEC                           | 0.6      | 26              | 2           |  |  |
|                            | Other                                     | 1.3      | 55              | 6           |  |  |
| Vealth index quintiles     | Poorest                                   | 15.7     | 644             | 79          |  |  |
|                            | Second                                    | 19.9     | 815             | 82          |  |  |
|                            | Middle                                    | 21.4     | 877             | 86          |  |  |
|                            | Fourth                                    | 21.0     | 862             | 82          |  |  |
|                            | Richest                                   | 21.9     | 898             | 79          |  |  |
| thnicity of household head | Creole                                    | 24.0     | 985             | 90          |  |  |
|                            | Mestizo                                   | 50.0     | 2046            | 197         |  |  |
|                            | Garifuna                                  | 6.2      | 253             | 26          |  |  |
|                            | Maya                                      | 9.9      | 407             | 55          |  |  |
|                            | Other                                     | 8.2      | 335             | 33          |  |  |
|                            | Missing/DK                                | 1.7      | 70              | 6           |  |  |
| otal                       |   | 100.0    | 4096            | 409         |  |  |

Table HH.4 provides background characteristics of female respondents 15-49 years of age. The table includes information on the distribution of women according to region, area, age, marital status, motherhood status, births in last two years, education<sup>1</sup>, wealth index quintiles<sup>2</sup>, and ethnicity of the household head.

Some background characteristics of children under 5 years are presented in Table HH.5. These include the distribution of children by several attributes: sex, region and area, age, mother's or caretaker's education, wealth, and ethnicity of household head.

Male and female under-five children occur in equal numbers in the sample (male 50.6 percent, female 49.4 percent). About twice as many (61.8 percent) of the under-five children are rural dwellers compared with the urban percentage (38.2). Rates for Mestizo children (48.7 percent) follow the ethnic profile as seen in Table HH.3.

The wealth index is assumed to capture the underlying long-term wealth through information on the household assets, and is intended to produce a ranking of households by wealth, from poorest to richest. The wealth index does not provide information on absolute poverty, current income or expenditure levels. The wealth scores calculated are applicable for only the particular data set they are based on. Further information on the construction of the wealth index can be found in Rutstein and Johnson, 2004, Filmer and Pritchett, 2001, and Gwatkin et. Al., 2000.

Electricity, a radio, a television, a non-mobile telephone, a refrigerator, a fan, a micro wave oven, a security alarm system, a DVD player, a washing machine, an air conditioner, a as bar-b-q grill, a water cooler, a sofa, a dining room table, a clothes closet, a watch, a bicycle, a cell telephone a motorcycle or scooter, an mp3/mp4 player, a car or truck. a computer, a fishing rod, a weight training machine, a boat with a motor.

<sup>1</sup> Unless otherwise stated, "education" refers to educational level attended by the respondent throughout this report when it is used as a background variable.

Principal components analysis was performed by using information on the ownership of consumer goods, dwelling characteristics, water and sanitation, and other characteristics that are related to the household's wealth to assign weights (factor scores) to each of the household assets. Each household was then assigned a wealth score based on these weights and the assets owned by that household. The survey household population was then ranked according to the wealth score of the household they are living in, and was finally divided into 5 equal parts (quintiles) from lowest (poorest) to highest (richest). The assets used in these calculations were as follows:

Table HH.5: Under-5's background characteristics
Percent and frequency distribution of children under five years of age by selected characteristics,
Belize, 2011

|                                |   | Mainhtad navant  | Number   | of children |
|--------------------------------|---|------------------|----------|-------------|
|                                |   | Weighted percent | Weighted | Un-weighted |
| Sex                            | Male  | 50.6             | 984      | 995         |
|                                | Female  | 49.4             | 962      | 951         |
| Region                         | Corozal   | 13.5             | 263      | 314         |
|                                | Orange Walk                                     | 15.5             | 302      | 320         |
|                                | Belize (Excluding<br>Belize City South<br>Side) | 12.3             | 240      | 153         |
|                                | Belize City South<br>Side                       | 13.0             | 252      | 252         |
|                                | <b>Belize District</b>                          | 25.3             | 492      | 405         |
|                                | Cayo  | 23.1             | 450      | 295         |
|                                | Stann Creek                                     | 10.9             | 212      | 251         |
|                                | Toledo  | 11.6             | 226      | 361         |
| Area                           | Urban   | 38.2             | 743      | 681         |
|                                | Rural   | 61.8             | 1203     | 1265        |
| Age                            | 0-5   | 7.6              | 148      | 145         |
|                                | 6-11  | 10.7             | 209      | 212         |
|                                | 12-23   | 20.8             | 404      | 398         |
|                                | 24-35   | 20.2             | 393      | 403         |
|                                | 36-47   | 20.3             | 395      | 391         |
|                                | 48-59   | 20.4             | 397      | 397         |
| Mother's<br>education*         | None  | 5.1              | 100      | 108         |
|                                | Primary/Infant                                  | 48.6             | 946      | 994         |
|                                | Secondary +                                     | 43.1             | 839      | 778         |
|                                | CET/ITVET/VOTEC                                 | 0.7              | 14       | 11          |
|                                | Missing/DK                                      | 0.0              | 1        | 1           |
|                                | Other   | 2.4              | 47       | 54          |
| Wealth index<br>quintiles      | Poorest   | 25.2             | 490      | 580         |
|                                | Second  | 23.1             | 450      | 437         |
|                                | Middle  | 20.9             | 407      | 388         |
|                                | Fourth  | 17.0             | 330      | 312         |
|                                | Richest   | 13.8             | 268      | 229         |
| Ethnicity of<br>household head | Creole  | 19.5             | 379      | 345         |
|                                | Mestizo   | 48.7             | 949      | 912         |
|                                | Garifuna  | 5.4              | 105      | 113         |
|                                | Maya  | 14.8             | 288      | 356         |
|                                | Other   | 10.0             | 195      | 192         |
|                                | Missing/DK                                      | 1.6              | 31       | 28          |
| Total                          |   | 100.0            | 1946     | 1946        |

## IV. CHILD MORTALITY

ne of the overarching goals of the Millennium Development Goals (MDGs) is the reduction of infant and under-five mortality. Specifically, the MDGs call for the reduction in under-five mortality by two-thirds between 1990 and 2015. Monitoring progress towards this goal is an important but difficult objective. Measuring childhood mortality may seem easy, but attempts using direct questions, such as "Has anyone in this household died in the last year?" give inaccurate results. Using direct measures of child mortality from birth histories is time consuming, more expensive, and requires greater attention to training and supervision. Alternatively, indirect methods developed to measure child mortality produce robust estimates that are comparable with the ones obtained from other sources. Indirect methods minimize the pitfalls of memory

lapses, inexact or misinterpreted definitions, and poor interviewing technique.

The infant mortality rate is the probability of dying before the first birthday. The under-five mortality rate is the probability of dying before the fifth birthday. In MICS surveys, infant and under five mortality rates are calculated based on an indirect estimation technique known as the Brass method (United Nations, 1983; 1990a; 1990b).

For the application of the technique, women are classified into 5-year groups of Time Since First Birth (TSFB), namely 0-4, 5-9, 10-14, 15-19 and 20-24 years. The average numbers of children ever born and proportion dead among these children are calculated for each group of women. The proportions dead calculated for each group are very closely related to mortality risks. The technique converts the proportions dead into conventional mortality risks by using several assumptions in regard to the length of exposure to the risk of dying among children born to each group of women, on the distribution of deaths of children over time, and on the level and pattern of fertility prevalent in the population. Simulations on model data have shown that proportions dead by TSFB groups of women can be converted into probabilities of dying by using modelled relationships, namely into 2q0 (probability of dying before age 2) for proportion dead among children of women in the 0-4 years TSFB group, under-5 mortality rates for the 5-9, 10-14 and 15-19 year TSFB groups, and 15q0 (probability of dying before age 15) for the 20-24 years TSFB group. The technique also time-locates these estimates, again by using several assumptions. This is necessary because children of women who have had their first births long ago have been exposed to mortality risks for a longer period of time, and therefore, their mortality experience refers to farther back in time, compared to that of children born to women who have had their first births recently.

The final step in the calculations is the conversion of the estimated mortality risks into comparable probabilities of dying for each estimate derived from different TSFB groups of women. The Coale-Demeny model life tables are used for this purpose. Coale-Demeny model life tables are life table schedules at different levels of mortality, that embody typical age patterns of mortality in human populations, categorized into 4 'families' of such typical patterns – North, South, East and West models. Using typical relationships between 2q0, 5q0 and 15q0 and the infant mortality rate embodied in these model life tables, the initial estimates of mortality

are converted into infant mortality rates, while the estimates of 2q0 and 15q0 are converted into estimates of 5q0 (Note that the 5-9, 10-14 and 15-19 year TSFB groups produce estimates of under-5 mortality rates at the initial calculation stage). By expressing mortality risks at different points in time with the same indicator, it then becomes possible to show trends in mortality during the last 15-20 years.

Table CM.1: Children ever born, children surviving and proportion dead, Belize, 2011

|                        |       | CHILDREN EVER BORN |       | CHILDREN SURVIVING |       | PROPORTION | NUMBER OF |
|------------------------|-------|--------------------|-------|--------------------|-------|------------|-----------|
|                        |       | Mean               | Total | Mean               | Total | DEAD       | WOMEN     |
| Time since first birth | 0-4   | 1.3599             | 750   | 1.3357             | 737   | 0.0178     | 552       |
|                        | 5-9   | 2.2279             | 1182  | 2.1929             | 1164  | 0.0157     | 531       |
|                        | 10-14 | 3.0835             | 1636  | 2.9888             | 1586  | 0.0307     | 531       |
|                        | 15-19 | 3.7395             | 1596  | 3.5844             | 1530  | 0.0415     | 427       |
|                        | 20-24 | 4.7309             | 1779  | 4.5556             | 1713  | 0.0370     | 376       |
| Total                  |       | 2.8743             | 6944  | 2.7856             | 6729  | 0.0309     | 2416      |

For the calculations in this report, the Coale-Demeny, West model life table was selected as most appropriate, based on previous information on the age pattern of mortality in Belize.

Table CM.2 provides estimates of child mortality. The infant mortality rate (IMR) is estimated at 14 per thousand, while the probability of dying under age 5 (U5MR) is around 17 per thousand. These estimates have been calculated using the 5-9 years since first birth and therefore refer to August 2006.

Table CM.2: Child mortality
Infant and under-five mortality rates, based on WEST model, Belize, 2011

|                        |                       | INFANT MORTALITY RATE [1] | UNDER-FIVE MORTALITY RATE [2] |
|------------------------|-----------------------|---------------------------|-------------------------------|
| Sex                    | Male                  | 16                        | 18                            |
|                        | Female                | 14                        | 16                            |
| Area                   | Urban                 | (17)                      | (19)                          |
|                        | Rural                 | 13                        | 15                            |
| Wealth index quintiles | Poorest/Second/Middle | 16                        | 19                            |
|                        | Fourth/Richest        | (11)                      | (12)                          |
| Total                  |                       | 14                        | 17                            |

<sup>[1]</sup> MICS indicator 1.2; MDG indicator 4.2

Rates refer to August 2006. The West Model was assumed to approximate the age pattern of mortality in Belize.

Overall, the data show that there are few differences by background characteristics. Differences by sex and place of residence of the child are small. The data do show some differences by wealth; wealthier households tend to have lower mortality rates than poorer households.

<sup>[2]</sup> MICS indicator 1.1; MDG indicator 4.1

<sup>( )</sup> Figures that are based on less than 250 un-weighted cases

# V. Nutrition

# **Nutritional Status**

child mortality.

Children's nutritional status is a reflection of their overall health. When children have access to an adequate food supply, are not exposed to repeated illness, and are well cared for, they reach their growth potential and are considered well nourished.

Malnutrition is associated with more than half of all child deaths worldwide. Undernourished children are more likely to die from common childhood ailments, and for those who survive, have recurring sicknesses and faltering growth. Three-quarters of the children who die from causes related to malnutrition were only mildly or moderately malnourished – showing no outward sign of their vulnerability. The Millennium Development target is to reduce by half the proportion of people who suffer from hunger between 1990 and 2015. A reduction in the prevalence of malnutrition will also assist in the goal to reduce

In a well-nourished population, there is a reference distribution of height and weight for children under age five. Under-nourishment in a population can be gauged by comparing children to a reference population. The reference population used in this report is based on new WHO growth standards<sup>1</sup>. Each of the three nutritional status indicators can be expressed in standard deviation units (z-scores) from the median of the reference population.

Weight-for-age is a measure of both acute and chronic malnutrition. Children whose weight-for-age is more than two standard deviations below the median of the reference population are considered moderately or severely underweight while those whose weight-for-age is more than three standard deviations below the median are classified as severely underweight.

Height-for-age is a measure of linear growth. Children whose height-for-age is more than two standard deviations below the median of the reference population are considered short for their age and are classified as moderately or severely stunted. Those whose height-for-age is more than three standard deviations below the median are classified as severely stunted. Stunting is a reflection of chronic malnutrition as a result of failure to receive adequate nutrition over a long period and recurrent or chronic illness.

Finally, children whose weight-for-height is more than two standard deviations below the median of the reference population are classified as moderately or severely wasted, while those who fall more than three standard deviations below the median are classified as severely wasted. Wasting is usually the result of a recent nutritional deficiency. The indicator may exhibit significant seasonal shifts associated with changes in the availability of food or disease prevalence.

In MICS, weights and heights of all children under 5 years of age were measured using anthropometric equipment recommended by UNICEF (www.childinfo.org). Findings in this section are based on the results of these measurements.

Table NU.1 shows percentages of children classified into each of these categories, based on the anthropometric measurements that were taken during fieldwork. Additionally, the table includes the percentage of children who are overweight, which takes into account those children whose weight for height is above 2 standard deviations from the median of the reference population, and mean z-scores for all three anthropometric indicators.

http://www.who.int/childgrowth/standards/second\_set/technical\_report\_2.pdf

Table NU.1: Nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Belize, 2011

|   | Tercentage of chindren under age to your montal status according to the annual pointed and age, height for age  Weight for age  Weight for age | Weight      | Weight for age   | ומן סומותה מי    |        | H         | Height for age | - wording to     |          | वित्रक वित्र | Weigh     | Weight for height |                  |        |
|---|--|-------------|------------------|------------------|--------|-----------|----------------|------------------|----------|--|-----------|-------------------|------------------|--------|
|   |  |             |                  |                  | Number |           | )              |                  | Number   |  | )         | •                 |                  | Number |
|   |  | Underweight | eight            |                  | Of     | Stunted   | ted            |                  | Obildran | Wasted   | ted       | Overweight        |                  | Of     |
|   |  | Percent     | Percent<br>below | Mean Z-<br>Score | under  | Percent   | Percent        | Mean Z-<br>Score | under    | Percent  | Percent   | Percent           | Mean Z-<br>Score | under  |
|   |  | -2 sd [1]   | -3 sd [2]        | (SD)             | D D D  | -2 sd [3] | -3 sd [4]      | (SD)             | 999      | -2 sd [5]  | -3 sd [6] | +2 sd             | (SD)             | age o  |
| Sex                                     | Male   | 2.2         | 9.0              | -0.3             | 914    | 18.6      | 2.2            | 8.0-             | 905      | 3.2  | 6.0       | 9.8               | 0.2              | 968    |
|   | Female   | 9.9         | 2.0              | -0.4             | 895    | 20.0      | 2.5            | -1.0             | 878      | 3.4  | 1.5       | 7.1               | 0.2              | 872    |
| Area                                    | Urban  | 5.4         | 2.0              | -0.1             | 829    | 15.7      | 2.8            | -0.7             | 662      | 2.8  | 1.2       | 9.8               | 0.3              | 199    |
|   | Rural  | 9.9         | 1.6              | -0.4             | 1132   | 21.4      | 7.0            | -1.0             | 1118     | 3.6  | 1.2       | 2.9               | 0.2              | 1107   |
| Region                                  | Corozal  | 7.0         | 1.6              | -0.4             | 251    | 19.7      | 2.0            | -1.0             | 249      | 3.1  | 0.3       | 5.4               | 0.2              | 248    |
|   | Orange Walk  | 4.7         | 1.0              | -0.3             | 280    | 17.2      | 3.1            | -1.0             | 278      | 2.4  | 0.7       | 7.3               | 0.4              | 280    |
|   | Belize (Excluding Belize<br>City South Side)   | 5.0         | 0.0              | -0.2             | 198    | 13.9      | 6.9            | -0.7             | 186      | 4.2  | 2.6       | 14.1              | 0.3              | 186    |
|   | Belize City South Side   | 5.6         | 0.8              | -0.1             | 235    | 8.1       | 1.7            | -0.3             | 235      | 3.4  | 1.3       | 8.5               | 0.2              | 234    |
|   | Belize District  | 5.3         | 0.4              | -0.1             | 434    | 10.7      | 4.0            | -0.5             | 421      | 3.8  | 1.9       | 11.0              | 0.2              | 420    |
|   | Cayo   | 5.3         | 1.6              | -0.3             | 421    | 18.6      | 4.1            | -0.8             | 413      | 2.8  | 1.6       | 0.9               | 0.1              | 410    |
|   | Stann Creek  | 9.5         | 1.6              | -0.5             | 207    | 17.5      | 3.5            | -0.7             | 206      | 4.9  | 1.2       | 4.4               | 0.0              | 205    |
|   | Toledo   | 7.4         | 2.0              | -0.4             | 216    | 41.6      | 16.1           | -1.6             | 214      | 3.3  | 6:0       | 12.3              | 9.0              | 206    |
| Age                                     | 0-5  | 7.5         | 2.7              | -0.1             | 126    | 13.6      | 6.9            | -0.4             | 123      | 2.5  | 4.5       | 12.6              | 0.2              | 119    |
|   | 6-11   | 3.3         | 1.8              | 0.0              | 191    | 10.9      | 3.0            | -0.2             | 188      | 4.1  | 0.8       | 6.9               | 0.2              | 186    |
|   | 12-23  | 5.1         | 9.0              | -0.2             | 384    | 22.8      | 4.3            | -1.0             | 379      | 1.7  | 0.3       | 8.7               | 0.4              | 380    |
|   | 24-35  | 6.5         | 8.0              | -0.3             | 360    | 19.5      | 8.9            | -1.0             | 351      | 3.4  | 1.4       | 7.2               | 0.2              | 347    |
|   | 36-47  | 7.5         | 1.8              | -0.5             | 375    | 20.7      | 6.3            | -1.1             | 371      | 4.1  | 6:0       | 7.4               | 0.2              | 371    |
|   | 48-59  | 9.9         | 1.4              | -0.5             | 372    | 20.3      | 5.1            | -1.0             | 369      | 2.8  | 1.4       | 7.0               | 0.1              | 364    |
| Mother's                                | None   | 8.5         | æ.               | -0.4             | 94     | 28.4      | 9.2            | -1.1             | 93       | 1.8  | 0.0       | 10.9              | 0.4              | 93     |
| education                               | Primary  | 7.0         | 1.6              | -0.5             | 206    | 26.7      | 7.5            | -1.2             | 891      | 2.8  | 1.3       | 2.7               | 0.2              | 884    |
|   | Secondary +  | 5.2         | 6:0              | -0.1             | 757    | 10.4      | 2.7            | -0.5             | 747      | 4.1  | 1.3       | 10.6              | 0.2              | 740    |
|   | Other  | (2.3)       | (2.3)            | (0.0)            | 42     | (4.6)     | (5.4)          | (-0.4)           | 41       | (2.1)  | (2.1)     | (0.0)             | (0.2)            | 42     |
| Wealth                                  | Poorest  | 8.8         | 2.1              | 9.0-             | 469    | 32.9      | 11.1           | -1.3             | 464      | 3.8  | 1.4       | 4.9               | 0.2              | 459    |
| index                                   | Second   | 7.0         | 1.7              | -0.5             | 421    | 21.5      | 3.5            | -1.1             | 415      | 4.4  | 9.0       | 7.5               | 0.2              | 417    |
| S D D D D D D D D D D D D D D D D D D D | Middle   | 2.0         | 9.0              | -0.2             | 383    | 12.3      | 3.7            | 9.0-             | 373      | 2.2  | 1.1       | 8.9               | 0.2              | 369    |
|   | Fourth   | 4.7         | 9.0              | -0.2             | 302    | 11.8      | 2.9            | 9.0-             | 302      | 3.5  | 2.3       | 8.8               | 0.2              | 300    |
|   | Richest  | 3.0         | 1.1              | 0.1              | 230    | 0.6       | 3.5            | -0.5             | 226      | 1.8  | 0.7       | 11.7              | 0.4              | 224    |
| Ethnicity of                            | Creole   | 4.3         | 1.0              | -0.2             | 332    | 6.6       | 3.5            | -0.5             | 333      | 4.0  | 2.1       | 7.5               | 0.1              | 326    |
| household                               | Mestizo  | 5.9         | 1.2              | -0.3             | 895    | 19.1      | 4.7            | -1.0             | 875      | 3.1  | 0.7       | 9.7               | 0.3              | 874    |
|   | Garifuna   | 8.4         | 0.8              | -0.4             | 86     | 8.5       | 9.0            | -0.5             | 96       | 2.1  | 0.8       | 5.2               | 0.0              | 96     |
|   | Maya   | 9.1         | 2.7              | -0.7             | 278    | 44.3      | 14.0           | -1.7             | 275      | 2.5  | 1.8       | 6.6               | 0.4              | 271    |
|   | Other  | 4.5         | 9.0              | -0.1             | 176    | 0.9       | 1.9            | -0.4             | 172      | 3.7  | 1.4       | 8.9               | 0.1              | 171    |
|   | Missing/DK   | (10.9)      | (0.0)            | (0.1)            | 59     | (11.7)    | (2.2)          | (-0.4)           | 53       | (0.0)  | (0.0)     | (13.7)            | (0.4)            | 29     |
| Total                                   |  | 6.2         | 1.3              | -0.3             | 1809   | 19.3      | 5.4            | 6.0-             | 1780     | 3.3  | 1.2       | 7.9               | 0.2              | 1768   |
| [1] MICS indi                           | 11 MICS indicator 2.1a and MDG indicator 1.8;  | or 1.8;     |                  |                  |        |           |                |                  |          |  |           |                   |                  |        |

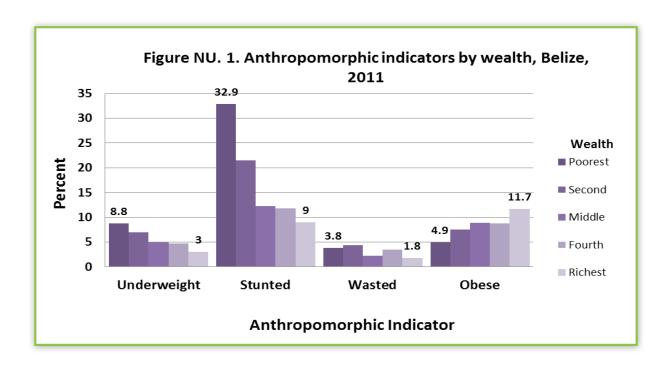
[1] MICS indicator 2.1a and MDG indicator 1.8;
[2] MICS indicator 2.2b;
[3] MICS indicator 2.2b;
[4] MICS indicator 2.3a,
[5] MICS indicator 2.3a,
[6] MICS indicator 2.3a,
[6] MICS indicator 2.3b;
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[15] MICS indicator 2.3b;
[16] MICS indicator 2.3b;
[17] MICS indicator 2.3b;
[18] MICS indicator 2.3b;
[19] MICS indicator 2.3b;
[10] MICS indicator 2.3c;
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[10] MICS indicator 2.3c;
[11] MICS indicator 2.3c;
[12] MICS indicator 2.3c;
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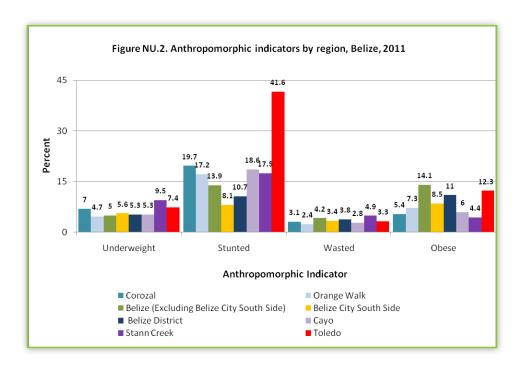
Children whose full birth date (month and year) were not obtained, and children whose measurements are outside a plausible range are excluded from Table NU.1. Children are excluded from one or more of the anthropometric indicators when their weights and heights have not been measured, whichever applicable. For example if a child has been weighed but his/her height has not been measured, the child is included in underweight calculations, but not in the calculations for stunting and wasting. Percentages of children by age and reasons for exclusion are shown in the data quality Tables DQ.6 and DQ.7 in Appendix F.

Overall 91.5 percentage of children under 5 years had both their weights and heights measured (Table DQ.7 in Appendix F). Both weights and age were measured in 93.6 percent of children and both height and age were measured in 92.4 percent of children under-5 years. It is seen that the percentages of children under age 6 months excluded from the analysis were about twice as high as the rates for other age groups. This is true for all three anthropomorphic indicators. Table DQ.7 shows that due to incomplete dates of birth, implausible measurements, and missing weight and/or height, 6.4 percent of children have been excluded from calculations of the weight-for-age indicator, while the figures are 7.6 for the height-for-age indicator, and 8.5 for the weight-for-height indicator.

About 6 percent of children under age five in Belize are moderately underweight and 1 percent are classified as severely underweight (Table NU.1). Almost 20 percent of children (19.3 percent) are moderately stunted or too short for their age and 3.3 percent are moderately wasted or too thin for their height. About 7.9 percent of children under age 5 years are considered to be obese.

Males and females show approximately the same rates for moderate underweight, stunting and wasting. A small difference in rates occur in urban and rural areas with rural children having higher rates than urban children in all three categories (urban/rural percentages are: 5.4/6.6 underweight, 15.7/21.4 stunting and 2.8/3.6 wasting). Generally urban children are more obese than rural children with rates of 9.8 percent urban and 6.7 percent rural.

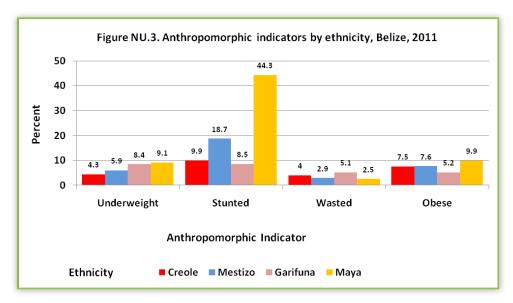




Children from poor households are more likely to be underweight and stunted than other children from wealthier households (Figure NU.1). A clear distinction can not be made between children in different wealth categories with respect to wasting. In contrast, a trend for higher percentages for wealthier households is evident for obesity.

Stunting is highest in Toledo District (41.6 Percent) and lowest in Belize City South Side (8.1 percent) (Figure NU.2). Also obesity is most pronounced in Toledo (12.3 percent) and Belize City Excluding Belize City South Side (14.1 percent). In general, Belize City South Side appears to be less disadvantaged with respect to all four anthropomorphic indicators, except for overweight (Figure NU.2).

Children from Maya headed households have the highest rates for underweight (9.1 percent), stunting (44.3 percent) and obesity (9.9 percent) when compared to children of other ethnicities. Wasting is least prevalent in children from Maya headed households (2.5 percent) (Figure NU.3).



# **Breastfeeding and Infant and Young Child Feeding**

Breastfeeding for the first few years of life protects children from infection, provides an ideal source of nutrients, and is economical and safe. However, many mothers stop breastfeeding too soon and there are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition and is unsafe if clean water is not readily available.

WHO/UNICEF have the following feeding recommendations:

- Exclusive breastfeeding for first six months
- Continued breastfeeding for two years or more
- O Safe and age-appropriate complementary foods beginning at 6 months
- Frequency of complementary feeding: 2 times per day for 6-8 month olds; 3 times per day for 9-11 month olds

It is also recommended that breastfeeding be initiated within one hour of birth.

The indicators related to recommended child feeding practices are as follows:

- o Early initiation of breastfeeding (within 1 hour of birth)
- o Exclusive breastfeeding rate (< 6 months)</p>
- O Predominant breastfeeding (< 6 months)</p>
- Continued breastfeeding rate (at 1 year and at 2 years)
- Duration of breastfeeding
- Age-appropriate breastfeeding (0-23 months)
- Introduction of solid, semi-solid and soft foods (6-8 months)
- Minimum meal frequency (6-23 months)
- Milk feeding frequency for non-breastfeeding children (6-23 months)
- o Bottle feeding (0-23 months)

Table NU.2 provides the proportion of children born in the last two years who were ever breastfed, those who were first breastfed within one hour and one day of birth, and those who received a pre-lacteal feed. Although a very important step in management of lactation and establishment of a physical and emotional relationship between the baby and the mother, 61.5 percent of babies are breastfed for the first time within one hour of birth, while 83.1 percent of newborns in Belize start breastfeeding within one day of birth, and 92 percent have ever been breastfed.

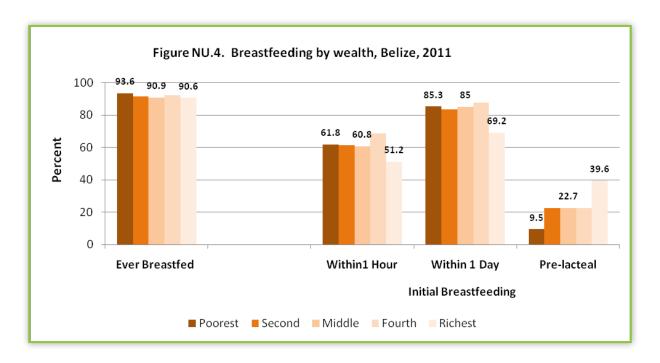
Mother's education does not seem to impact rates of early breastfeeding. However, pre-lacteal feeding increases significantly with increasing level of education (none at 9.8 percent to Secondary + at 16.6 percent). Rates of breastfeeding within one hour of birth for urban and rural children do not appear to be significantly different. However, rates for urban children breastfed within one day is 77.4 percent while the rate for rural children is 86.7 percent.

Table NU.2: Initial breastfeeding

Percentage of last-born children in the 2 years preceding the survey who were ever breastfed, percentage who were breastfed within one hour of birth and within one day of birth, and percentage who received a pre-lacteal feed, Belize, 2011

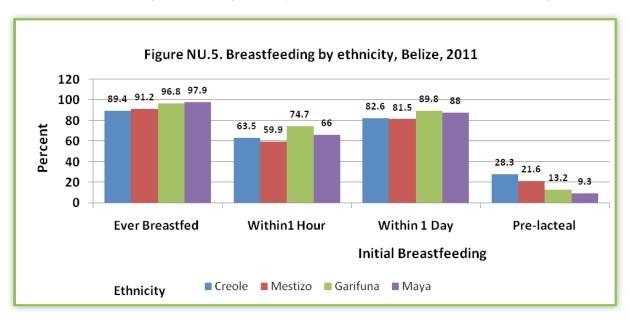
|                        |   | Percentage ever<br>breastfed [1] | Percentage<br>who were first<br>breastfed: Within<br>one hour of birth<br>[2] | Percentage<br>who were first<br>breastfed: Within<br>one day of birth | Percentage who received a pre-<br>lacteal feed | Number of last-<br>born children in<br>the two years<br>preceding the<br>survey |
|------------------------|---|----------------------------------|---|---|--|---|
| Region                 | Corozal                                   | 97.4                             | 56.5  | 78.4  | 27.4   | 95  |
|                        | Orange Walk                               | 90.1                             | 62.9  | 84.5  | 18.0   | 108   |
|                        | Belize (Excluding Belize City South Side) | (89.6)                           | (54.7)  | (83.1)  | (33.1)   | 74  |
|                        | Belize City South Side                    | 89.2                             | 69.7  | 84.1  | 25.8   | 77  |
|                        | Belize District                           | 89.4                             | 62.3  | 83.6  | 29.4   | 151   |
|                        | Cayo                                      | 88.6                             | 59.1  | 80.9  | 22.9   | 189   |
|                        | Stann Creek                               | 96.8                             | 70.7  | 88.1  | 16.3   | 69  |
|                        | Toledo                                    | 96.7                             | 61.7  | 87.5  | 3.8  | 73  |
| Area                   | Urban                                     | 87.9                             | 61.1  | 77.4  | 22.5   | 262   |
|                        | Rural                                     | 94.5                             | 61.8  | 86.7  | 20.9   | 424   |
| Months since           | 0-11 months                               | 91.4                             | 59.6  | 82.2  | 19.8   | 313   |
| last birth             | 12-23 months                              | 92.5                             | 63.0  | 83.9  | 23.7   | 357   |
| Assistance             | Skilled attendant                         | 92.1                             | 61.4  | 83.2  | 22.0   | 659   |
| at delivery            | Traditional birth attendant               | (*)                              | (*)   | (*)   | (*)  | 12  |
|                        | Other                                     | (*)                              | (*)   | (*)   | (*)  | 8   |
|                        | Missing                                   | (*)                              | (*)   | (*)   | (*)  | 6   |
| Place of               | Public sector health facility             | 93.7                             | 65.2  | 86.8  | 17.8   | 526   |
| delivery               | Private sector health facility            | 84.1                             | 47.0  | 68.5  | 38.9   | 117   |
|                        | Home                                      | (98.3)                           | (60.4)  | (85.4)  | (21.6)   | 39  |
|                        | Other/Missing                             | (*)                              | (*)   | (*)   | (*)  | 4   |
| Mother's               | None                                      | 92.0                             | 54.4  | 80.7  | 9.8  | 41  |
| education              | Primary                                   | 92.8                             | 61.4  | 85.8  | 16.6   | 311   |
|                        | Secondary +                               | 91.1                             | 62.0  | 81.1  | 27.6   | 315   |
|                        | CET/ITVET/VOTEC                           | (*)                              | (*)   | (*)   | (*)  | 3   |
|                        | Other                                     | (*)                              | (*)   | (*)   | (*)  | 15  |
| Wealth index           |   | 93.6                             | 61.8  | 85.3  | 9.5  | 173   |
| quintiles              | Second                                    | 91.5                             | 61.5  | 83.5  | 22.6   | 156   |
|                        | Middle                                    |                                  |   |   |  |   |
|                        |   | 90.9                             | 60.8  | 85.0  | 22.7   | 134   |
|                        | Fourth<br>Richest                         | 92.2<br>90.6                     | 68.8<br>51.2  | 87.6<br>69.2  | 22.4<br>39.6                                   | 132<br>91   |
| Ethnicity of           |   |                                  |   |   |  |   |
| Ethnicity of household | Creole<br>Mestizo                         | 89.4<br>91.2                     | 63.5<br>59.9  | 82.6<br>81.5  | 28.3<br>21.6                                   | 113<br>355  |
| head                   | Garifuna                                  | (96.9)                           | (74.7)  | (89.8)  | (13.2)   | 43  |
|                        | Maya                                      | 97.9                             | 66.0  | 88.0  | 9.3  | 96  |
|                        | Other                                     | 88.8                             | 52.5  | 82.1  | 30.6   | 71  |
|                        | Missing/DK                                | (*)                              | (*)   | (*)   | (*)  | 8   |
| Total                  |   | 91.9                             | 61.5  | 83.1  | 21.5   | 685   |

<sup>[1]</sup> MICS indicator 2.4; [2] MICS indicator 2.5
( ) Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

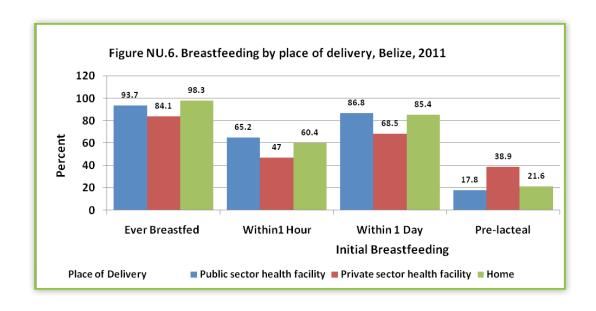


Children from the richest families *ever breastfed* less frequently than children from less wealthy families while *pre-lacteal* feeding is most pronounced in the richest (39.6 percent) families and least evident in the poorest (9.5 percent) (Figure NU.4).

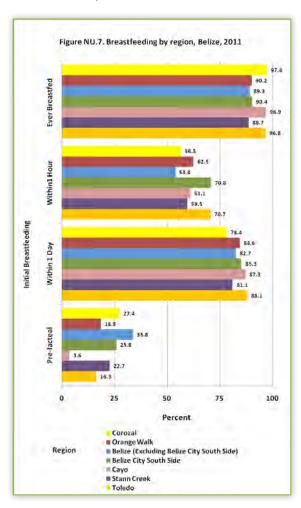
The Maya and Garifuna children seem to be *ever breastfed* at rates slightly higher than the Creole or Mestizo children. *Pre-lacteal* feeding is accordingly least pronounced in the Maya and Garifuna (Figure NU.5).



Breastfeeding rates are most pronounced for delivery at home or in a public sector hospital. Figure NU.6 indicates that private sector health facilities seem to be linked to reduced rates of early breast feeding and also to increased rates of pre-lacteal feeding.



Rates of early breastfeeding (within one hour or within one day) are lowest in the Corozal District and in Belize (excluding Belize City South Side) and highest in the Districts of Cayo and Toledo and in Belize City South Side (Figure NU.7). Pre-lacteal feeding seems to have a trend opposite to this with highest rates in the Corozal District and in Belize (excluding Belize City South Side) and lowest rates of breastfeeding in the Districts of Cayo and Toledo and in Belize City South Side.



In Table NU.3, breastfeeding status is based on the reports of mothers/caretakers of children's consumption of food and fluids during the previous day or night prior to the interview. *Exclusively breastfed* refers to infants who received only breast milk (and vitamins, mineral supplements, or medicine). The table shows exclusive breastfeeding of infants during the first six months of life, as well as continued breastfeeding of children at 12-15 and 20-23 months of age.

Table NU.3: Breastfeeding
Percentage of living children according to breastfeeding status at selected age groups, Belize, 2011

|              |                 | Chi                                     | ldren 0-5 month                           | s                  | Children 12-1   | 15 months          | Children 20-2  | 23 months          |
|--------------|-----------------|---|---|--------------------|---|--------------------|--|--------------------|
|              |                 | Percent<br>exclusively<br>breastfed [1] | Percent<br>predominantly<br>breastfed [2] | Number of children | Percent<br>breastfed<br>(Continued<br>breastfeeding<br>at 1 year) [3] | Number of children | Percent<br>breastfed<br>(Continued<br>breastfeeding<br>at 2 years) [4] | Number of children |
| Sex          | Male            | 10.5                                    | 30.3                                      | 90                 | 63.6  | 57                 | 37.0   | 62                 |
|              | Female          | 21.0                                    | 40.4                                      | 58                 | 60.7  | 59                 | 33.4   | 94                 |
| Region       | Corozal         | (*)                                     | (*)                                       | 18                 | (71.8)  | 21                 | (53.8)   | 26                 |
|              | Orange Walk     | (15.0)                                  | 53.6                                      | 28                 | (*)   | 17                 | (*)  | 23                 |
|              | Belize District | (8.0)                                   | 13.5                                      | 37                 | (*)   | 30                 | (*)  | 34                 |
|              | Cayo            | (4.9)                                   | 26.0                                      | 40                 | (*)   | 24                 | (33.6)   | 43                 |
|              | Stann Creek     | (*)                                     | (*)                                       | 9                  | (*)   | 9                  | (*)  | 15                 |
|              | Toledo          | (*)                                     | (*)                                       | 16                 | (*)   | 14                 | (*)  | 15                 |
| Area         | Urban           | 10.9                                    | 29.3                                      | 61                 | (49.7)  | 50                 | 32.3   | 69                 |
|              | Rural           | 17.3                                    | 37.8                                      | 87                 | 71.5  | 66                 | 36.9   | 87                 |
| Mother's     |                 |   |   |                    |   |                    |  |                    |
| education    | Primary         | 15.3                                    | 36.1                                      | 62                 | 65.7  | 54                 | 38.2   | 71                 |
|              | Secondary +     | 11.6                                    | 30.6                                      | 75                 | 60.7  | 51                 | 30.3   | 74                 |
|              | Other           | (*)                                     | (*)                                       | 11                 | (*)   | 11                 | (*)  | 11                 |
| Wealth index | Poorest         | (23.7)                                  | 62.0                                      | 29                 | (71.8)  | 26                 | (33.2)   | 43                 |
| quintiles    | Second          | (12.9)                                  | 40.8                                      | 31                 | (*)   | 25                 | (39.0)   | 43                 |
|              | Middle          | (22.3)                                  | 36.2                                      | 36                 | (*)   | 26                 | (*)  | 27                 |
|              | Fourth          | (4.6)                                   | 11.5                                      | 31                 | (*)   | 23                 | (*)  | 19                 |
|              | Richest         | (*)                                     | (*)                                       | 22                 | (*)   | 16                 | (*)  | 24                 |
| Ethnicity of | Creole          | (14.1)                                  | 33.8                                      | 31                 | (*)   | 22                 | (28.7)   | 29                 |
| household    | Mestizo         | 9.0                                     | 27.1                                      | 71                 | 57.2  | 53                 | 42.3   | 87                 |
| head         | Garifuna        | (*)                                     | (*)                                       | 11                 | (*)   | 8                  | (*)  | 4                  |
|              | Maya            | (*)                                     | (*)                                       | 14                 | (*)   | 18                 | (36.8)   | 20                 |
|              | Other           | (*)                                     | (*)                                       | 21                 | (*)   | 16                 | (*)  | 15                 |
| Total        |                 | 14.7                                    | 34.3                                      | 148                | 62.1  | 116                | 34.9   | 156                |

[1] MICS indicator 2.6; [2] MICS indicator 2.9; [3] MICS indicator 2.7; [4] MICS indicator 2.8

There is marked difference between the sexes for the rates of exclusively breastfed infants 0 – 5 months of age. Approximately 10.5 percent males and 21.0 percent females aged less than six months are exclusively breastfed. A similar difference is evident for children 0 – 5 months who are predominantly breastfed (males 30.3 and females 40.4 percent). By age 12-15 months rates for continued breastfeeding are approximately equal for males (63.6 percent) and females (60.7 percent). The same applies for continued breastfeeding for children 20 – 23 months (males 36.9 percent and females 33.8 percent).

Table NU.3 shows urban/rural differences in the rates of breastfeeding in children 0 – 5 months and 12 – 15 months. Rates for exclusively breastfed 0 – 5 month old children are urban 11.2 percent and rural 17.0 percent. For predominantly breastfed children the rates are urban 30.0 percent and rural 37.1 percent. Differences are even more pronounced for continued breastfeeding in children 12 – 15 months of age (urban

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

49.7 percent and rural 71.5 percent). At two years the rates for urban and rural children are approximately equal.

A detailed examination of breastfeeding for variables other than sex and area can not be justified because the sample size is inadequate.

Table NU.4 shows the median duration of breastfeeding by selected background characteristics. Among children under age 3, the median duration is 16.0 months for any breastfeeding, 0.9 months for exclusive breastfeeding, and 3.1 months for predominant breastfeeding. The median duration for exclusive and predominant breastfeeding is small for all variables rarely exceeding 3 months. Similarly the median duration for any breastfeeding does not exceed two years.

Table NU.4: Duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children age 0-35

months, Belize, 2011

|                    |  | Mediar                | duration (in month         | ns) of                       |  |
|--------------------|--|-----------------------|----------------------------|------------------------------|--|
|                    |  | Any breastfeeding [1] | Exclusive<br>breastfeeding | Predominant<br>breastfeeding | Number of<br>children age<br>0-35 months |
| Sex                | Male                                     | 15.8                  | 0.4                        | 0.9                          | 591                                      |
|                    | Female                                   | 16.6                  | 0.7                        | 1.4                          | 563                                      |
| Region             | Corazal                                  | 22.6                  | 1.0                        | 1.5                          | 162                                      |
|                    | Orange Walk                              | 14.8                  | 0.5                        | 2.8                          | 184                                      |
|                    | Belize (Excluding Belize City South Side | 15.4                  | na                         | na                           | 125                                      |
|                    | Belize City South Side                   | 8.7                   | 0.6                        | 1.1                          | 143                                      |
|                    | Belize District                          | 11.9                  | 0.5                        | 0.6                          | 268                                      |
|                    | Cayo                                     | 15.6                  | 0.4                        | 0.6                          | 283                                      |
|                    | Stann Creek                              | 16.4                  | 1.4                        | 2.9                          | 121                                      |
|                    | Toledo                                   | 17.8                  | 1.3                        | 4.6                          | 137                                      |
| Area               | Urban                                    | 12.6                  | 0.5                        | 1.0                          | 443                                      |
|                    | Rural                                    | 18.0                  | 0.5                        | 1.1                          | 71                                       |
| Mother's           | None                                     | 22.9                  | 1.8                        | 1.8                          | 62                                       |
| education          | Primary                                  | 18.6                  | 0.6                        | 1.6                          | 543                                      |
|                    | Secondary+                               | 14.8                  | 0.5                        | 0.7                          | 514                                      |
|                    | CET/ITVET/VOTEC                          | (*)                   | (*)                        | (*)                          |  |
| Wealth index       | Poorest                                  | 19.5                  | 0.9                        | 3.5                          | 293                                      |
| quintile           | Second                                   | 16.6                  | 0.5                        | 2.1                          | 26                                       |
|                    | Middle                                   | 11.7                  | 0.7                        | 1.8                          | 24                                       |
|                    | Fourth                                   | 20.5                  | 0.4                        | 0.4                          | 190                                      |
|                    | Richest                                  | 6.1                   | 0.4                        | 0.5                          | 169                                      |
| Ethnicity of       | Creole                                   | 15.0                  | 0.5                        | 1.2                          | 207                                      |
| nousehold head     | Mestizo                                  | 19.0                  | 0.5                        | 0.7                          | 580                                      |
|                    | Garifuna                                 | 13.2                  | 0.9                        | 2.7                          | 6  |
|                    | Maya                                     | 17.6                  | 0.5                        | 2.4                          | 16                                       |
|                    | Other                                    | 14.3                  | 0.7                        | 0.7                          | 118                                      |
| Median             |  | 16.1                  | 0.5                        | 1.0                          | 1154                                     |
| Mean for all child | Iren (0-35 months)                       | 16.0                  | 0.9                        | 3.1                          | 1154                                     |

<sup>[1]</sup> MICS indicator 2.10

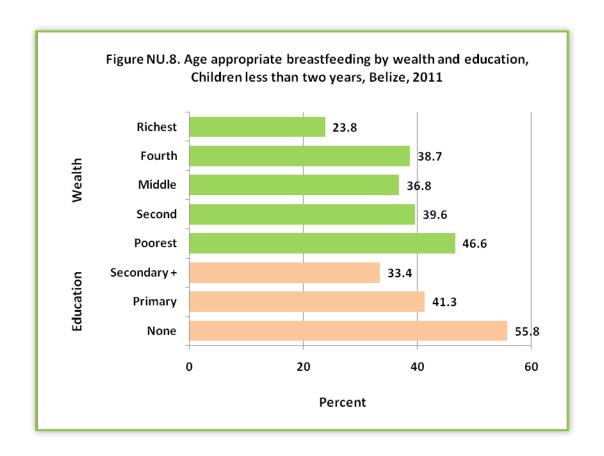
The adequacy of infant feeding in children under 24 months is provided in Table NU.5. Different criteria of feeding are used depending on the age of the child. For infants aged 0-5 months, exclusive breastfeeding is considered as age-appropriate feeding, while infants aged 6-23 months are considered to be appropriately fed if they are receiving breast milk and solid, semi-solid or soft food.

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases; na Not applicable

Overall, only 43.9 percent of children aged 6-23 months are being appropriately fed. Age-appropriate feeding among all infants 0-5 months old drops to 14.7 percent.

Age-appropriate feeding rates for children 0 – 5 months are considerably different for the sexes (males 10.5 percent and females 21.0 percent) and also for urban/rural areas (urban 10.9 percent and rural 17.3 percent). Small sample sizes prevent comparisons for other variables for the 0 – 5 month old children.

For 6 – 23 month old children small difference in age-appropriate feeding rates occur between the sexes (males 45.5 percent and females 42.2 percent) and between urban and rural areas (urban 38.7 percent and rural 47.1 percent). Surprisingly, children of mothers with primary education appropriately feed their children at a rate of 47.7 percent while mothers with a secondary education or better only appropriately feed their children at a rate of 38.1 percent. A similar pattern exists for wealthy families. Children from poor families are appropriately feed at a rate of 50.7 percent while the richest families adequately feed their children at a rate of 28.0 percent. Figure NU.8 clearly shows the decreasing pattern for all children less than 2 years with respect to wealth and educational level.



|              | Percentage of children age 0-23 r         | Table NU.5: Age months who were            |                    |  | he previous day    | , Belize, 2011                            |                       |
|--------------|---|--|--------------------|--|--------------------|---|-----------------------|
|              |   | Children age                               | 0-5 months         | Children age 6   | -23 months         | Children age (                            | )-23 months           |
|              |   | Percent<br>exclusively<br>breastfed<br>[1] | Number of children | Percent<br>currently<br>breastfeeding<br>and receiving<br>solid, semi-<br>solid or soft<br>foods | Number of children | Percent<br>appropriately<br>breastfed [2] | Number of<br>children |
| Sex          | Male                                      | 10.5                                       | 90                 | 45.5   | 306                | 37.6                                      | 396                   |
|              | Female                                    | 21.0                                       | 58                 | 42.2   | 307                | 38.9                                      | 365                   |
| Region       | Corozal                                   | (*)  | 18                 | 64.6   | 93                 | 58.0                                      | 110                   |
|              | Orange Walk                               | (15.0)                                     | 28                 | 40.4   | 96                 | 34.7                                      | 124                   |
|              | Belize (Excluding Belize City South Side) | (*)  | 17                 | (48.1)   | 66                 | 38.1                                      | 83                    |
|              | Belize City South Side                    | (*)  | 20                 | 37.2   | 71                 | 32.3                                      | 91                    |
|              | Belize District                           | (8.0)                                      | 37                 | 42.4   | 137                | 35.1                                      | 174                   |
|              | Cayo                                      | (4.9)                                      | 40                 | 35.1   | 154                | 28.8                                      | 195                   |
|              | Stann Creek                               | (*)  | 9                  | 38.3   | 68                 | 36.1                                      | 77                    |
|              | Toledo                                    | (41.5)                                     | 16                 | 48.9   | 66                 | 47.5                                      | 82                    |
| Area         | Urban                                     | 10.9                                       | 61                 | 38.7   | 237                | 33.0                                      | 298                   |
|              | Rural                                     | 17.3                                       | 87                 | 47.1   | 376                | 41.5                                      | 463                   |
| Mother's     | None                                      | (*)  | 7                  | (59.8)   | 38                 | (53.4)                                    | 45                    |
| education    | Primary                                   | 15.3                                       | 62                 | 47.7   | 285                | 41.9                                      | 347                   |
|              | Secondary +                               | 11.6                                       | 75                 | 38.9   | 275                | 33.0                                      | 350                   |
|              | CET/ITVET/VOTEC                           | (*)  | 1                  | (*)  | 3                  | (*)                                       | 3                     |
|              | Missing/DK                                | (*)  | 0                  | (*)  | 0                  | (*)                                       | 0                     |
|              | Other                                     | (*)  | 3                  | (*)  | 13                 | (*)                                       | 16                    |
| Wealth index | Poorest                                   | (23.7)                                     | 29                 | 50.7   | 160                | 46.6                                      | 189                   |
| quintiles    | Second                                    | (12.9)                                     | 31                 | 45.4   | 141                | 39.6                                      | 172                   |
|              | Middle                                    | (22.3)                                     | 36                 | 41.1   | 118                | 36.7                                      | 154                   |
|              | Fourth                                    | (4.6)                                      | 31                 | 47.6   | 107                | 37.9                                      | 138                   |
|              | Richest                                   | (*)  | 22                 | 28.0   | 87                 | 23.8                                      | 108                   |
| Ethnicity of | Creole                                    | (14.1)                                     | 31                 | 36.1   | 97                 | 30.7                                      | 129                   |
| household    | Mestizo                                   | 9.0  | 71                 | 46.6   | 323                | 39.9                                      | 394                   |
| head         | Garifuna                                  | (*)  | 11                 | (33.5)   | 33                 | (31.9)                                    | 44                    |
|              | Maya                                      | (*)  | 14                 | 47.6   | 91                 | 45.5                                      | 105                   |
|              | Other                                     | (*)  | 19                 | 43.4   | 60                 | 37.4                                      | 80                    |
|              | Missing/DK                                | (*)  | 2                  | (*)  | 8                  | (*)                                       | 10                    |
| Total        |   | 14.7                                       | 148                | 43.9   | 613                | 38.2                                      | 761                   |

<sup>[1]</sup> MICS indicator 2.6; [2] MICS indicator 2.14

Appropriate complementary feeding of children from 6 months to two years of age is particularly important for growth and development and the prevention of under-nutrition. Continued breastfeeding beyond six months should be accompanied by consumption of nutritionally adequate, safe and appropriate complementary foods that help meet nutritional requirements when breast milk is no longer sufficient. This requires that for breastfed children, two or more meals of solid, semi-solid or soft foods are needed if they are six to eight months old, and three or more meals if they are 9-23 months of age. For children 6-23 months and older who are not breastfed, four or more meals of solid, semi-solid or soft foods or milk feeds are needed.

<sup>( )</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

About 68.0 percent of infants age 6-8 received solid, semi-solid, or soft foods (Table NU.6). Among currently breastfeeding infants this percentage is 68.5 while it is 67.0 among infants currently not breastfeeding. Females fare better than males in being fed adequate amounts of complementary foods (overall males 65.8 percent and females 70.6 percent). Urban children seem to fare better than rural children (73.0 percent to 65.7 percent).

Table NU.6: Introduction of solid, semi-solid or soft food
Percentage of infants age 6-8 months who received solid, semi-solid or soft foods during the previous day, Belize, 2011

|       |        | Currently bre  | eastfeeding                             | Currently not b   | reastfeeding                      | All   |                                   |
|-------|--------|--|---|---|-----------------------------------|---|-----------------------------------|
|       |        | Percent re-<br>ceiving solid,<br>semi-solid or<br>soft foods | Number of<br>children age<br>6-8 months | Percent receiving<br>solid, semi-solid<br>or soft foods | Number of children age 6-8 months | Percent receiving<br>solid, semi-solid<br>or soft foods [1] | Number of children age 6-8 months |
| Sex   | Male   | (66.5)   | 40                                      | (*)   | 14                                | 64.6  | 54                                |
|       | Female | (71.0)   | 30                                      | (*)   | 15                                | (70.6)  | 46                                |
| Area  | Urban  | (*)  | 18                                      | (*)   | 15                                | (70.8)  | 33                                |
|       | Rural  | 64.6   | 52                                      | (*)   | 15                                | 65.7  | 67                                |
| Total |        | 68.5   | 70                                      | (*)   | 29                                | 67.4  | 100                               |

<sup>[1]</sup> MICS indicator 2.12

Table NU.7 presents the proportion of children age 6-23 months who received semi-solid or soft foods the minimum number of times or more during the previous day according to breastfeeding status (see the note in Table NU.7 for a definition of minimum number of times for different age groups). Overall, over a half of the children age 6-23 months (67.6 percent) were receiving solid, semi-solid and soft foods the minimum number of times.

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Table NU.7: Minimum meal frequency
Percentage of children age 6-23 months who received solid, semi-solid, or soft foods (and milk feeds for non-breastfeeding children)
the minimum number of times or more during the previous day, according to breastfeeding status, Belize, 2011

|                   |  | Currently brea   | astfeeding                                  | Current   | ly not breastfee  | ding                                     | All  |  |
|-------------------|--|--|---|---|---|--|--|--|
|                   |  | Percent re-<br>ceiving solid,<br>semi-solid<br>and soft foods<br>the minimum<br>number of<br>times | Number<br>of children<br>age 6-23<br>months | Percent receiving<br>at least 2 milk<br>feeds [1] | Percent re-<br>ceiving solid,<br>semi-solid and<br>soft foods or<br>milk feeds 4<br>times or more | Number of<br>children age<br>6-23 months | Percent with<br>minimum<br>meal fre-<br>quency [2] | Num-<br>ber of<br>children<br>age 6-23<br>months |
| Sex               | Male   | 48.6   | 168   | 85.3  | 89.8  | 138                                      | 67.1   | 306  |
|                   | Female                                       | 51.2   | 157   | 83.5  | 85.7  | 150                                      | 68.1   | 307  |
| Age               | 6-8 months                                   | 43.1   | 70  | (88.3)  | (88.3)  | 29                                       | 56.4   | 100  |
|                   | 9-11 months                                  | 42.3   | 70  | (92.2)  | (92.2)  | 39                                       | 60.2   | 109  |
|                   | 12-17 months                                 | 49.3   | 102   | 85.1  | 89.4  | 73                                       | 66.0   | 174  |
|                   | 18-23 months                                 | 62.6   | 83  | 81.1  | 85.4  | 147                                      | 77.2   | 230  |
| Region            | Corozal                                      | 67.4   | 62  | (85.7)  | (88.3)  | 30                                       | 74.3   | 93   |
|                   | Orange Walk                                  | (56.9)   | 47  | 92.6  | 94.2  | 48                                       | 75.7   | 96   |
|                   | Belize (Excluding Belize<br>City South Side) | (*)  | 37  | (*)   | (*)   | 29                                       | (53.1)   | 66   |
|                   | Belize City South Side                       | (42.6)   | 28  | (91.1)  | (95.6)  | 43                                       | 74.4   | 71   |
|                   | Belize District                              | 37.6   | 65  | 83.6  | 88.4  | 72                                       | 64.2   | 137  |
|                   | Cayo   | (44.0)   | 72  | 91.9  | 92.2  | 82                                       | 69.5   | 154  |
|                   | Stann Creek                                  | (45.0)   | 35  | (90.3)  | (90.3)  | 32                                       | 66.6   | 68   |
|                   | Toledo                                       | (48.9)   | 42  | (34.2)  | (52.0)  | 24                                       | 50.0   | 66   |
| Area              | Urban  | 51.5   | 101   | 90.8  | 90.7  | 136                                      | 74.0   | 237  |
|                   | Rural  | 49.1   | 224   | 78.6  | 84.9  | 152                                      | 63.6   | 376  |
| Mother's edu-     | None   | (58.6)   | 28  | (*)   | (*)   | 10                                       | (65.4)   | 38   |
| cation            | Primary                                      | 49.7   | 168   | 79.8  | 85.0  | 117                                      | 64.2   | 285  |
|                   | Secondary +                                  | 47.9   | 124   | 87.3  | 89.1  | 151                                      | 70.5   | 275  |
|                   | CET/ITVET/VOTEC                              | (*)  | 0   | (*)   | (*)   | 3  | (*)  | 3  |
|                   | Other  | (*)  | 5   | (*)   | (*)   | 7  | (*)  | 13   |
| Wealth index      | Poorest                                      | 53.7   | 103   | 58.8  | 73.5  | 57                                       | 60.8   | 160  |
| quintiles         | Second                                       | 53.4   | 82  | 88.1  | 92.2  | 59                                       | 69.6   | 141  |
|                   | Middle                                       | 31.3   | 53  | 93.3  | 93.3  | 65                                       | 65.3   | 118  |
|                   | Fourth                                       | 51.5   | 61  | (92.2)  | (89.5)  | 46                                       | 67.9   | 107  |
|                   | Richest                                      | (*)  | 26  | 89.4  | 89.1  | 61                                       | 79.7   | 87   |
| Ethnicity of      | Creole                                       | (42.3)   | 40  | 91.4  | 90.1  | 58                                       | 70.6   | 97   |
| household<br>head | Mestizo                                      | 52.5   | 183   | 87.6  | 88.5  | 140                                      | 68.1   | 323  |
| noud              | Garifuna                                     | (*)  | 17  | (*)   | (*)   | 16                                       | (58.9)   | 33   |
|                   | Maya   | 42.1   | 55  | (63.7)  | (80.1)  | 36                                       | 57.1   | 91   |
|                   | Other  | (59.9)   | 28  | (90.8)  | (95.0)  | 33                                       | 78.8   | 60   |
|                   | Missing/DK                                   | (*)  | 3   | (*)   | (*)   | 6  | (*)  | 8  |
| Total             |  | 49.8   | 325   | 84.4  | 87.6  | 288                                      | 67.6   | 613  |

<sup>[1]</sup> MICS indicator 2.15; [2] MICS indicator 2.13

The continued practice of bottle-feeding is a concern because of the possible contamination due to unsafe water and lack of hygiene in preparation. Table NU.8 shows that bottle-feeding is still prevalent in Belize. Almost sixty percent (57.8 percent) of children under 6 months of age are fed using a bottle with a nipple.

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

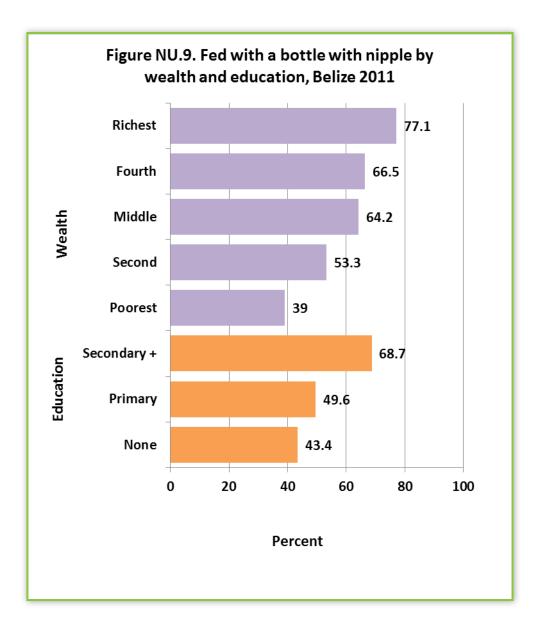
Table NU.8: Bottle feeding Percentage of children age 0-23 months who were fed with a bottle with a nipple during the previous day, Belize, 2011 Percentage of Number children age 0-23 of months fed with a children bottle with a nipple age 0-23 [1] months: Sex Male 63.7 396 **Female** 51.4 365 54.6 Age 0-5 months 148 6-11 months 63.5 209 55.9 12-23 months 404 Region Corozal 49.0 110 44.2 Orange Walk 124 Belize (Excluding Belize 71.7 83 City South Side) 75.5 91 **Belize City South Side Belize District** 73.7 174 Cayo 195 72.4 77 Stann Creek Toledo 27.6 82 Area 69.9 298 Rural 49.9 463 Mother's (43.4)45 education **Primary** 49.6 347 Secondary + 68.7 350 CET/ITVET/VOTEC 3 (\*) Other (\*) 16 Wealth 39.0 189 **Poorest** index Second 53.3 172 quintiles 64.2 154 Middle Fourth 66.5 138 Richest 77.1 108 Ethnicity of 71.6 129 Creole household 56.1 394 Mestizo head Garifuna (73.9)44 Maya 42.9 Other 53.9 80 Missing/DK 10 Total 761

In children under 23 months males are more likely than females to be fed from a bottle with a nipple (males 63.7 percent and females 51.4 percent). It is clear that urban children are also more likely to be fed from a bottle (urban 69.9 percent and rural 49.9 percent). In Belize, the prevalence is highest in Belize City South Side (75.5 percent) and the rest of the Belize District (71.7 percent) and in the Stann Creek District (72.4 percent), and it is lowest in the Toledo District (27.6 percent). Rates of bottle feeding increase as the educational level of the mother increases (no education: 43.4 percent to Secondary+: 68.7 percent). A similar trend exists for the index of wealth with poorest families at 39.0 percent and the richest families at 77.1 percent (Figure NU.9). Children with Creole (71.6 percent) and Garifuna (73.9 percent) heads of household display elevated prevalence among ethnic groups for feeding from a bottle with a nipple.

<sup>[1]</sup> MICS indicator 2.11

<sup>()</sup> Figures that are based on 25-49 un-weighted cases;

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases



# **Children's Vitamin A Supplementation**

Vitamin A is essential for eye health and proper functioning of the immune system. It is found in foods such as milk, liver, eggs, red and orange fruits, red palm oil and green leafy vegetables, although the amount of vitamin A readily available to the body from these sources varies widely. In developing areas of the world, where vitamin A is largely consumed in the form of fruits and vegetables, daily per capita intake is often insufficient to meet dietary requirements. Inadequate intakes are further compromised by increased requirements for the vitamin as children grow or during periods of illness, as well as increased losses during common childhood infections. As a result, vitamin A deficiency is quite prevalent in the developing world and particularly in countries with the highest burden of under-five deaths.

The 1990 World Summit for Children set the goal of virtual elimination of vitamin A deficiency and its consequences, including blindness, by the year 2000. This goal was also endorsed at the Policy Conference on Ending Hidden Hunger in 1991, the 1992 International Conference on Nutrition, and the UN General Assembly's Special Session on Children in 2002. The critical role of vitamin A for child health and immune function also makes control of deficiency a primary component of child survival efforts, and therefore

critical to the achievement of the fourth Millennium Development Goal: a two-thirds reduction in under-five mortality by the year 2015.

For countries with vitamin A deficiency problems, current international recommendations call for high-dose vitamin A supplementation every four to six months, targeted to all children between the ages of six to 59 months living in affected areas. Providing young children with two high-dose vitamin A capsules a year is a safe, cost-effective, efficient strategy for eliminating vitamin A deficiency and improving child survival. Giving vitamin A to new mothers who are breastfeeding helps protect their children during the first months of life and helps to replenish the mother's stores of vitamin A, which are depleted during pregnancy and lactation. For countries with vitamin A supplementation programs, the definition of the indicator is the percent of children 6-59 months of age receiving at least one high dose vitamin A supplement in the last six months.

Based on UNICEF/WHO guidelines, the Belize Ministry of Health recommends that children aged 6-11 months be given one high dose Vitamin A capsules and children aged 12-59 months given a vitamin A capsule every 6 months. In some parts of the country, Vitamin A capsules are linked to immunization services and are given when the child has contact with these services after six months of age. It is also recommended that mothers take a Vitamin A supplement within eight weeks of giving birth due to increased Vitamin A requirements during pregnancy and lactation.

Within the six months prior to the MICS, 65.1 percent of children aged 6-59 months received a high dose Vitamin A supplement (Table NU.10). Approximately 66.9 percent of females received the supplement in the last 6 months: males received treatment at a rate of 63.1 percent. Children from the Toledo District (51.3 percent) and the Belize City South Side (51.9 percent) were less likely to get Vitamin A supplement within the last 6 months. Maya children (58.2 percent) were least likely to receive Vitamin A supplement within the last 6 months.

The age pattern of Vitamin A supplementation shows that supplementation in the last six months rises slowly from 53.3 percent among children aged 6-11 months to 68.0 percent among children aged 48-59 months. Rural children receive Vitamin A supplementation at a rate of 66.9 percent as compared to urban rate of 62.0 percent.

# Table NU.10: Children's vitamin A supplementation Percent distribution of children age 6-59 months by receipt of a high dose vitamin A supplement in the last 6 months, Belize, 2011

|                             |                               | Percentage who reco                         |                 |  |                                       |
|-----------------------------|-------------------------------|---|-----------------|--|---------------------------------------|
|                             |                               | Child health book/card/<br>vaccination card | Mother's report | Percentage of<br>children who<br>received Vitamin<br>A during the last 6<br>months [1] | Number of children<br>age 6-59 months |
| Sex                         | Male                          | 2.8   | 63.2            | 63.2   | 894                                   |
| Jex                         | Female                        | 4.8   | 66.9            | 66.9   | 904                                   |
| Region                      | Corozal                       | 10.3  | 57.0            | 57.0   | 246                                   |
| Tiografi                    | Orange Walk                   | 3.8   | 65.9            | 65.9   | 274                                   |
|                             | Belize (Excluding Belize City | 3.5   | 67.6            | 67.6   | 223                                   |
|                             | South Side)                   | 0.0   | 0.10            | 5.10   |                                       |
|                             | Belize City South Side        | 1.4   | 51.9            | 51.9   | 232                                   |
|                             | Belize District               | 2.4   | 59.6            | 59.6   | 455                                   |
|                             | Cayo                          | 4.4   | 78.2            | 78.2   | 409                                   |
|                             | Stann Creek                   | 0.0   | 73.9            | 73.9   | 203                                   |
|                             | Toledo                        | 2.1   | 51.3            | 51.3   | 211                                   |
| Area                        | Urban                         | 2.7   | 62.0            | 62.0   | 682                                   |
|                             | Rural                         | 4.5   | 66.9            | 66.9   | 1116                                  |
| Age                         | 6-11                          | 5.0   | 53.3            | 53.3   | 209                                   |
| _                           | 12-23                         | 3.6   | 65.5            | 65.5   | 404                                   |
|                             | 24-35                         | 4.3   | 66.5            | 66.5   | 393                                   |
|                             | 36-47                         | 4.8   | 66.5            | 66.5   | 395                                   |
|                             | 48-59                         | 2.0   | 68.0            | 68.0   | 397                                   |
| Mother's education          | None                          | 3.4   | 45.5            | 45.5   | 93                                    |
|                             | Primary/Infant                | 3.7   | 66.9            | 66.9   | 884                                   |
|                             | Secondary +                   | 4.0   | 65.3            | 65.3   | 764                                   |
|                             | CET/ITVET/VOTEC               | (*)   | (*)             | (*)  | 13                                    |
|                             | Missing/DK                    | (*)   | (*)             | (*)  | 1                                     |
|                             | Other                         | 2.1   | 60.3            | 60.3   | 43                                    |
| Wealth index quintiles      | Poorest                       | 3.6   | 55.9            | 55.9   | 462                                   |
|                             | Second                        | 5.5   | 72.6            | 72.6   | 420                                   |
|                             | Middle                        | 3.1   | 61.2            | 61.2   | 371                                   |
|                             | Fourth                        | 5.1   | 69.0            | 69.0   | 299                                   |
|                             | Richest                       | 1.0   | 70.6            | 70.6   | 247                                   |
| Ethnicity of household head | Creole                        | 3.7   | 67.2            | 67.2   | 347                                   |
|                             | Mestizo                       | 5.0   | 67.9            | 67.9   | 878                                   |
|                             | Garifuna                      | 0.0   | 69.3            | 69.3   | 94                                    |
|                             | Maya                          | 3.1   | 58.2            | 58.2   | 274                                   |
|                             | Other                         | 1.0   | 54.9            | 54.9   | 175                                   |
|                             | Missing/DK                    | 5.6   | 66.6            | 66.6   | 29                                    |
| Total                       |                               | 3.8   | 65.1            | 65.1   | 1798                                  |

<sup>[1]</sup> MICS indicator 2.17
(\*) Figures that are based on less than 25 un-weighted cases

# **Low Birth Weight**

Weight at birth is a good indicator not only of a mother's health and nutritional status but also the newborn's chances for survival, growth, long-term health and psychosocial development. Low birth weight (less than 2,500 grams) carries a range of grave health risks for children. Babies who were undernourished in the womb face a greatly increased risk of dying during their early months and years. Those who survive have impaired immune function and increased risk of disease; they are likely to remain undernourished, with reduced muscle strength, throughout their lives, and suffer a higher incidence of diabetes and heart disease in later life. Children born underweight also tend to have a lower IQ and cognitive disabilities, affecting their performance in school and their job opportunities as adults.

In the developing world, low birth weight stems primarily from the mother's poor health and nutrition. Three factors have most impact: the mother's poor nutritional status before conception, short stature (due mostly to under nutrition and infections during her childhood), and poor nutrition during the pregnancy. Inadequate weight gain during pregnancy is particularly important since it accounts for a large proportion of foetal growth retardation. Moreover, diseases such as diarrhoea and malaria, which are common in many developing countries, can significantly impair foetal growth if the mother becomes infected while pregnant.

In the industrialized world, cigarette smoking during pregnancy is the leading cause of low birth weight. In developed and developing countries alike, teenagers who give birth when their own bodies have yet to finish growing run the risk of bearing underweight babies.

One of the major challenges in measuring the incidence of low birth weight is the fact that more than half of infants in the developing world are not weighed. In the past, most estimates of low birth weight for developing countries were based on data compiled from health facilities. However, these estimates are biased for most developing countries because the majority of newborns are not delivered in facilities, and those who are represent only a selected sample of all births.

Because many infants are not weighed at birth and those who are weighed may be a biased sample of all births, the reported birth weights usually cannot be used to estimate the prevalence of low birth weight among all children. Therefore, the percentage of births weighing below 2500 grams is estimated from two items in the questionnaire: the mother's assessment of the child's *size* at birth (i.e., very small, smaller than average, average, larger than average, very large) and the mother's recall of the child's weight or the weight as recorded on a health card if the child was weighed at birth<sup>2</sup>.

# Table NU.11: Low birth weight infants

Percentage of last-born children in the 2 years preceding the survey that are estimated to have weighed below 2500 grams at birth and percentage of live births weighed at birth, Belize, 2011

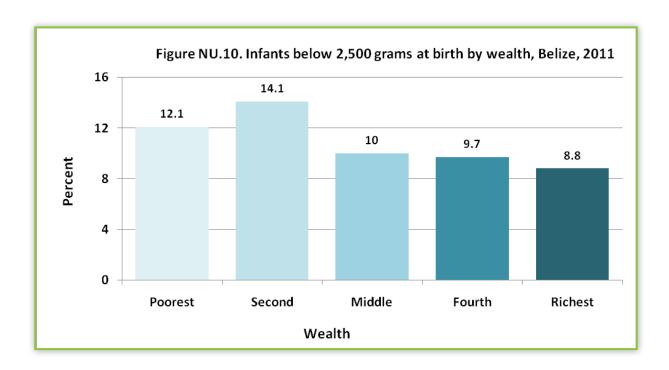
|                             |   | Percent of           | f live births:       |   |
|-----------------------------|---|----------------------|----------------------|---|
|                             |   | Below 2500 grams [1] | Weighed at birth [2] | Number of live births in the last 2 years |
| Region                      | Corozal                                   | 13.5                 | 98.2                 | 95  |
|                             | Orange Walk                               | 9.4                  | 98.4                 | 108                                       |
|                             | Belize (Excluding Belize City South Side) | 12.9                 | 87.5                 | 74  |
|                             | Belize City South Side                    | 10.2                 | 96.4                 | 77  |
|                             | Belize District                           | 11.5                 | 92.0                 | 151                                       |
|                             | Cayo                                      | 10.4                 | 98.3                 | 189                                       |
|                             | Stann Creek                               | 12.4                 | 90.7                 | 69  |
|                             | Toledo                                    | 10.6                 | 87.8                 | 73  |
| Area                        | Urban                                     | 11.4                 | 96.3                 | 262                                       |
|                             | Rural                                     | 11.0                 | 94.3                 | 424                                       |
| Education                   | None                                      | (11.2)               | (91.6)               | 41  |
|                             | Primary                                   | 12.2                 | 94.5                 | 311                                       |
|                             | Secondary +                               | 10.5                 | 95.8                 | 315                                       |
|                             | CET/ITVET/VOTEC                           | (*)                  | (*)                  | 3   |
|                             | Other                                     | (*)                  | (*)                  | 15  |
| Wealth index quintiles      | Poorest                                   | 12.1                 | 91.9                 | 173                                       |
|                             | Second                                    | 14.1                 | 96.0                 | 156                                       |
|                             | Middle                                    | 9.6                  | 95.9                 | 134                                       |
|                             | Fourth                                    | 9.7                  | 95.6                 | 132                                       |
|                             | Richest                                   | 8.7                  | 97.3                 | 91  |
| Ethnicity of household head | Creole                                    | 13.4                 | 95.1                 | 113                                       |
|                             | Mestizo                                   | 10.1                 | 95.6                 | 355                                       |
|                             | Garifuna                                  | (10.1)               | (92.4)               | 43  |
|                             | Maya                                      | 13.9                 | 91.7                 | 96  |
|                             | Other                                     | 9.8                  | 100.0                | 71  |
|                             | Missing/DK                                | (*)                  | (*)                  | 8   |
| Total                       |   | 11.1                 | 95.0                 | 685                                       |

<sup>[1]</sup> MICS indicator 2.18; [2] MICS indicator 2.19

<sup>()</sup> Figures that are based on 25-49 un-weighted cases;

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases

Overall, 95.0 percent of births were weighed at birth and approximately 11.1 percent of infants are estimated to weigh less than 2500 grams at birth (Table NU.11). There was notable variation by wealth (Figure NU.10). Maya (13.9 percent) and Creole (13.4 percent) children show elevated rates low birth weights. Low birth weight infants are most prevalent in the Corozal District (13.5 percent), the Belize area (excluding Belize City South Side) (12.9 percent) and the Stann Creek District (12.4 percent). The percentage of low birth weight does not vary much by urban and rural areas or by mother's education.





## **Vaccinations**

he Millennium Development Goal (MDG) 4 is to reduce child mortality by two thirds between 1990 and 2015. Immunization plays a key part in this goal. Immunizations have saved the lives of millions of children in the three decades since the launch of the Expanded Programme on Immunization (EPI) in 1974. Worldwide there are still 27 million children overlooked by routine immunization and as a result, vaccine-preventable diseases cause more than 2 million deaths every year.

A World Fit for Children goal is to ensure full immunization of children under-one year of age at 90 percent nationally, with at least 80 percent coverage in every district or equivalent administrative unit. According to UNICEF and WHO guidelines, a child should receive a BCG vaccination to protect against tuberculosis, three doses of DPT to protect against diphtheria, pertussis, and tetanus, three doses of polio vaccine, and a measles vaccination by the age of 18 months. Mothers were asked to provide vaccination cards for children under the age of five. Interviewers copied vaccination information from the cards onto the MICS guestionnaire.

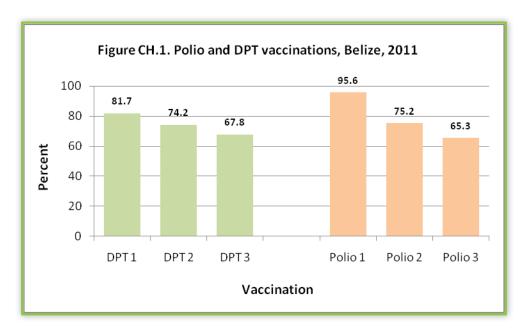
Table CH.1: Vaccinations in first year of life
Percentage of children age 18-29 months immunized against childhood diseases at any time before the survey and before
the first birthday (and by 18 months for measles), Belize, 2011

|  | Vaccinated at any<br>time before the<br>survey according to:<br>Vaccination card | Vaccinated at any<br>time before the<br>survey according<br>to: Mother's report | Vaccinated at any<br>time before the<br>survey according<br>to: Either | Vaccinated by 12<br>months of age (18<br>months for measles) |
|--|--|---|--|--|
| BCG [1]  | 75.5   | 22.5  | 98.0   | 97.5   |
| Polio 1  | 75.0   | 22.4  | 97.3   | 95.6   |
| Polio 2  | 75.6   | 1.8   | 77.4   | 75.2   |
| Polio 3 [2]                                      | 69.2   | 0.8   | 70.0   | 65.3   |
| Polio Booster                                    | 1.5  | 0.8   | 2.3  | 1.4  |
| DTP 1)   | 77.7   | 5.8   | 83.4   | 81.7   |
| DTP 2)   | 75.4   | 1.2   | 76.6   | 74.2   |
| DTP 3) [3]                                       | 72.3   | 1.2   | 73.5   | 67.8   |
| DPT Booster (Diphteria, Whooping Cough, Tetanus) | 1.4  | 1.2   | 2.6  | 2.2  |
| HIB 1 Haemophilus Influenzae B)                  | 77.5   | 6.0   | 83.5   | 83.5   |
| HIB 2 Haemophilus Influenzae B)                  | 75.4   | 1.2   | 76.6   | 76.6   |
| HIB 3 Haemophilus Influenzae B)                  | 72.3   | 1.2   | 73.5   | 73.5   |
| HIB 4 Haemophilus Influenzae B)                  | 1.6  | 1.1   | 2.8  | 2.1  |
| НерВ 1   | 77.4   | 6.1   | 83.5   | 83.5   |
| НерВ 2   | 75.3   | 1.5   | 76.8   | 76.8   |
| НерВ 3 [5]                                       | 72.2   | 1.5   | 73.7   | 73.7   |
| Measles [4]                                      | 72.2   | 17.5  | 89.8   | 84.9   |
| All vaccinations                                 | 62.9   | 0.0   | 62.9   | 54.3   |
| No vaccinations                                  | 0.0  | 1.7   | 1.7  | 1.7  |
| Number of children age 18-29 months              | 405  | 405   | 405  | 405  |

[1] MICS indicator 3.1; [2] MICS indicator 3.2; [3] MICS indicator 3.3; [4] MICS indicator 3.4; MDG indicator 4.3; [5] MICS indicator 3.5

Overall, 75.3 percent of children had health cards that were seen by the interviewers (Table CH.2). If the child did not have a card, the mother was asked to recall whether or not the child had received each of the vaccinations and, for DPT, Polio, HIB and Heb B, how many times. The percentage of children age 12 to 23 months who received each of the vaccinations is shown in Table CH.1. The denominator for the table is comprised of children age 12-23 months so that only children who are old enough to be fully vaccinated are counted. For measles, the denominator is 18-29 months as the vaccine is administered from age 6 months. In the top panel, the numerator includes all children who were vaccinated at any time before the survey according to the vaccination card or the mother's report. In the bottom panel, only those who were vaccinated before their first birthday, as recommended, are included. For children without vaccination cards, the proportion of vaccinations given before the first birthday is assumed to be the same as for children with vaccination cards.

Approximately 97.5 percent of children age 12-23 months received a BCG vaccination by the age of 12 months and the first dose of DPT was given to 81.7 percent. The percentage declines for subsequent doses of DPT to 74.2 percent for the second dose, and 67.8 percent for the third dose (Figure CH.1). Similarly, 95.6 percent of children received Polio 1 by age 12 months and this declines to 65.3 percent by the third dose. The coverage for measles vaccine by 18 months is somewhat lower than for the other vaccines at 84.9 percent.



In Belize, influenza vaccinations are also recommended as part of the immunization schedule and three doses are provided to the child by age 12 months. These can be seen in Table CH1.

Table CH.2 shows vaccination coverage rates among children 12-23 months by background characteristics. The figures indicate children receiving the vaccinations at any time up to the date of the survey, and are based on information from both the vaccination cards and mothers'/caretakers' reports. In general, Maya children seem to have the lowest levels of vaccinations followed by Creole children. There were too few cases of Garifuna children to make useable comparisons. Female children overall seem to have slightly higher coverage rates than male children, though the differences are generally small. The Toledo District and Belize City South Side have the lowest vaccination rates of all regions of the country for BCG, Polio 1, DPT 1 and Measles vaccinations.

Table CH.2: Vaccinations by background characteristics Percentage of children age 18-29 months currently vaccinated against childhood diseases, Belize, 2011

| Particle    |              |  |         |         |         |        |        |        | PERCE  | PERCENTAGE O        | OF CHILD | CHILDRENWHO RECEIVED: | ) RECEIV | ŒD: |      |        |         |                |       |        |  |  |
|--|--------------|--|---------|---------|---------|--------|--------|--------|--------|---------------------|----------|-----------------------|----------|-----|------|--------|---------|----------------|-------|--------|--|--|
| Male 890 892 752 874 833 759 759 759 759 759 759 759 759 759 759   |              |  | BCG     | Polio 1 | Polio 2 |        | DPT 1  | DPT 2  |        | DPT<br>Boost-<br>er | HIB 1    | HIB 2                 | HIB 3    |     | _    |        | Hep B 3 | ı <del>-</del> | None  |        | Percentage<br>with vacci-<br>nation card<br>seen | Number<br>of children<br>age 18-29<br>months |
| Concoral   St.     | Sex          | Male   | 0.66    | 98.2    | 75.2    | 67.4   | 83.3   | 75.9   | 73.0   | 3.2                 | 83.4     | 75.9                  | 73.0     | 3.2 | 83.4 | 76.4   | 73.5    | 88.7           | 0.7   | 58.6   | 72.7   | 198  |
| Corrige Weak in Control  |              | Female   | 97.0    | 96.4    | 79.4    | 72.4   | 83.5   | 77.2   | 73.9   | 2.1                 | 83.5     | 77.2                  | 73.9     | 2.5 | 83.6 | 77.3   | 74.0    | 8.06           | 2.7   | 8.99   | 77.9   | 207  |
| Helize (17) (17) (17) (17) (17) (17) (17) (17)   | Region       | Corozal  | 98.3    | 96.7    | 82.1    | 82.1   | 82.3   | 82.1   | 77.3   | 3.1                 | 82.3     | 82.1                  | 77.3     | 3.1 | 82.6 | 82.4   | L.L.L   | 93.6           | 1.7   | 74.5   | 77.2   | 99   |
| Figure 1   |              | Orange Walk  | 100.0   | 100.0   | 80.3    | 74.4   | 85.7   | 82.5   | 78.0   | 2.1                 | 85.7     | 82.5                  | 78.0     | 2.1 | 85.7 | 82.5   | 78.0    | 95.7           | 0.0   | 71.7   | 81.7   | 29   |
| Belize City St. 98.0 98.8 145 64.7 94.4 72.0 69.5 3.7 84.6 72.0 69.5 3 |              | Belize<br>(Excluding<br>Belize City<br>South Side) | *       | *       | *)      | *      | *      | *      | *)     | *                   | *)       | *)                    | *        | *   | *    | *)     | *       | *              | *     | *      | *  | 36   |
| Belize Belize B 88 3 8 3 44 5 64 7 84 4 72.0 69.5 67.0 69.5 67.0 69.5 67.0 69.5 67.0 69.5 67.0 69.5 67.0 69.5 67.0 69.5 67.0 67.0 67.0 67.0 67.0 67.0 67.0 67.0  |              | Belize City<br>South Side                          | 98.0    | 98.0    | 78.3    | 73.8   | 92.2   | 80.3   | 75.8   | 6.4                 | 92.3     | 80.3                  | 75.8     | 6.4 | 92.2 | 80.3   | 75.8    | 92.1           | 2.0   | 68.3   | 73.9   | 52   |
| Cayo   Ge,   |              | Belize<br>District                                 | 98.8    | 98.8    | 74.5    | 64.7   | 84.4   | 72.0   | 69.5   | 3.7                 | 84.6     | 72.0                  | 69.5     | 3.7 | 84.4 | 72.0   | 69.5    | 93.5           | 1.2   | 61.7   | 73.8   | 88   |
| Stann Creek (100.0) 94.1 95.3 88.8 54.3 72.3 58.4 57.1 4.4 72.3 58.4 57.1 77.5 76.2 88.0 6.9 (81.1) 79.0 (81.1) 79 |              | Cayo   | 6.96    | 95.3    | 81.6    | 6.69   | 85.5   | 80.9   | 77.8   | 0.0                 | 85.5     | 80.9                  | 77.8     | 0.  | 85.5 | 80.9   | 77.8    | 82.2           | 3.1   | 60.1   | 82.9   | 66   |
| Toledo   94.1   95.3   58.8   54.3   72.3   58.4   57.1   44.   72.3   58.4   57.1   44.   72.5   58.4   57.1   44.   72.5   58.4   57.1   44.   72.5   58.4   57.1   44.   72.5   58.4   57.1   59.5   57.2   58.4   77.5   75.2   70.4   2.2   84.1   75.0   70.4   89.4   97.5   98.5   77.5   |              | Stann Creek  | (100.0) | (97.9)  | (86.9)  | (79.7) | (88.0) | (81.1) | (0.67) | (4.6)               | (88.0)   | (81.1)                | (19.0)   |     |      | (83.2) | (80.9)  | (93.4)         |       | (75.3) | (79.2)   | 40.3   |
| Hurant (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)   |              | Toledo   | 94.1    | 95.3    | 58.8    | 54.3   | 72.3   | 58.4   | 57.1   | 4.4                 | 72.3     | 58.4                  | 57.1     | 4.4 | 72.6 | 58.8   | 57.6    | 82.7           | 3.7   | 38.3   | 51.5   | 22   |
| Find Hard (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)  | Area         | Urban  | 98.9    | 98.7    | 77.1    | 0.69   | 84.1   | 75.0   | 70.4   | 2.2                 | 84.2     | 75.0                  | 70.4     | 2.2 | 84.1 | 75.0   | 70.4    | 89.4           | 0.7   | 61.7   | 74.7   | 145  |
| Holo Primary 99.3 98.5 80.7 74.8 87.8 81.1 76.3 1.8 87.8 81.1 76.3 2.3 87.9 81.7 76.9 91.7 76.9 91.7 76.9 11.0 Primary 99.3 98.5 80.7 74.8 87.8 81.1 76.3 1.8 87.8 81.1 76.3 2.3 87.9 81.7 76.9 91.7 |              | Rural  | 97.5    | 96.5    | 77.6    | 9.07   | 83.1   | 77.5   | 75.2   | 2.8                 | 83.1     | 77.5                  | 75.2     | 3.2 | 83.2 | 77.9   | 75.7    | 89.9           | 2.3   | 63.5   | 75.7   | 260  |
| High Primary 99.3 98.5 80.7 74.8 87.8 81.1 76.3 1.8 87.8 81.1 76.3 1.8 76.3 2.3 87.9 81.7 76.9 91.7 0.3 Infant Secondary 97.8 75.3 66.0 81.7 74.0 72.4 3.2 81.8 74.0 72.4 3.2 81.8 74.0 72.4 89.9 81.7 75.0 91.8 75.1 89.9 81.7 80.3 4.0 90.0 81.7 80.3 4.0 89.9 81.7 80.3 74.0 75.0 2.8 84.5 78.1 75.0 2.8 84.8 84.8 84.8 84.8 84.8 84.8 84.8   | Mother's     | None   | *)      | *       | *       | *      | *      | *      | *      | *                   | *        | *                     | *        | *   | *    | *      | *       | *              | *     | *      | *  | 22   |
| Secondary+ 979 978 75.3 66.0 81.7 74.0 72.4 3.2 81.8 74.0 72.4 3.2 81.7 74.0 72.4 89.9 81.7 74.0 72.4 89.9 17.    ity of Creole 99.2 100.0 81.2 73.1 89.9 81.7 80.3 4.0 90.0 81.7 80.3 4.0 89.9 81.7 80.3 91.6 0.0 81.7 80.3 4.0 89.9 81.7 80.3 91.6 0.0 81.7 80.3 4.0 89.9 81.7 80.3 91.6 0.0 81.7 80.3 4.0 89.9 81.7 80.3 91.6 0.0 81.2 73.1 89.9 81.7 80.3 4.0 89.9 81.7 80.3 4.0 89.9 81.7 80.3 91.6 0.0 81.2 73.1 89.9 81.7 80.3 4.0 89.9 81.7 80.3 4.0 89.9 81.7 80.3 91.6 0.0 81.2 73.1 89.9 81.7 80.3 81.7 80.3 81.7 80.3 81.7 80.3 81.7 80.3 81.7 80.3 81.7 80.3 81.7 80.3 81.7 80.3 81.7 80.3 81.7 80.3 81.7 80.3 81.7 81.7 81.7 81.7 81.7 81.7 81.7 81.7  | education    | Primary/<br>Infant                                 | 99.3    | 98.5    | 80.7    | 74.8   | 87.8   | 81.1   | 76.3   | 1.8                 | 878      | 81.1                  | 76.3     | 2.3 | 87.9 | 81.7   | 76.9    | 91.7           | 0.3   | 67.0   | 78.8   | 187  |
| ity of Creole 99.2 100.0 81.2 73.1 89.9 81.7 75.0 2.4 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.2 78.5 92.9 0.8 Carifuna (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)   |              | Secondary +  | 97.9    | 97.8    | 75.3    | 0.99   | 81.7   | 74.0   | 72.4   | 3.2                 | 81.8     | 74.0                  | 72.4     | 3.2 | 81.7 | 74.0   | 72.4    | 89.4           | 1.7   | 59.3   | 73.2   | 184  |
| Mestizo 99.2 99.2 80.9 73.6 84.5 78.1 75.0 2.4 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 75.0 2.8 84.5 78.1 (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)  | Ethnicity of |  | 99.2    | 100.0   | 81.2    | 73.1   | 89.9   | 81.7   | 80.3   | 4.0                 | 0.06     | 81.7                  | 80.3     | 4.0 | 89.9 | 81.7   | 80.3    | 91.6           | 0.0   | 65.2   | 78.4   | 77   |
| Garifuna (*) (*) (*) (*) (*) (*) (*) (*) (*) (*)   | household    | Mestizo  | 99.2    | 99.2    | 80.9    | 73.6   | 84.5   | 78.1   | 75.0   | 2.4                 | 84.5     | 78.1                  | 75.0     | 2.8 | 84.5 | 78.6   | 75.5    | 92.9           | 8.0   | 68.2   | 80.1   | 203  |
| Maya 96.9 96.1 69.7 62.8 74.1 69.8 68.8 2.9 74.1 69.8 68.8 2.9 74.4 70.1 69.1 79.3 3.1  Other (92.5) (88.0) (69.4) (63.4) (85.2) (73.6) (67.6) (2.1) (85.2) (73.6) (67.6) (2.1) (85.2) (73.6) (67.6) (88.2) (6.1) (88.2) (6.1) (88.2) (6.1) (88.2) (9.1) (9.2) (9. |              | Garifuna   | *)      | *       | *       | *)     | *      | *      | (*)    | *                   | *        | *                     | *        | *   | (*)  | *      | *       | *              | *     | *      | (*)  | 14   |
| Other (92.5) (88.0) (69.4) (63.4) (85.2) (73.6) (67.6) (2.1) (85.2) (73.6) (67.6) (2.1) (85.2) (73.6) (67.6) (88.2) (6.1) (81.0) (61.0) |              | Maya   | 6.96    | 96.1    | 2.69    | 62.8   | 74.1   | 8.69   | 68.8   | 5.9                 | 74.1     | 8.69                  | 68.8     | 5.9 | 74.4 | 70.1   | 69.1    | 79.3           | 3.1   | 47.2   | 6.69   | 92   |
| Missing/DK 100.0 100.0 48.8 48.8 48.8 48.8 0.0 48.8 48.8 0.0 48.8 48.8   |              | Other  | (92.5)  | (88.0)  | (69.4)  | (63.4) | (85.2) | (73.6) | (9.29) | (2.1)               | (85.2)   | (73.6)                | (9.79)   |     |      | (23.6) | (9.79)  | (88.2)         | (6.1) | (9.09) | (74.0)   | 41   |
| רו 1000 רכר 100 פני אכר אאר 20 אני אכר אאר 100 000 ארר כרס 1000  |              | Missing/DK   | 100.0   | 100.0   | 48.8    | 48.8   | 48.8   | 48.8   | 48.8   | 0.0                 | 48.8     | 48.8                  | 48.8     | 0.0 | 48.8 | 48.8   | 48.8    | 100.0          | 0.0   | 48.8   | 48.8   | 9  |
| 96.0 9/,3 1/,4 70.0 63,4 76.0 73.0 2.0 63.0 76.0 73.0 2.8 63.0 76.8 73.7 63.8 1.7  | Total        |  | 0.86    | 97.3    | 77.4    | 70.0   | 83.4   | 9.92   | 73.5   | 2.6                 | 83.5     | 9.92                  | 73.5     | 2.8 | 83.5 | 76.8   | 73.7    | 83.8           | 1.7   | 67.9   | 75.3   | 405  |

4 un-weighted cases in "CET/ITVET/VOTEC" and 9 un-weighted cases in "Other" on Education and 6 un-weighted cases in Missing/DK" in Ethnicity of the head of household are not shown ( ) Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

#### **Neonatal Tetanus Protection**

One of the MDGs is to reduce by three quarters the maternal mortality ratio, with one strategy to eliminate maternal tetanus. In addition, another goal is to reduce the incidence of neonatal tetanus to less than 1 case of neonatal tetanus per 1000 live births in every district. A World Fit for Children goal is to eliminate maternal and neonatal tetanus by 2005.

- The strategy of preventing maternal and neonatal tetanus is to assure all pregnant women receive at least two doses of tetanus toxoid vaccine. If a woman has not received two doses of the tetanus toxoid during a particular pregnancy, she (and her newborn) are also considered to be protected against tetanus if the woman:
- Received at least two doses of tetanus toxoid vaccine, the last within the previous 3 years;
- Received at least 3 doses, the last within the previous 5 years;
- Received at least 4 doses, the last within the previous 10 years;
- Received at least 5 doses anytime during her life.

To assess the status of tetanus vaccination coverage, women who gave birth during the two years before the survey were asked if they had received tetanus toxoid injections during the pregnancy for their most recent birth, and if so, how many. Women who did not receive two or more tetanus toxoid vaccinations during this pregnancy were then asked about tetanus toxoid vaccinations they may have received prior to this pregnancy. Interviewers also asked women to present their vaccination card, on which dates of tetanus toxoid are recorded and referred to information from the cards when available. Table CH.3 presents the results.

Table CH.3 shows the protection status from tetanus of women who have had a live birth within the last 2 years by major background characteristics. Overall, 52.4 percent of women are protected. Belize City South Side (39.0 percent) has the lowest rates of tetanus protection among the other regions. Garifuna women have the lowest rates (47.6 percent) while the Maya have the highest (54.0 percent). Less educated women seem to have lower rates of protection against Tetanus.

Table CH.3: Neonatal tetanus protection

Percentage of women age 15-49 years with a live birth in the last 2 years protected against neonatal tetanus,

Belize, 2011

|              |   | Percentage of women who                                  | Percentage<br>two or mo                            |  | ıring last pı                                       |   |  | Number<br>of<br>women                 |
|--------------|---|--|--|--|---|---|--|---------------------------------------|
|              |   | received at<br>least 2 doses<br>during last<br>pregnancy | 2 doses,<br>the last<br>within<br>prior 3<br>years | 3 doses,<br>the last<br>within<br>prior 5<br>years | 4 doses,<br>the last<br>within<br>prior 10<br>years | 5 or<br>more<br>doses<br>during<br>lifetime | Protected<br>against<br>tetanus<br>[1] | with a live birth in the last 2 years |
| Area         | Urban   | 33.0   | 16.7   | 0.3  | 0.0   | 0.0   | 50.1                                   | 262                                   |
|              | Rural   | 35.5   | 18.2   | 0.2  | 0.0   | 0.0   | 53.9                                   | 424                                   |
| Region       | Corozal   | 39.5   | 17.7   | 0.8  | 0.0   | 0.0   | 58.0                                   | 95                                    |
|              | Orange Walk                                     | 52.8   | 12.0   | 0.0  | 0.0   | 0.0   | 64.8                                   | 108                                   |
|              | Belize (Excluding<br>Belize City South<br>Side) | (26.6)   | (30.8)   | (0.0)  | (0.0)   | (0.0)                                       | (57.5)                                 | 74                                    |
|              | Belize City South<br>Side                       | 24.1   | 13.7   | 1.1  | 0.0   | 0.0   | 39.0                                   | 77                                    |
|              | Belize District                                 | 25.4   | 22.1   | 0.6  | 0.0   | 0.0   | 48.1                                   | 151                                   |
|              | Cayo  | 32.6   | 16.6   | 0.0  | 0.0   | 0.0   | 49.1                                   | 189                                   |
|              | Stann Creek                                     | 31.9   | 19.0   | 0.0  | 0.0   | 0.0   | 50.9                                   | 69                                    |
|              | Toledo  | 27.7   | 18.3   | 0.0  | 0.0   | 0.0   | 46.0                                   | 73                                    |
| Education    | None  | (16.8)   | (14.5)   | (0.0)  | (0.0)   | (0.0)                                       | (31.3)                                 | 46                                    |
|              | Primary   | 36.4   | 14.3   | 0.5  | 0.0   | 0.0   | 51.2                                   | 306                                   |
|              | Secondary +                                     | 36.5   | 20.7   | 0.0  | 0.0   | 0.0   | 57.2                                   | 315                                   |
|              | Other   | (*)  | (*)  | (*)  | (*)   | (*)   | (*)                                    | 15                                    |
| Wealth       | Poorest   | 31.6   | 16.6   | 0.4  | 0.0   | 0.0   | 48.6                                   | 173                                   |
| index        | Second  | 33.2   | 20.7   | 0.0  | 0.0   | 0.0   | 53.9                                   | 156                                   |
| quintiles    | Middle  | 33.0   | 10.4   | 0.6  | 0.0   | 0.0   | 44.1                                   | 134                                   |
|              | Fourth  | 39.7   | 21.7   | 0.0  | 0.0   | 0.0   | 61.4                                   | 132                                   |
|              | Richest   | 37.3   | 19.4   | 0.0  | 0.0   | 0.0   | 56.7                                   | 91                                    |
| Ethnicity of | Creole  | 30.6   | 21.7   | 0.8  | 0.0   | 0.0   | 53.0                                   | 113                                   |
| household    | Mestizo   | 39.2   | 13.5   | 0.2  | 0.0   | 0.0   | 52.9                                   | 355                                   |
| head         | Garifuna  | (24.5)   | (23.1)   | (0.0)  | (0.0)   | (0.0)                                       | (47.6)                                 | 43                                    |
|              | Maya  | 30.3   | 23.6   | 0.0  | 0.0   | 0.0   | 54.0                                   | 96                                    |
|              | Other   | 28.9   | 21.3   | 0.0  | 0.0   | 0.0   | 50.3                                   | 71                                    |
| Total        |   | 34.5   | 17.7   | 0.2  | 0.0   | 0.0   | 52.4                                   | 685                                   |

<sup>[1]</sup> MICS indicator 3.7

# **Oral Rehydration Treatment**

Diarrhoea is the second leading cause of death among children under five worldwide. Most diarrhoea-related deaths in children are due to dehydration from loss of large quantities of water and electrolytes from the body in liquid stools. Management of diarrhoea – either through oral rehydration salts (ORS) or a recommended home fluid (RHF) - can prevent many of these deaths. Preventing dehydration and malnutrition by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhoea.

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

<sup>3</sup> un-weighted cases in "CET/ITVET/VOTEC" on Education and 8 un-weighted cases in "Missing/DK" on Ethnicity of Household Head are not shown

The goals are to: 1) reduce by one half death due to diarrhoea among children under five by 2010 compared to 2000 (A World Fit for Children); and 2) reduce by two thirds the mortality rate among children under five by 2015 compared to 1990 (Millennium Development Goals). In addition, the World Fit for Children calls for a reduction in the incidence of diarrhoea by 25 percent.

#### The indicators are:

- · Prevalence of diarrhoea
- Oral rehydration therapy (ORT)
- · Home management of diarrhoea
- ORT with continued feeding

In the MICS questionnaire, mothers (or caretakers) were asked to report whether their child had had diarrhoea in the two weeks prior to the survey. If so, the mother was asked a series of questions about what the child had to drink and eat during the episode and whether this was more or less than the child usually ate and drank.

Overall, 7.9 percent of under-five children had diarrhoea in the two weeks preceding the survey (Table CH.4). Diarrhoea prevalence was slightly higher in rural areas (8.8 percent) than in urban areas (4.6 percent). Males had a higher prevalence (9.2 percent) than females (6.5 percent).

Table CH.4 also shows the percentage of children receiving various types of recommended liquids during the episode of diarrhoea. Since children may have been given more than one type of liquid, the percentages do not necessarily add to 100. About 22.8 percent received fluids from ORS packets or pre-packaged ORS fluids and 42.7 percent received Pedialyte. Males and females received oral rehydration solution at about the same rates. Approximately 55.2 percent of children with diarrhoea received one or more of the recommended home treatments (i.e., were treated with ORS or any recommended homemade fluid).

63

Table CH.4: Oral rehydration solutions and recommended homemade fluids

Percentage of children age 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration solutions and recommended homemade fluids, Belize, 2011

|                   |   |  |  | Children wit   | h diarrhoea who i | received:  |  |
|-------------------|---|--|--|--|-------------------|--|--|
|                   |   | Had diar-<br>rhoea in<br>last two<br>weeks | Number of<br>children age<br>0-59 months | ORS (Fluid<br>from ORS<br>packet or<br>pre-pack-<br>aged ORS<br>fluid) | Pedialyte         | ORS or<br>any rec-<br>ommend-<br>ed home-<br>made<br>fluid | Number<br>of children<br>aged 0-59<br>months with<br>diarrhoea |
| Sex               | Male                                      | 9.2  | 984                                      | 22.9   | 44.6              | 58.1   | 91   |
|                   | Female                                    | 6.5  | 962                                      | 22.8   | 39.9              | 50.8   | 62   |
| Region            | Corozal                                   | 9.2  | 263                                      | (38.8)   | (62.3)            | (72.4)   | 24   |
|                   | Orange Walk                               | 3.4  | 302                                      | (*)  | (*)               | (*)  | 10   |
|                   | Belize (Excluding Belize City South Side) | 5.4  | 240                                      | (*)  | (*)               | (*)  | 13   |
|                   | Belize City South Side                    | 4.1  | 252                                      | (*)  | (*)               | (*)  | 10   |
|                   | Belize District Cayo                      | 4.7<br>13.6                                | 492<br>450                               | (*)<br>(15.5)  | (*)<br>(48.5)     | (*)<br>(61.4)  | 23<br>61   |
|                   | Stann Creek                               | 8.2  | 212                                      | (*)  | (*)               | (*)  | 18   |
|                   | Toledo                                    | 7.5  | 226                                      | (*)  | (*)               | (*)  | 17   |
| Area              | Urban                                     | 6.4  | 743                                      | (13.7)   | (46.8)            | (58.5)   | 48   |
|                   | Rural                                     | 8.8  | 1203                                     | 27.0   | 40.9              | 53.7   | 106  |
| Age               | 0-11                                      | 9.3  | 357                                      | (17.8)   | (44.8)            | (56.1)   | 33   |
|                   | 12-23                                     | 14.6                                       | 404                                      | 27.0   | 45.4              | 58.9   | 59   |
|                   | 24-35                                     | 7.6  | 393                                      | (16.4)   | (34.7)            | (46.8)   | 30   |
|                   | 36-47                                     | 4.5  | 395                                      | (*)  | (*)               | (*)  | 18   |
|                   | 48-59                                     | 3.4  | 397                                      | (*)  | (*)               | (*)  | 14   |
| Mother's          | None                                      | 9.5  | 115                                      | (*)  | (*)               | (*)  | 11   |
| education         | Primary                                   | 8.6  | 931                                      | 27.1   | 32.8              | 49.0   | 80   |
|                   | Secondary +                               | 7.2  | 839                                      | 19.4   | 54.3              | 63.0   | 61   |
|                   | Other                                     | (3.2)                                      | 47                                       | (*)  | (*)               | (*)  | 1  |
| Wealth index      | Poorest                                   | 9.6  | 490                                      | 31.9   | 31.9              | 54.8   | 47   |
| quintiles         | Second                                    | 6.4  | 450                                      | (20.7)   | (37.1)            | (45.2)   | 29   |
|                   | Middle                                    | 9.4  | 407                                      | (25.2)   | (47.3)            | (55.2)   | 38   |
|                   | Fourth                                    | 6.1  | 330                                      | (*)  | (*)               | (*)  | (*)  |
|                   | Richest                                   | 7.2  | 268                                      | (*)  | (*)               | (*)  | (*)  |
| Ethnicity of      | Creole                                    | 5.2  | 379                                      | (*)  | (*)               | (*)  | (*)  |
| household<br>head | Mestizo                                   | 9.0  | 949                                      | 19.1   | 37.8              | 47.8   | 86   |
| neau              | Garifuna                                  | 2.5  | 105                                      | (*)  | (*)               | (*)  | 3  |
|                   | Maya                                      | 10.5                                       | 288                                      | (29.1)   | (44.7)            | (62.4)   | 30   |
|                   | Other                                     | 6.5  | 195                                      | (*)  | (*)               | (*)  | (*)  |
|                   | Missing/DK                                | (7.8)                                      | 31                                       | (*)  | (*)               | (*)  | (*)  |
| Total             |   | 7.9  | 1946                                     | 22.8   | 42.7              | 55.2   | 153  |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

About 16.7 percent of under-five children with diarrhoea drank more than usual while 80.4 percent drank the same or less (Table CH.5). Seventy-two percent ate somewhat less, same or more (continued feeding), but 27.6 percent ate much less or stopped food or have not ever eaten. It is clear that males were denied drink at a higher rate than females but fared a little better in getting food. Also, rural children were not as likely as urban children to access drink and food.

Table CH.5. Feeding practices during diarrhoea

Percent distribution of children age 0-59 months with diarrhoea in the last two weeks by amount of liquids and food given during episode of diarrhoea, Belize, 2011

|               |        |   |   |                                      | D                                     | rinking prac                           | tices during                      | diarrhoea:                   |                 |   |
|---------------|--------|---|---|--------------------------------------|---------------------------------------|--|-----------------------------------|------------------------------|-----------------|---|
|               |        | Had diar-<br>rhoea in last<br>two weeks | Number<br>of children<br>age 0-59<br>months | Given<br>much less<br>to drink       | Given<br>somewhat<br>less to<br>drink | Given<br>about the<br>same to<br>drink | Given<br>more to<br>drink         | Given<br>nothing<br>to drink | Miss-<br>ing/DK | Total   |
| Sex           | Male   | 9.2                                     | 984   | 14.1                                 | 24.6                                  | 40.8                                   | 16.1                              | 3.7                          | 0.7             | 100.0   |
|               | Female | 6.5                                     | 962   | 4.4                                  | 39.5                                  | 37.6                                   | 17.7                              | 0.9                          | 0.0             | 100.0   |
| Area          | Urban  | 6.4                                     | 743   | (8.1)                                | (20.5)                                | (47.2)                                 | (20.9)                            | (2.0)                        | (1.3)           | 100.0   |
|               | Rural  | 8.8                                     | 1203  | 11.1                                 | 35.2                                  | 36.0                                   | 14.8                              | 2.8                          | 0.0             | 100.0   |
| Total         |        | 7.9                                     | 1946  | 10.2                                 | 30.7                                  | 39.5                                   | 16.7                              | 2.6                          | 0.4             | 100.0   |
|               |        |   |   | Eating <sub>I</sub>                  | oractices du                          | ring diarrho                           | ea:                               |                              |                 | Number  |
|               |        | Given much less to eat                  | Given<br>somewhat<br>less to eat            | Given<br>about the<br>same to<br>eat | Given<br>more to<br>eat               | Stopped<br>food                        | Had never<br>been giv-<br>en food | Missing/<br>DK               | Total           | of children<br>aged 0-59<br>months<br>with diar-<br>rhoea |
| Sex<br>Female | Male   | 16.9                                    | 27.7  | 37.5                                 | 3.4                                   | 11.0                                   | 2.9                               | 0.7                          | 100.0           | 91  |
|               |        | 14.4                                    | 41.1  | 34.8                                 | 1.0                                   | 6.1                                    | 2.5                               | 0.0                          | 100.0           | 62  |
| Area<br>Rural | Urban  | (11.6)                                  | (33.8)                                      | (43.9)                               | (6.4)                                 | (1.7)                                  | (1.3)                             | (1.3)                        | 100.0           | 48  |
|               |        | 17.8                                    | 32.9  | 33.0                                 | 0.6                                   | 12.3                                   | 3.4                               | 0.0                          | 100.0           | 106   |
| Total         |        | 15.9                                    | 33.2  | 36.4                                 | 2.4                                   | 9.0                                    | 2.7                               | 0.4                          | 100.0           | 153   |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases

Table CH.6 provides the proportion of children age 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and percentage of children with diarrhoea who received other treatments. Overall, 34.4 percent of children with diarrhoea received ORS or increased fluids, 58.6 percent received ORT (ORS or recommended homemade fluids or increased fluids) and 42.5 percent received ORT with continued feeding. There are differences in the management of diarrhoea by area. ORT with continued feeding occurred at a higher rate in urban (58.0 percent) than in rural (35.6 percent) areas. Almost twice as many females (25.2 percent) versus males (14.5 percent) were not given any treatment or drug for diarrhoea.

# Table CH.6: Oral rehydration therapy with continued feeding and other treatments Percentage of children age 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and percentage of children with diarrhoea who received other treatments, Belize, 2011

|       |        | Children wi             | th diarrhoea who  | received:                      |  |                                       |
|-------|--------|-------------------------|---|--------------------------------|--|---------------------------------------|
|       |        | ORS or increased fluids | ORT (ORS or<br>recommend-<br>ed home-<br>made fluids<br>or increased<br>fluids) | ORT with continued feeding [1] | Number<br>of children<br>aged 0-59<br>months with<br>diarrhoea | Not given any<br>treatment or<br>drug |
| Sex   | Male   | 34.4                    | 59.5  | 41.7                           | 91   | 14.5                                  |
|       | Female | 34.5                    | 57.5  | 43.8                           | 62   | 25.2                                  |
| Area  | Urban  | 27.6                    | 62.1  | 58.0                           | 48   | 19.7                                  |
|       | Rural  | 37.5                    | 57.1  | 35.6                           | 106  | 18.5                                  |
| Total |        | 34.4                    | 34.4  | 42.5                           | 153  | 18.9                                  |

[1] MICS indicator 3.8

# **Care Seeking and Antibiotic Treatment of Pneumonia**

Pneumonia is the leading cause of death in children and the use of antibiotics in under-5s with suspected pneumonia is a key intervention. A World Fit for Children goal is to reduce by one-third the deaths due to acute respiratory infections.

Children with suspected pneumonia are those who had an illness with a cough accompanied by rapid or difficult breathing and whose symptoms were NOT due to a problem in the chest and a blocked nose.

### The indicators are:

- · Prevalence of suspected pneumonia
- Care seeking for suspected pneumonia
- · Antibiotic treatment for suspected pneumonia
- · Knowledge of the danger signs of pneumonia

Table CH.7: Care seeking for suspected pneumonia and antibiotic use during suspected pneumonia
Percentage of children age 0-59 months with suspected pneumonia in the last two weeks who were taken to a health provider and percentage of children who were given antibiotics, Belize, 2011

|       |             |   |   | CHILD                              | REN WITH   | H SUSPE         | CTED PN               | CHILDREN WITH SUSPECTED PNEUMONIA WHO WERETAKENTO: | A WHO V                  | VERETA                                      | KENTO                     |             |  |  |  |
|-------|-------------|---|---|------------------------------------|--|-----------------|-----------------------|--|--------------------------|---|---------------------------|-------------|--|--|--|
|       |             | Had suspected pneumonia in the last two weeks | Number of<br>children age<br>0-59 months        | Public sector: Government hospital | Public<br>sector:<br>Govern-<br>ment<br>health<br>center | Other<br>public | Private<br>hospital / | Private<br>hospital / Private<br>clinic physician  | Private<br>pharma-<br>cy | Other Relaprivate tive/medical Friend Other | Rela-<br>tive /<br>Friend |             | Percentage of chil- dren with of children suspected age 0-59 pneumonia months who re- ceived an- pected Any appro- tibiotics in pneumonia priate provid- the last two er [1] weeks [2] two weeks | Percentage of children with suspected pneumonia who received antibiotics in the last two weeks [2] | of chil- dren with of children suspected age 0-59 nneumonia months who re- pected tibiotics in pneumonia he last two in the last weeks [2] two weeks |
| Sex   | Sex Male    | 3.2   | 984   | (33.7)                             | (19.6)   | (2.1)           | (11.3)                | (4.9)  | (3.1)                    | (5.6)                                       | (2.6) (5.0) (2.0)         | (2.0)       | (77.3)   | (67.7)   | 31   |
|       | Female      | 2.7   | 962   | (34.6)                             | (25.1)   | (0.0)           | (29.3)                | (3.2)  | (0.0)                    | (0.0)                                       |                           | (0.0) (0.0) | (88.1)   | (74.1)   | 26   |
| Area  | Area Urban  | 2.0   | 743   | *                                  | *)   | *)              | *)                    | *  | *)                       | *)  | *                         | *)          | *  | *  | 15   |
|       | Rural       | 3.5   | 1203  | 32.8                               | 17.4   | 3.7             | 16.7                  | 5.6  | 0.0                      | 1.9   | 3.7                       | 1.5         | 78.2   | 63.7   | 42   |
| Total | _           | 3.0   | 1946  | 34.1                               | 22.1   | 2.8             | 19.5                  | 4.1  | 1.7                      | 1.4   | 2.7                       | 1.1         | 82.2   | 70.7   | 57   |
| [1] N | AICS indica | 1/V [0] .D C 40+                              | [1] MICS indicator 2 0: [2] MICS indicator 2 10 | 10                                 |  |                 |                       |  |                          |   |                           |             |  |  |  |

[1] MICS indicator 3.9; [2] MICS indicator 3.10

() Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Table CH.7 presents the prevalence of suspected pneumonia and, if care was sought outside the home, the site of care. Three percent of children aged 0-59 months were reported to have had symptoms of pneumonia during the two weeks preceding the survey. Of these children, 82.2 percent were taken to an appropriate provider.

Table CH.7 also presents the use of antibiotics for the treatment of suspected pneumonia in under-5s by sex, age, region, area, age, and socioeconomic factors. In Belize, 70.7 percent of under-5 children with suspected pneumonia had received an antibiotic during the two weeks prior to the survey.

Issues related to knowledge of danger signs of pneumonia are presented in Table CH.8. Obviously, mothers' knowledge of the danger signs is an important determinant of care-seeking behaviour. Overall, 7.0 percent of women know of the two danger signs of pneumonia – fast and difficult breathing. The most commonly identified symptom for taking a child to a health facility is develops a fever (73.3 percent). 13.0 percent of mothers identified fast breathing and 21.2 percent of mothers identified difficult breathing as symptoms for taking children immediately to a health care provider.

Mothers in the Stann Creek District recognized the two signs of pneumonia at a higher rate (24.5 percent) than in all other regions (a minimum of 0.4 percent in Orange Walk) (Table CH.8). As expected more educated mothers had a higher rate for recognizing the two signs of pneumonia (no education 5.3 percent, primary 5.3 percent and secondary+ 9.2 percent). Mothers from households with Garifuna heads recognized the two signs of pneumonia at a higher rate (17.2 percent) than in all other ethnicities. The next highest rate occurred in households with Creole heads (8.5 percent).

Table CH.8: Knowledge of the two danger signs of pneumonia

Percentage of mothers and caretakers of children age 0-59 months by symptoms that would cause them to take the child immediately to a health facility, and percentage of mothers who recognize fast and difficult breathing as signs for seeking care immediately, Belize, 2011

|                    |   |  |                   |                       | 20207                             |                                       |                          |                       |                               |  |  |
|--------------------|---|--|-------------------|-----------------------|-----------------------------------|---------------------------------------|--------------------------|-----------------------|-------------------------------|--|--|
|                    |   | Percentage                               | of mothers/       | caretakers wl<br>heal | no think that<br>th facility if t |                                       | ould be tak              | ken immediat          | tely to a                     | Mothers/care-  | Northead   |
|                    |   | Is not able<br>to drink or<br>breastfeed | Becomes<br>sicker | Develops a<br>fever   | Has fast<br>breathing             | Has dif-<br>ficulty<br>breath-<br>ing | Has<br>blood in<br>stool | ls drinking<br>poorly | Has<br>other<br>symp-<br>toms | takers who<br>recognize the<br>two danger<br>signs of pneu-<br>monia | Number of<br>mothers/care-<br>takers of chil-<br>dren age 0-59<br>months |
| Region             | Corozal   | 2.8                                      | 9.9               | 77.1                  | 7.7                               | 22.8                                  | 1.9                      | 2.3                   | 36.2                          | 5.4  | 177  |
|                    | Orange Walk                                     | 1.5                                      | 5.0               | 57.6                  | 6.8                               | 18.5                                  | 2.5                      | 2.2                   | 5.6                           | 0.4  | 206  |
|                    | Belize (Excluding<br>Belize City<br>South Side) | 5.4                                      | 24.8              | 78.5                  | 11.5                              | 20.6                                  | 3.9                      | 0.9                   | 12.0                          | 4.3  | 166  |
|                    | Belize City<br>South Side                       | 3.6                                      | 3.7               | 67.6                  | 9.9                               | 23.4                                  | 5.4                      | 1.5                   | 36.1                          | 5.3  | 181  |
|                    | Belize Dis-<br>trict                            | 4.4                                      | 13.8              | 72.8                  | 10.7                              | 22.1                                  | 4.7                      | 1.3                   | 24.6                          | 4.9  | 347  |
|                    | Cayo  | 1.3                                      | 4.3               | 79.5                  | 13.0                              | 21.2                                  | 4.4                      | 2.8                   | 21.6                          | 7.2  | 337  |
|                    | Stann Creek<br>Toledo                           | 17.6<br>1.5                              | 28.3<br>36.6      | 71.6<br>79.5          | 27.5<br>18.4                      | 33.0<br>9.2                           | 24.5<br>6.1              | 17.0<br>3.1           | 46.4<br>20.8                  | 24.5<br>4.6  | 150<br>145   |
|                    |   |  |                   |                       |                                   |                                       |                          |                       |                               |  |  |
| Area               | Urban   | 4.7                                      | 9.3               | 73.0                  | 12.8                              | 22.6                                  | 5.8                      | 3.7                   | 28.0                          | 7.4  | 544  |
|                    | Rural   | 3.8                                      | 16.5              | 73.5                  | 13.0                              | 20.3                                  | 6.5                      | 3.9                   | 22.1                          | 6.6  | 818  |
| Education          | None  | 0.9                                      | 13.8              | 69.7                  | 11.1                              | 12.9                                  | 5.1                      | 0.8                   | 20.1                          | 5.3  | 59   |
|                    | Primary/<br>Infant                              | 3.0                                      | 14.2              | 73.2                  | 11.2                              | 18.4                                  | 5.1                      | 4.1                   | 21.5                          | 5.3  | 647  |
|                    | Secondary +                                     | 5.8                                      | 13.5              | 74.7                  | 15.3                              | 25.1                                  | 7.6                      | 3.9                   | 28.5                          | 9.2  | 625  |
| Wealth index quin- | Poorest   | 1.9                                      | 16.3              | 73.2                  | 13.8                              | 17.5                                  | 4.6                      | 3.0                   | 20.3                          | 5.4  | 306  |
| tiles              | Second  | 4.8                                      | 11.1              | 72.6                  | 9.4                               | 20.6                                  | 7.1                      | 3.4                   | 26.6                          | 6.4  | 308  |
|                    | Middle  | 4.2                                      | 14.2              | 72.9                  | 13.5                              | 22.7                                  | 7.6                      | 3.3                   | 27.7                          | 7.2  | 294  |
|                    | Fourth  | 5.2                                      | 14.3              | 73.3                  | 15.3                              | 24.9                                  | 6.3                      | 6.5                   | 19.9                          | 8.6  | 254  |
|                    | Richest   | 5.0                                      | 11.7              | 75.2                  | 13.4                              | 21.1                                  | 5.6                      | 3.3                   | 28.8                          | 7.7  | 201  |
| Ethnicity of       | Creole  | 4.2                                      | 12.0              | 72.4                  | 15.7                              | 22.3                                  | 7.2                      | 3.6                   | 29.4                          | 8.5  | 288  |
| household<br>head  | Mestizo   | 3.3                                      | 10.7              | 72.2                  | 10.1                              | 22.0                                  | 4.4                      | 3.0                   | 23.6                          | 5.6  | 673  |
|                    | Garifuna  | 11.1                                     | 23.6              | 75.2                  | 20.5                              | 29.3                                  | 18.4                     | 13.0                  | 43.5                          | 17.2   | 77   |
|                    | Maya  | 3.7                                      | 22.3              | 83.9                  | 18.8                              | 15.7                                  | 6.8                      | 5.0                   | 16.2                          | 7.2  | 190  |
|                    | Other   | 5.4                                      | 16.1              | 63.4                  | 7.9                               | 15.0                                  | 6.9                      | 2.2                   | 16.2                          | 3.1  | 113  |
| Total              |   | 4.1                                      | 13.6              | 73.3                  | 13.0                              | 21.2                                  | 6.3                      | 3.8                   | 24.5                          | 7.0  | 1362   |
|                    |   |  |                   |                       |                                   |                                       |                          |                       |                               |  |  |

<sup>7</sup> un-weighted cases in "CET/ITVET/VOTEC" and 28 un-weighted cases in "Other" on Education and 21 un-weighted cases in "Missing/DK" on Ethnicity of Household Head are not shown

## **Solid Fuel Use**

More than 3 billion people around the world rely on solid fuels for their basic energy needs, including cooking and heating. Solid fuels include biomass fuels, such as wood, charcoal, crops or other agricultural waste, dung, shrubs and straw, and coal. Cooking and heating with solid fuels leads to high levels of indoor smoke

which contains a complex mix of health-damaging pollutants. The main problem with the use of solid fuels is their incomplete combustion, which produces toxic elements such as carbon monoxide, polyaromatic hydrocarbons, sulphur dioxide (SO<sub>2</sub>) among others. Use of solid fuels increases the risks of incurring acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer, and possibly tuberculosis, asthma and may contribute to low birth weight of babies born to pregnant women exposed to smoke. The primary indicator for monitoring use of solid fuels is the proportion of the population using solid fuels as the primary source of domestic energy for cooking, shown in Table CH.9.

Table CH.9: Solid fuel use

Percent distribution of household members according to type of cooking fuel used by the household, and percentage of household members living in households using solid fuels for cooking, Belize, 2011

|                                     |  | Perc                                   | entage of                                    | f househ                               | old membe                              | ers in house                           | eholds usi                                | ng:  |   |   |  |
|-------------------------------------|--|--|--|--|--|--|---|--|---|---|--|
|                                     |  | Electricity                            | Butane                                       | Biogas                                 | Kerosene                               | Charcoal                               | Wood                                      | No<br>food<br>cooked<br>in<br>house-<br>hold | Total                                     | Solid<br>fuels for<br>cooking<br>[1]      | Number<br>of house-<br>hold<br>members     |
| Region                              | Corozal  | 0.2                                    | 66.3   | 0.1                                    | 0.1                                    | 0.1                                    | 32.6                                      | 0.6  | 100.0                                     | 32.7                                      | 2296                                       |
|                                     | Orange Walk Belize (Excluding Belize City South Side)        | 0.8<br>3.1                             | 81.1<br>92.5                                 | 0.0                                    | 0.1                                    | 0.2                                    | 17.3<br>2.9                               | 0.4<br>1.4                                   | 100.0                                     | 17.4<br>2.9                               | 2584<br>2799                               |
|                                     | Belize City South<br>Side                                    | 3.1                                    | 94.1   | 0.1                                    | 0.3                                    | 0.0                                    | 0.5                                       | 1.8  | 100.0                                     | 0.5                                       | 2177                                       |
|                                     | Belize District<br>Cayo                                      | 3.1<br>2.9                             | 93.2<br>83.1                                 | 0.1<br>0.0                             | 0.2<br>0.0                             | 0.0<br>0.5                             | 1.8<br>12.8                               | 1.6<br>0.4                                   | 100.0<br>100.0                            | 1.8<br>13.3                               | 4976<br>3865                               |
|                                     | Stann Creek<br>Toledo  | 1.1<br>0.6                             | 82.6<br>40.6                                 | 0.0<br>0.0                             | 0.0<br>0.1                             | 0.0<br>0.0                             | 15.0<br>56.6                              | 1.4<br>2.0                                   | 100.0<br>100.0                            | 15.0<br>56.6                              | 1833<br>1733                               |
| Area                                | Urban<br>Rural   | 2.1<br>1.6                             | 92.9<br>68.6                                 | 0.0<br>0.0                             | 0.1<br>0.1                             | 0.3<br>0.1                             | 3.0<br>28.8                               | 1.5<br>0.7                                   | 100.0<br>100.0                            | 3.3<br>28.9                               | 7536<br>9752                               |
| Education<br>of house-<br>hold head | None Primary Secondary + CET/ITVET/VO- TEC Missing/DK Other  | 1.8<br>1.4<br>2.5<br>0.0               | 51.1<br>73.0<br>92.1<br>98.5<br>93.0<br>89.1 | 0.0<br>0.1<br>0.0<br>0.0<br>0.0        | 0.2<br>0.2<br>0.0<br>0.0<br>0.0        | 0.2<br>0.1<br>0.1<br>0.0<br>2.6<br>0.0 | 45.8<br>24.1<br>4.0<br>0.5<br>1.7<br>10.9 | 0.9<br>1.0<br>1.1<br>0.9<br>0.4<br>0.0       | 100.0<br>100.0<br>100.0<br>100.0<br>100.0 | 46.0<br>24.2<br>4.1<br>0.5<br>4.3<br>10.9 | 1377<br>8782<br>6412<br>172<br>256<br>288  |
| Wealth<br>index<br>quintiles        | Poorest<br>Second<br>Middle<br>Fourth<br>Richest             | 1.4<br>1.6<br>1.6<br>1.8<br>2.9        | 31.6<br>79.4<br>91.5<br>96.5<br>96.8         | 0.0<br>0.1<br>0.0<br>0.1<br>0.0        | 0.5<br>0.0<br>0.0<br>0.0<br>0.0        | 0.2<br>0.4<br>0.1<br>0.0<br>0.0        | 62.5<br>17.7<br>6.0<br>1.5<br>0.1         | 3.8<br>0.7<br>0.4<br>0.2<br>0.1              | 100.0<br>100.0<br>100.0<br>100.0<br>100.0 | 62.8<br>18.1<br>6.2<br>1.5<br>0.1         | 3458<br>3457<br>3459<br>3456<br>3457       |
| Ethnicity<br>of house-<br>hold head | Creole<br>Mestizo<br>Garifuna<br>Maya<br>Other<br>Missing/DK | 2.8<br>1.2<br>1.1<br>0.7<br>4.9<br>1.6 | 92.3<br>78.1<br>94.0<br>38.8<br>89.5<br>92.5 | 0.0<br>0.1<br>0.0<br>0.0<br>0.0<br>0.0 | 0.2<br>0.1<br>0.0<br>0.0<br>0.2<br>0.0 | 0.0<br>0.3<br>0.0<br>0.0<br>0.1<br>0.0 | 3.0<br>19.2<br>3.2<br>60.2<br>4.7<br>5.4  | 1.7<br>0.9<br>1.6<br>0.4<br>0.6<br>0.5       | 100.0<br>100.0<br>100.0<br>100.0<br>100.0 | 3.0<br>19.5<br>3.2<br>60.2<br>4.8<br>5.4  | 4048<br>8498<br>959<br>1933<br>1552<br>298 |
| Total                               | 1  | 1.8                                    | 79.2   | 0.0                                    | 0.1                                    | 0.2                                    | 17.6                                      | 1.0  | 100.0                                     | 17.7                                      | 17288                                      |

[1] MICS indicator 3.11

Overall, 17.7 percent of all households in Belize use solid fuels for cooking. Use of solid fuels is low in urban areas (3.3 percent) and higher in rural areas (28.9 percent). Solid fuel use is highest in the Toledo District (56.5 percent) and lowest in Belize City South Side (0.5 percent) (Table 9). Differentials with respect to household wealth and the educational level of the household head are also evident. The findings show that use of solid fuels is very common among households with Maya heads (60.2 percent), and very uncommon among the richest households (0.1 percent).

Solid fuel use by place of cooking is depicted in Table CH.10. The presence and extent of indoor pollution are dependent on cooking practices, places used for cooking, as well as types of fuel used. In Belize the use of solid fuels occurs in a separate building or outdoors in 63.6 percent of households that use solid fuels. Households with Creole heads seem to use solid fuels outside of the dwelling or in a separate building at a higher rate than other ethnicities (Creole 88.4 percent, Mestizo 72.3 percent and Maya 47.1 percent).

Table CH.10: Solid fuel use by place of cooking
Percent distribution of household members in households using solid fuels by place of cooking, Belize, 2011

|                        |   |   |                              | Place of                     | f cooking: |       |         |       |   |
|------------------------|---|---|------------------------------|------------------------------|------------|-------|---------|-------|---|
|                        |   | In a sepa-<br>rate room<br>used as<br>kitchen | Elsewhere<br>in the<br>house | In a<br>separate<br>building | Outdoors   | Other | Missing | Total | Number of<br>household<br>members in<br>households<br>using solid<br>fuels for<br>cooking |
| Region                 | Corozal   | 13.8  | 2.5                          | 52.2                         | 31.6       | 0.0   | 0.0     | 100.0 | 750   |
|                        | Orange Walk                                     | 44.6  | 3.0                          | 45.0                         | 5.5        | 1.9   | 0.0     | 100.0 | 451   |
|                        | Belize (Excluding<br>Belize City South<br>Side) | 15.1  | 0.0                          | 63.6                         | 21.2       | 0.0   | 0.0     | 100.0 | 81  |
|                        | Belize City South<br>Side                       | (*)   | (*)                          | (*)                          | (*)        | (*)   | (*)     | (*)   | 10  |
|                        | Belize District                                 | 15.5  | 0.0                          | 56.4                         | 27.0       | 0.0   | 1.0     | 100.0 | 91  |
|                        | Cayo  | 17.5  | 1.2                          | 49.5                         | 31.4       | 0.0   | 0.3     | 100.0 | 516   |
|                        | Stann Creek                                     | 35.9  | 10.7                         | 34.7                         | 16.3       | 0.9   | 1.5     | 100.0 | 274   |
|                        | Toledo  | 23.4  | 26.6                         | 29.3                         | 17.5       | 2.2   | 1.1     | 100.0 | 981   |
| Area                   | Urban   | 26.6  | 1.7                          | 31.1                         | 39.0       | 0.0   | 1.6     | 100.0 | 247   |
|                        | Rural   | 23.8  | 11.5                         | 42.9                         | 20.2       | 1.1   | 0.5     | 100.0 | 2817  |
| Education              | None  | 23.5  | 16.5                         | 40.7                         | 15.5       | 2.4   | 1.3     | 100.0 | 633   |
| of house-<br>hold head | Primary   | 24.0  | 9.8                          | 42.0                         | 23.2       | 0.7   | 0.4     | 100.0 | 2125  |
|                        | Secondary +                                     | 25.0  | 6.4                          | 43.7                         | 23.9       | 0.9   | 0.0     | 100.0 | 262   |
| Wealth                 | Poorest   | 23.8  | 13.7                         | 38.7                         | 21.5       | 1.5   | 0.8     | 100.0 | 2170  |
| index quin-<br>tiles   | Second  | 28.4  | 4.4                          | 46.0                         | 21.2       | 0.0   | 0.0     | 100.0 | 625   |
| tiles                  | Middle  | 16.9  | 1.6                          | 57.2                         | 24.4       | 0.0   | 0.0     | 100.0 | 213   |
|                        | Fourth  | (12.3)  | (2.0)                        | (60.9)                       | (24.8)     | (0.0) | (0.0)   | 100.0 | 53  |
| Ethnicity of           | Creole  | 10.8  | 0.0                          | 43.7                         | 44.7       | 0.0   | 0.8     | 100.0 | 121   |
| household<br>head      | Mestizo   | 23.6  | 3.1                          | 49.3                         | 23.0       | 0.5   | 0.5     | 100.0 | 1658  |
| noau                   | Garifuna  | (6.2)   | (2.0)                        | (7.5)                        | (79.1)     | (0.0) | (5.1)   | 100.0 | 31  |
|                        | Maya  | 27.1  | 23.2                         | 31.8                         | 15.3       | 2.0   | 0.6     | 100.0 | 1163  |
|                        | Other   | 20.5  | 8.9                          | 38.1                         | 32.5       | 0.0   | 0.0     | 100.0 | 75  |
| Total                  | I   | 24.1  | 10.7                         | 41.9                         | 21.7       | 1.1   | 0.6     | 100.0 | 3064  |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases 1 un-weighted case in "CET/ITVET/VOTEC", 7 un-weighted cases in "Missing/DK" and 37 cases of "Other" on the Education of the Head of Household are excluded from the table. 3 un-weighted cases in "Richest" category in Wealth Index quintiles and 19 un-weighted cases in the "Missing/DK" category in Ethnicity of household head are excluded from the table.

# **Child Disability**

Disability is a general term describing impairments, participation restrictions and activity limitations. The term disability describes an interaction between the disabled person and negative attitudes, inaccessible buildings and transportation and limited support in the society.

Disability is very diverse requiring in some cases extensive health care interventions. In general, however, all people with disabilities have the same general health care needs as everyone else, and therefore need access to mainstream health care services.

MICS was designed to identify children 2 to 9 years at risk for disability in ten areas: walking (gross motor skills), hearing, seeing, understanding, movement (fine motor skills), learning, speaking and mental slowness.

Table CH.11 indicates that in Belize, 2011 more than a third (36.4 percent) of children 2 to 9 years was at risk for one or more disabilities as reported by the mother or primary caretaker. The Stann Creek District recorded the highest at risk percentage (59.3 percent) and the Belize City South Side the lowest (23.0 percent). Rural children are at higher risk for disabilities than urban children (urban 28.3 percent, rural 41.5 percent).

Increasing mother's educational levels seems to correlate with decreasing risk of disability. The rate for children whose mothers had no education was 40.4 percent and for children whose mothers had secondary or better education, the rate was 32.2 percent. The three specific impairments that are most frequent are speech is not normal (14.9 percent), appears mentally backward, dull or slow (12.5 percent) and no speaking/cannot be understood in words (8.4 percent).



Table CH.11: Children at increased risk of disability
Percentage of children age 2-9 years reported to have impairments or activity limitations, by background characteristics, Belize, 2011

|            |   | Pe                                    | rcentage of cl   | ildren age 2                                | Percentage of children age 2-9 reported to have specified impairments or activity limitations | have spet  | sified impain   | ments or act   | ivity limitation                                   | St   | 5-3                  |   | 2 years                                     |   |  |   |
|------------|---|---------------------------------------|--|---|---|--|---|--|--|--|----------------------|---|---|---|--|---|
|            |   | Delay in sitting, standing or walking | Difficulty<br>seeing, ei-<br>ther in the<br>daytime or<br>at night | Appears<br>to have<br>difficulty<br>hearing | No under-<br>standing of<br>instructions  | Difficulty in walk-ing, moving arms, weak-ness or stiff-ness | Have fits,<br>become<br>rigid, lose<br>conscious-<br>ness | Not learning to do things like other children his/ her age | No speaking<br>cannot be<br>understood<br>in words | Appears<br>mentally<br>backward,<br>dull, or<br>slow | Speech is not normal | Num-<br>ber of<br>children<br>aged 3-9<br>years | Cannot<br>name<br>at least<br>one<br>object | Num-<br>ber of<br>children<br>aged 2<br>years | Percentage of children age 2-9 years with at least one reported impairment [1] | Num-<br>ber of<br>children<br>aged 2-9<br>years |
|            | Urban   | 2.1                                   | 2.8  | 2.0   | 4.1   | 1.9  | 2.4   | 3.2  | 6.5  | 7.7  | 11.9                 | 1089  | 13.6  | 146   | 28.3   | 1235  |
| -          | Rural   | 3.9                                   | 5.3  | 5.2   | 7.7   | 2.7  | 1.8   | 6.5  | 9.5  | 15.4   | 16.7                 | 1758  | 16.8  | 241   | 41.5   | 1999  |
| Region     | Corozal   | 2.9                                   | 4.9  | 3.5   | 3.4   | 2.4  | 1.6   | 3.4  | 7.1  | 23.2   | 9.1                  | 360   | 1.7   | 52  | 37.8   | 412   |
| _          | Orange Walk                                       | 2.0                                   | 3.0  | 2.4   | 0.9   | 2.1  | 1.3   | 6.3  | 8.3  | 6.5  | 6.6                  | 416   | 10.9  | 29  | 29.3   | 475   |
|            | Belize (Exclud-<br>ing Belize City<br>South Side) | 2.9                                   | 2.0  | 5.1   | 4.5   | 1.8  | 2.2   | 2.2  | 4.2  | 6.2  | 7.8                  | 410   | (7.9)                                       | 42  | 24.4   | 451   |
| رں بیا     | Belize City<br>South Side                         | 2.5                                   | 2.0  | 0.8   | 4.3   | 1.9  | 1.5   | 2.9  | 5.5  | 4.0  | 8.0                  | 334   | 20.7  | 51  | 23.0   | 385   |
|            | Belize District                                   | 2.7                                   | 3.6  | 3.1   | 4.4   | 1.9  | 1.9   | 2.5  | 4.8  | 5.2  | 7.9                  | 744   | 15.0  | 93  | 23.8   | 837   |
|            | Сауо  | 5.1                                   | 4.6  | 4.2   | 10.8  | 3.8  | 3.3   | 8.6  | 12.7   | 20.3   | 35.7                 | 671   | 26.2  | 91  | 59.3   | 762   |
| 3)         | Stann Creek                                       | 3.2                                   | 8.0  | 8.4   | 3.5   | 1.5  | 1.7   | 4.3  | 7.4  | 8.6  | 10.7                 | 324   | 16.8  | 44  | 33.1   | 368   |
| 7          | Toledo  | 2.7                                   | 2.9  | 3.5   | 7.9   | 2.4  | 1.0   | 6.2  | 10.0   | 12.4   | 4.9                  | 331   | 16.3  | 49  | 29.1   | 379   |
| N.         | 2-4   | 3.7                                   | 3.2  | 3.3   | 6.4   | 5.6  | 2.2   | 5.3  | 12.1   | 11.2   | 15.6                 | 792   | 15.6  | 387   | 37.5   | 1179  |
| 77         | 2-6   | 2.9                                   | 3.8  | 4.0   | 6.9   | 2.0  | 1.8   | 4.9  | 5.3  | 12.5   | 13.8                 | 908   | na  | na  | 34.2   | 908   |
|            | 7-9   | 3.0                                   | 2.8  | 4.6   | 9.9   | 2.6  | 1.9   | 5.4  | 8.9  | 13.7   | 15.1                 | 1249  | na  | na  | 36.9   | 1249  |
| Mother's N | None  | 7.7                                   | 4.6  | 8.9   | 8.7   | 7.7  | 2.3   | 7.9  | 12.9   | 18.2   | 20.0                 | 195   | *   | 21  | 40.4   | 216   |
| (          | education Primary                                 | 3.1                                   | 4.6  | 4.5   | 9.9   | 2.4  | 1.7   | 5.6  | 8.7  | 14.4   | 14.7                 | 1483  | 17.0  | 188   | 39.2   | 1671  |
| , 0,       | Secondary + CET/ITVET/                            | *)                                    | (*)  | %<br>(*)                                    | (*)   | c: <del>*</del>  | (*)   | *.*)   | e:0<br>(*)   | 4.6<br>(*)   | (*)                  | 14  | * (*)                                       | 4 4   | (*)  | 19  |
| _          | Missing/DK  | *                                     | *  | *   | *   | *  | *   | *  | *  | *  | *                    | 2   | *   | 0   | *  | 2   |
| J          | Other   | 2.5                                   | 1.4  | 2.0   | 2.9   | 3.8  | 2.5   | 6.2  | 14.9   | 2.0  | 7.1                  | 26  | *   | 7   | 34.5   | 29  |
| Wealth F   | Poorest   | 4.3                                   | 3.9  | 5.7   | 8.9   | 3.3  | 1.7   | 6.2  | 10.8   | 16.6   | 15.6                 | 711   | 15.9  | 66  | 40.7   | 810   |
|            | Second  | 3.4                                   | 5.2  | 4.2   | 4.9   | 2.0  | 1.9   | 0.9  | 9.1  | 13.7   | 12.8                 | 647   | 13.1  | 88  | 36.2   | 735   |
| dainines   | Middle  | 3.3                                   | 4.4  | 2.8   | 9.9   | 2.2  | 1.4   | 6.2  | 7.8  | 11.1   | 13.1                 | 571   | 21.7  | 87  | 35.4   | 829   |
| -          | Fourth  | 2.4                                   | 4.2  | 4.1   | 4.1   | 3.2  | 3.2   | 3.7  | 5.1  | 10.9   | 14.3                 | 495   | 13.6  | 53  | 32.3   | 549   |
| -          | Richest   | 2.1                                   | 3.9  | 2.1   | 9.9   | 1.   | 2.0   | 3.1  | 7.7  | 7.3  | 19.8                 | 422   | 11.6  | 09  | 35.8   | 482   |
|            |   | 3.2                                   | 2 /  | 4.0   | 8 9   | 7 0  | 000   | C  |  | 1  |                      | 1700  | 1   |   |  | 7000  |

[1] MICS indicator 3.21() Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 unweighted cases, na = not applicable

The educational level of the mother seems to have a great effect on the perception of disability in the child. As the educational level increased the perception of risk in all areas of disability decreased. In general, also, children from rural areas were perceived to be at higher risk for disabilities than urban children in all areas of disabilities considered.



## VII. WATER AND SANITATION

Safe drinking water is a basic necessity for good health. Unsafe drinking water can be a significant carrier of diseases such as trachoma, cholera, typhoid, and schistosomiasis. Drinking water can also be tainted with chemical, physical and radiological contaminants with harmful effects on human health. In addition to its association with disease, access to drinking water may be particularly important for women and children, especially in rural areas, who bear the primary responsibility for carrying water, often for long distances.

The MDG goal is to reduce by half, between 1990 and 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. The World Fit for Children goal calls for a reduction in the proportion of households without access to hygienic sanitation facilities and affordable and safe drinking water by at least one-third.

The list of indicators used in MICS is as follows:

## Water

- Use of improved drinking water sources
- Use of adequate water treatment method
- o Time to source of drinking water
- Person collecting drinking water

## **Sanitation**

- Use of improved sanitation facilities
- Sanitary disposal of child's faeces

For more details on water and sanitation and to access some reference documents, please visit the UNICEF childinfo website <a href="http://www.childinfo.org/wes.html">http://www.childinfo.org/wes.html</a>.

### **Use of Improved Water Sources**

The distribution of the population by source of drinking water is shown in Table WS.1. The population using *improved sources* of drinking water are those using any of the following types of supply: piped water (into dwelling, compound, yard or plot, public tap/standpipe), tube well/borehole, protected well, protected spring, and rainwater collection. Bottled water is considered as an improved water source only if the household is using an improved water source for other purposes, such as hand washing and cooking.

Table WS.1: Use of improved water sources
Percent distribution of household population using improved drinking water sources, Belize, 2011

|             |   |                     |                                   | Maiı               | n source                          | of dri                         | nking wa            | ter              |                      |                   |                                   |
|-------------|---|---------------------|-----------------------------------|--------------------|-----------------------------------|--------------------------------|---------------------|------------------|----------------------|-------------------|-----------------------------------|
|             |   |                     |                                   |                    | Impro                             | ved so                         | urces               |                  |                      |                   |                                   |
|             |   | Piped into dwelling | Piped into compound, yard or plot | Piped to neighbour | Public<br>tap /<br>stand-<br>pipe | Tube<br>well,<br>Bore-<br>hole | Protect-<br>ed well | Protected spring | Rainwater collection | Bottled<br>water* | Number of<br>household<br>members |
| Region      | Corozal                                   | 7.0                 | 10.8                              | 0.8                | 0.0                               | 0.0                            | 3.2                 | 0.0              | 26.1                 | 47.7              | 2296                              |
|             | Orange Walk                               | 8.3                 | 4.7                               | 0.0                | 0.0                               | 0.0                            | 2.1                 | 0.0              | 21.2                 | 61.4              | 2584                              |
|             | Belize (Excluding Belize City South Side) | 11.7                | 1.9                               | 0.0                | 0.0                               | 0.0                            | 0.6                 | 0.0              | 17.9                 | 67.5              | 2799                              |
|             | Belize City<br>South Side                 | 27.7                | 1.3                               | 0.2                | 1.4                               | 0.0                            | 0.0                 | 0.0              | 10.1                 | 59.2              | 2177                              |
|             | Belize<br>District                        | 18.7                | 1.6                               | 0.1                | 0.6                               | 0.0                            | 0.4                 | 0.0              | 14.5                 | 63.9              | 4976                              |
|             | Cayo                                      | 23.1                | 10.7                              | 2.1                | 0.0                               | 0.0                            | 1.3                 | 0.3              | 11.3                 | 46.8              | 3865                              |
|             | Stann Creek                               | 45.4                | 27.3                              | 1.6                | 0.1                               | 0.1                            | 0.6                 | 0.0              | 2.4                  | 22.0              | 1833                              |
|             | Toledo                                    | 3.4                 | 46.0                              | 1.1                | 14.2                              | 7.0                            | 5.7                 | 0.3              | 8.1                  | 11.4              | 1733                              |
| Area        | Urban                                     | 21.5                | 3.4                               | 0.6                | 0.7                               | 0.0                            | 0.1                 | 0.0              | 7.6                  | 65.6              | 7536                              |
| 7 0.0       | Rural                                     | 15.1                | 19.5                              | 1.0                | 2.3                               | 1.3                            | 3.0                 | 0.2              | 19.6                 | 34.1              | 9752                              |
| Education   | None                                      | 16.9                | 25.0                              | 1.7                | 4.9                               | 1.9                            | 4.0                 | 0.0              | 21.8                 | 20.5              | 1507                              |
| of house-   | Primary                                   | 19.6                | 17.1                              | 0.8                | 2.0                               | 1.0                            | 2.2                 | 0.2              | 16.1                 | 37.4              | 8652                              |
| hold head   | Secondary +                               | 16.2                | 4.2                               | 0.8                | 0.6                               | 0.1                            | 0.7                 | 0.0              | 8.7                  | 68.2              | 6412                              |
|             | CET/ITVET/<br>VOTEC                       | 14.8                | 3.3                               | 0.0                | 0.0                               | 0.0                            | 0.0                 | 0.0              | 5.5                  | 76.4              | 172                               |
|             | Missing/DK                                | 26.4                | 17.6                              | 0.0                | 0.0                               | 0.0                            | 3.2                 | 0.0              | 8.8                  | 41.5              | 256                               |
|             | Other                                     | 3.8                 | 0.0                               | 0.0                | 0.0                               | 0.0                            | 0.0                 | 0.0              | 65.4                 | 30.8              | 288                               |
| Wealth      | Poorest                                   | 11.9                | 37.6                              | 3.8                | 6.0                               | 3.3                            | 4.3                 | 0.2              | 18.1                 | 8.9               | 3458                              |
| index quin- | Second                                    | 27.8                | 19.5                              | 0.6                | 1.2                               | 0.2                            | 2.3                 | 0.4              | 16.8                 | 29.4              | 3457                              |
| tiles       | Middle                                    | 25.1                | 4.0                               | 0.0                | 0.1                               | 0.1                            | 1.5                 | 0.0              | 16.9                 | 50.4              | 3459                              |
|             | Fourth                                    | 16.8                | 0.8                               | 0.0                | 0.3                               | 0.0                            | 0.5                 | 0.0              | 13.2                 | 67.2              | 3456                              |
|             | Richest                                   | 7.8                 | 0.6                               | 0.0                | 0.3                               | 0.0                            | 0.0                 | 0.0              | 6.8                  | 83.3              | 3457                              |
| Ethnicity   | Creole                                    | 24.9                | 5.0                               | 0.5                | 0.8                               | 0.0                            | 0.6                 | 0.0              | 15.9                 | 51.9              | 4048                              |
| of house-   | Mestizo                                   | 14.3                | 12.6                              | 1.0                | 0.4                               | 0.0                            | 2.6                 | 0.1              | 13.6                 | 52.3              | 8498                              |
| hold head   | Garifuna                                  | 36.4                | 6.8                               | 0.4                | 0.5                               | 0.2                            | 0.1                 | 0.0              | 4.0                  | 51.4              | 959                               |
|             | Maya                                      | 16.1                | 39.1                              | 2.3                | 9.9                               | 6.0                            | 2.5                 | 0.3              | 8.9                  | 10.7              | 1933                              |
|             | Other                                     | 10.1                | 3.8                               | 0.0                | 0.8                               | 0.2                            | 0.7                 | 0.0              | 29.4                 | 54.0              | 1552                              |
| Takal       | Missing/DK                                | 19.0                | 3.3                               | 0.0                | 0.0                               | 0.0                            | 0.0                 | 0.0              | 7.7                  | 63.6              | 298                               |
| Total       |   | 17.9                | 12.5                              | 0.9                | 1.6                               | 0.7                            | 1.8                 | 0.1              | 14.4                 | 47.8              | 17288                             |

## Table WS.1: Use of improved water sources [continued] Percent distribution of household population using unimproved drinking water sources, Belize, 2011

|                        |   |                     | Unimpro            | ved sources   |                   |       |  |                                   |
|------------------------|---|---------------------|--------------------|---|-------------------|-------|--|-----------------------------------|
|                        |   | Unprotected<br>well | Unprotected spring | Surface<br>water (riv-<br>er, stream,<br>dam, lake,<br>pond, canal,<br>irrigation<br>channel) | Bottled<br>water* | Other | Percent-<br>age using<br>improved<br>sources of<br>drinking<br>water [1] | Number of<br>household<br>members |
| Region                 | Corozal                                   | 3.2                 | 0.0                | 0.0   | 1.2               | 0.0   | 95.6   | 2296                              |
|                        | Orange Walk                               | 1.1                 | 0.1                | 0.0   | 1.2               | 0.0   | 97.6   | 2584                              |
|                        | Belize (Excluding Belize City South Side) | 0.1                 | 0.0                | 0.0   | 0.2               | 0.0   | 99.7   | 2799                              |
|                        | Belize City South<br>Side                 | 0.0                 | 0.0                | 0.0   | 0.2               | 0.0   | 99.8   | 2177                              |
|                        | Belize District                           | 0.0                 | 0.0                | 0.0   | 0.2               | 0.0   | 99.8   | 4976                              |
|                        | Cayo                                      | 0.5                 | 0.6                | 1.8   | 1.6               | 0.0   | 95.6   | 3865                              |
|                        | Stann Creek                               | 0.0                 | 0.0                | 0.0   | 0.1               | 0.4   | 99.5   | 1833                              |
|                        | Toledo                                    | 1.7                 | 0.2                | 0.7   | 0.2               | 0.1   | 97.1   | 1733                              |
| Area                   | Urban                                     | 0.0                 | 0.0                | 0.0   | 0.5               | 0.0   | 99.5   | 7536                              |
|                        | Rural                                     | 1.5                 | 0.3                | 0.8   | 1.0               | 0.1   | 96.2   | 9752                              |
| Education              | None                                      | 2.0                 | 0.0                | 1.3   | 0.0               | 0.0   | 96.7   | 1377                              |
| of house-<br>hold head | Primary                                   | 1.3                 | 0.3                | 0.7   | 1.2               | 0.1   | 96.3   | 8782                              |
| noid nead              | Secondary +                               | 0.1                 | 0.1                | 0.0   | 0.3               | 0.0   | 99.5   | 6412                              |
|                        | CET/ITVET/VO-<br>TEC                      | 0.0                 | 0.0                | 0.0   | 0.0               | 0.0   | 100.0  | 172                               |
|                        | Missing/DK                                | 0.0                 | 0.0                | 0.0   | 2.5               | 0.0   | 97.5   | 256                               |
|                        | Other                                     | 0.0                 | 0.0                | 0.0   | 0.0               | 0.0   | 100.0  | 288                               |
| Wealth                 | Poorest                                   | 3.4                 | 0.4                | 1.4   | 0.6               | 0.2   | 94.0   | 3458                              |
| index<br>quintiles     | Second                                    | 0.7                 | 0.0                | 0.3   | 0.7               | 0.1   | 98.3   | 3457                              |
| quintilos              | Middle                                    | 0.3                 | 0.3                | 0.6   | 0.5               | 0.0   | 98.2   | 3459                              |
|                        | Fourth                                    | 0.0                 | 0.0                | 0.0   | 1.1               | 0.0   | 98.9   | 3456                              |
|                        | Richest                                   | 0.0                 | 0.1                | 0.0   | 1.0               | 0.0   | 98.9   | 3457                              |
| Ethnicity              | Creole                                    | 0.2                 | 0.0                | 0.0   | 0.1               | 0.0   | 99.6   | 4048                              |
| of house-<br>hold head | Mestizo                                   | 1.1                 | 0.2                | 0.8   | 1.1               | 0.0   | 96.8   | 8498                              |
| o.a noud               | Garifuna                                  | 0.0                 | 0.0                | 0.0   | 0.2               | 0.0   | 99.8   | 959                               |
|                        | Maya                                      | 2.0                 | 0.7                | 0.6   | 0.5               | 0.4   | 95.8   | 1933                              |
|                        | Other                                     | 0.0                 | 0.0                | 0.0   | 1.0               | 0.0   | 99.0   | 1552                              |
|                        | Missing/DK                                | 3.0                 | 0.0                | 0.0   | 3.4               | 0.0   | 93.6   | 298                               |
| Total                  |   | 0.9                 | 0.2                | 0.5   | 0.8               | 0.1   | 97.7   | 17288                             |

<sup>[1]</sup> MICS indicator 4.1; MDG indicator 7.8

<sup>\*</sup> Households using bottled water as the main source of drinking water are classified into improved or unimproved drinking water users according to the water source used for other purposes such as cooking and hand-washing.

Overall, 97.7 percent of the population is using an improved source of drinking water – 99.5 percent in urban areas and 96.2 percent in rural areas. Use of improved sources of water is widespread across regions of the country with the lowest rates occurring in the Corozal and Cayo Districts (95.6 percent in both cases). There is a slight reduction in rates of use of improved sources of drinking water for less educated head of households (no education 96.4 percent) and families with wealth index of poorest (94.0 percent).

Improved drinking water is obtained mainly from four sources: bottled water (47.8 percent), water piped into dwelling (17.9 percent), collected rainwater (14.4 percent) and water piped into yard or compound (12.5 percent) (Table WS.1). Urban and rural areas exhibit pronounced differences in the sources of improved drinking water: bottled water (urban 65.6 percent, rural 34.1 percent), piped into dwelling (urban 21.5 percent, rural 15.1 percent), collected rainwater (urban 7.6 percent, rural 19.6 percent) and piped into yard or plot (urban 3.4 percent, rural 19.5 percent).

Level of education of household head and the wealth index of the family seem to correlate to use of improved sources of drinking water in the same way. Presumably the more educated household heads live in households with higher wealth indices. Bottled water use rises with both increasing education and wealth index, rainwater collection decreases with the increase of wealth and education and water piped into compound is seen to decrease as wealth and education increase.

The prevalence of the use of unimproved sources of drinking water is very small (Table WS.1). Unprotected wells are the main source and their use is most pronounced in rural areas, the Corozal (3.2 percent) and Toledo (1.7 percent) Districts, household where the heads have no education, households with the poorest wealth index and in households with Maya heads.

Use of in-house water treatment is presented in Table WS.2. Households were asked of ways they may be treating water at home to make it safer to drink – boiling, adding bleach or chlorine, using a water filter, and using solar disinfection were considered as proper treatment of drinking water. The table shows water treatment by all households and the percentage of household members living in households using unimproved water sources but using appropriate water treatment methods.

About eight in ten (82.1 percent) of households did nothing to make the water safer to drink. About a third (31.2 percent) of household members using unimproved drinking water sources also use an appropriate water treatment measure. The most likely not to use any water treatment are households in the Corozal District (68.3 percent), urban areas (89.0 percent), households with heads having secondary or more education (87.1 percent), households with the richest wealth index (89.5 percent) and households with Garifuna heads (90.7 percent) (Table WS.2). In general the water treatment of choice was adding bleach or chlorine (9.9 percent) followed by boiling at 6.6 percent.

## Table WS.2: Household water treatment

Percentage of household population by drinking water treatment method used in the household, and for household members living in households where an unimproved drinking water source is used, the percentage who are using an appropriate treatment method, Belize, 2011

|                        |  |      |      | Water:                      | treatment                    | method                 | used in the h           | nusehold                 |       |               |                             |
|------------------------|--|------|------|-----------------------------|------------------------------|------------------------|-------------------------|--------------------------|-------|---------------|-----------------------------|
|                        |  | None | Boil | Add<br>bleach /<br>chlorine | Strain<br>through<br>a cloth | Use<br>water<br>filter | Solar disin-<br>fection | Let it stand and set-tle | Other | Don't<br>know | Number of household members |
| Region                 | Corozal                                      | 68.3 | 4.3  | 27.4                        | 0.8                          | 0.6                    | 0.0                     | 0.0                      | 0.0   | 0.0           | 2296                        |
|                        | Orange Walk                                  | 89.6 | 2.6  | 7.1                         | 2.5                          | 1.4                    | 0.0                     | 0.0                      | 0.0   | 0.0           | 2584                        |
|                        | Belize (Excluding Belize<br>City South Side) | 86.7 | 2.3  | 10.1                        | 0.0                          | 1.2                    | 0.0                     | 0.1                      | 0.4   | 0.1           | 2799                        |
|                        | Belize City South Side                       | 89.9 | 5.2  | 3.0                         | 0.1                          | 1.1                    | 0.0                     | 0.1                      | 1.0   | 0.0           | 2177                        |
|                        | Belize District                              | 88.1 | 3.6  | 7.0                         | 0.1                          | 1.2                    | 0.0                     | 0.1                      | 0.7   | 0.0           | 4976                        |
|                        | Cayo   | 79.6 | 9.0  | 8.4                         | 1.0                          | 2.7                    | 0.0                     | 0.2                      | 0.2   | 0.0           | 3865                        |
|                        | Stann Creek                                  | 84.5 | 7.4  | 6.6                         | 0.6                          | 1.3                    | 0.0                     | 0.0                      | 0.0   | 0.0           | 1833                        |
|                        | Toledo                                       | 75.0 | 17.9 | 6.1                         | 0.9                          | 0.6                    | 0.0                     | 0.2                      | 0.2   | 0.0           | 1733                        |
| Area                   | Urban  | 89.0 | 5.4  | 3.8                         | 0.5                          | 1.2                    | 0.0                     | 0.1                      | 0.4   | 0.0           | 7536                        |
|                        | Rural  | 76.8 | 7.5  | 14.6                        | 1.1                          | 1.6                    | 0.0                     | 0.0                      | 0.2   | 0.0           | 9752                        |
| Education              | None   | 74.2 | 11.8 | 12.9                        | 2.2                          | 1.1                    | 0.0                     | 0.0                      | 0.0   | 0.0           | 1377                        |
| of house-<br>hold head | Primary                                      | 78.9 | 7.3  | 12.7                        | 1.1                          | 1.3                    | 0.0                     | 0.1                      | 0.2   | 0.0           | 8782                        |
|                        | Secondary +                                  | 87.1 | 5.1  | 6.0                         | 0.2                          | 1.6                    | 0.0                     | 0.2                      | 0.4   | 0.0           | 6412                        |
|                        | CET/ITVET/VOTEC                              | 99.6 | 0.0  | 0.0                         | 0.0                          | 0.4                    | 0.0                     | 0.0                      | 0.0   | 0.0           | 172                         |
|                        | Missing/DK                                   | 92.3 | 0.0  | 7.7                         | 0.0                          | 0.0                    | 0.0                     | 0.0                      | 0.0   | 0.0           | 256                         |
|                        | Other  | 87.3 | 4.4  | 2.5                         | 2.4                          | 3.3                    | 0.0                     | 0.0                      | 0.0   | 0.0           | 288                         |
| Wealth                 | Poorest                                      | 76.6 | 12.3 | 10.9                        | 0.9                          | 0.5                    | 0.0                     | 0.4                      | 0.1   | 0.0           | 3458                        |
| index quin-<br>tiles   | Second                                       | 77.3 | 8.0  | 13.6                        | 1.5                          | 1.2                    | 0.0                     | 0.0                      | 0.4   | 0.0           | 3457                        |
|                        | Middle                                       | 82.9 | 4.6  | 10.8                        | 1.4                          | 1.0                    | 0.0                     | 0.0                      | 0.5   | 0.0           | 3459                        |
|                        | Fourth                                       | 84.2 | 5.2  | 9.6                         | 0.5                          | 1.3                    | 0.0                     | 0.1                      | 0.1   | 0.0           | 3456                        |
|                        | Richest                                      | 89.5 | 2.9  | 4.6                         | 0.1                          | 3.0                    | 0.0                     | 0.0                      | 0.2   | 0.0           | 3457                        |
| Ethnicity of           | Creole                                       | 86.0 | 3.3  | 8.4                         | 0.3                          | 1.6                    | 0.0                     | 0.1                      | 0.8   | 0.0           | 4048                        |
| household<br>head      | Mestizo                                      | 81.3 | 4.7  | 13.3                        | 1.3                          | 1.0                    | 0.0                     | 0.0                      | 0.1   | 0.0           | 8498                        |
|                        | Garifuna                                     | 90.7 | 4.1  | 3.7                         | 0.2                          | 1.4                    | 0.0                     | 0.1                      | 0.0   | 0.0           | 959                         |
|                        | Maya   | 70.4 | 23.7 | 5.5                         | 0.6                          | 0.9                    | 0.0                     | 0.6                      | 0.0   | 0.0           | 1933                        |
|                        | Other  | 85.8 | 5.3  | 4.6                         | 0.8                          | 4.2                    | 0.0                     | 0.0                      | 0.0   | 0.0           | 1552                        |
|                        | Missing/DK                                   | 82.1 | 8.3  | 9.4                         | 0.0                          | 0.0                    | 0.0                     | 0.0                      | 0.6   | 0.0           | 298                         |
| Total                  |  | 82.1 | 6.6  | 9.9                         | 0.9                          | 1.4                    | 0.0                     | 0.1                      | 0.2   | 0.0           | 17288                       |

#### Table WS.2: Household water treatment [continued]

Percentage of household population by drinking water treatment method used in the household, and for household members living in households where an unimproved drinking water source is used, the percentage who are using an appropriate treatment method, Belize, 2011

|                   |   | Percentage of household members in<br>households using unimproved drinking<br>water sources and using an appropriate<br>water treatment method [1] | Number of household members in households using unimproved drinking water sources |
|-------------------|---|--|---|
| Region            | Corozal                                   | 69.4   | 101   |
|                   | Orange Walk                               | 27.9   | 63  |
|                   | Belize (Excluding Belize City South Side) | (*)  | 7   |
|                   | Belize City South Side                    | (*)  | 4   |
|                   | Belize District                           | (*)  | 11  |
|                   | Cayo                                      | 7.4  | 171   |
|                   | Stann Creek                               | (*)  | 9   |
|                   | Toledo                                    | (*)  | 50  |
| Area              | Urban                                     | (0.0)  | 35  |
|                   | Rural                                     | 34.2   | 371   |
| Education of      | None                                      | 32.5   | 46  |
| household<br>head | Primary                                   | 28.9   | 321   |
|                   | Secondary +                               | (58.6)   | 33  |
|                   | Missing/DK                                | (*)  | 6   |
| Wealth index      | Poorest                                   | 32.6   | 207   |
| quintiles         | Second                                    | 43.8   | 60  |
|                   | Middle                                    | 37.3   | 61  |
|                   | Fourth                                    | (17.0)   | 39  |
|                   | Richest                                   | (9.0)  | 38  |
| Ethnicity of      | Creole                                    | (*)  | 15  |
| household<br>head | Mestizo                                   | 31.7   | 273   |
|                   | Garifuna                                  | (*)  | 2   |
|                   | Maya                                      | 27.2   | 82  |
|                   | Other                                     | (*)  | 15  |
|                   | Missing/DK                                | (*)  | 19  |
| Total             |   | 31.2   | 406   |

<sup>[1]</sup> MICS indicator 4.2

The amount of time it takes to obtain water is presented in Table WS.3 and the person who usually collected the water in Table WS.4. Note that these results refer to one roundtrip from home to drinking water source. Information on the number of trips made in one day was not collected.

Table WS.3 shows that for 94.9 percent of households, the drinking water source is on the premises. In general few households bring water from a distance (1.9 percent for a round trip of less than 30 minutes and 0.7 percent a trip of 30 minutes or more). In households where water is collected from a distance, adult women fetch the water in 37.6 percent of the cases and adult men in 43.9 percent. In 9.1 percent of cases a male child fetches the water while in 6.7 percent it is a female child.

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Table WS.3: Time to source of drinking water

Percent distribution of household population according to time to go to source of drinking water, get water and return, for users of improved and unimproved drinking water sources, Belize, 2011

|                     |   |                   |                            | Tir                        | me to source o | of drinking v     | vater                      |                            |              |       |                             |
|---------------------|---|-------------------|----------------------------|----------------------------|----------------|-------------------|----------------------------|----------------------------|--------------|-------|-----------------------------|
|                     |   | Users of          | mproved o                  | drinking wa                | ter sources    | Users of u        | nimproved                  | drinking w                 | ater sources |       |                             |
|                     |   | Water on premises | Less<br>than 30<br>minutes | 30 min-<br>utes or<br>more | Missing/DK     | Water on premises | Less<br>than 30<br>minutes | 30 min-<br>utes or<br>more | Missing/DK   | Total | Number of household members |
| Region              | Corozal   | 88.3              | 4.6                        | 1.9                        | 0.8            | 3.8               | 0.6                        | 0.0                        | 0.0          | 100.0 | 2296                        |
|                     | Orange Walk                                     | 96.3              | 0.9                        | 0.3                        | 0.0            | 2.1               | 0.4                        | 0.0                        | 0.0          | 100.0 | 2584                        |
|                     | Belize (Excluding<br>Belize City South<br>Side) | 98.2              | 1.1                        | 0.4                        | 0.0            | 0.1               | 0.2                        | 0.0                        | 0.0          | 100.0 | 2799                        |
|                     | Belize City South<br>Side                       | 96.2              | 3.4                        | 0.1                        | 0.0            | 0.2               | 0.0                        | 0.0                        | 0.0          | 100.0 | 2177                        |
|                     | Belize District                                 | 97.3              | 2.1                        | 0.3                        | 0.0            | 0.1               | 0.1                        | 0.0                        | 0.0          | 100.0 | 4976                        |
|                     | Cayo  | 94.7              | 0.4                        | 0.4                        | 0.1            | 2.0               | 1.8                        | 0.6                        | 0.0          | 100.0 | 3865                        |
|                     | Stann Creek                                     | 99.0              | 0.3                        | 0.2                        | 0.0            | 0.0               | 0.4                        | 0.1                        | 0.0          | 100.0 | 1833                        |
|                     | Toledo  | 90.2              | 4.5                        | 2.1                        | 0.4            | 1.9               | 0.7                        | 0.1                        | 0.1          | 100.0 | 1733                        |
| Area                | Urban   | 97.5              | 1.9                        | 0.1                        | 0.1            | 0.4               | 0.0                        | 0.0                        | 0.0          | 100.0 | 7536                        |
|                     | Rural   | 92.9              | 2.0                        | 1.1                        | 0.3            | 2.4               | 1.2                        | 0.3                        | 0.0          | 100.0 | 9752                        |
| Education of house- | None  | 90.9              | 1.7                        | 3.5                        | 0.5            | 1.7               | 0.8                        | 0.9                        | 0.0          | 100.0 | 1377                        |
| hold head           | Primary   | 93.0              | 2.7                        | 0.5                        | 0.2            | 2.3               | 1.2                        | 0.2                        | 0.0          | 100.0 | 8782                        |
|                     | Secondary +                                     | 97.8              | 1.1                        | 0.4                        | 0.1            | 0.5               | 0.0                        | 0.0                        | 0.0          | 100.0 | 6412                        |
|                     | CET/ITVET/VOTEC                                 | 99.5              | 0.5                        | 0.0                        | 0.0            | 0.0               | 0.0                        | 0.0                        | 0.0          | 100.0 | 172                         |
|                     | Missing/DK                                      | 96.4              | 1.2                        | 0.0                        | 0.0            | 1.8               | 0.0                        | 0.6                        | 0.0          | 100.0 | 256                         |
|                     | Other   | 100.0             | 0.0                        | 0.0                        | 0.0            | 0.0               | 0.0                        | 0.0                        | 0.0          | 100.0 | 288                         |
| Wealth index quin-  | Poorest   | 86.9              | 4.4                        | 2.1                        | 0.6            | 3.4               | 2.5                        | 0.1                        | 0.0          | 100.0 | 3458                        |
| tiles               | Second  | 94.5              | 2.8                        | 0.7                        | 0.2            | 0.9               | 0.5                        | 0.4                        | 0.0          | 100.0 | 3457                        |
|                     | Middle  | 96.8              | 1.2                        | 0.2                        | 0.0            | 1.0               | 0.4                        | 0.3                        | 0.0          | 100.0 | 3459                        |
|                     | Fourth  | 97.9              | 0.7                        | 0.2                        | 0.1            | 1.1               | 0.0                        | 0.0                        | 0.1          | 100.0 | 3456                        |
|                     | Richest   | 98.2              | 0.4                        | 0.2                        | 0.0            | 1.1               | 0.0                        | 0.0                        | 0.0          | 100.0 | 3457                        |
| Ethnicity of        | Creole  | 97.2              | 2.1                        | 0.3                        | 0.1            | 0.2               | 0.1                        | 0.0                        | 0.0          | 100.0 | 4048                        |
| household<br>head   | Mestizo   | 94.5              | 1.5                        | 0.6                        | 0.2            | 1.9               | 1.0                        | 0.3                        | 0.0          | 100.0 | 8498                        |
|                     | Garifuna  | 99.2              | 0.6                        | 0.0                        | 0.0            | 0.0               | 0.0                        | 0.0                        | 0.2          | 100.0 | 959                         |
|                     | Maya  | 89.6              | 4.3                        | 1.7                        | 0.2            | 2.6               | 1.5                        | 0.1                        | 0.0          | 100.0 | 1933                        |
|                     | Other   | 95.3              | 1.4                        | 1.7                        | 0.6            | 0.9               | 0.0                        | 0.0                        | 0.0          | 100.0 | 1552                        |
|                     | Missing/DK                                      | 91.5              | 2.1                        | 0.0                        | 0.0            | 6.4               | 0.0                        | 0.0                        | 0.0          | 100.0 | 298                         |
| Total               |   | 94.9              | 1.9                        | 0.7                        | 0.2            | 1.5               | 0.7                        | 0.2                        | 0.0          | 100.0 | 17288                       |

Table WS.4: Person collecting water

Percentage of households without drinking water on premises, and percent distribution of households without drinking water on premises according to the person usually collecting drinking water used in the household,

Belize, 2011

|                   |   |  |                      |                                      | Dorcon us                             | ually collect                    | ing drinkin                    | a water |         |   |
|-------------------|---|--|----------------------|--------------------------------------|---------------------------------------|----------------------------------|--------------------------------|---------|---------|---|
|                   |   | Percentage<br>of households<br>without<br>drinking<br>water on<br>premises | Number of households | Adult<br>woman<br>(age 15+<br>years) | Adult<br>man<br>(age<br>15+<br>years) | Female<br>child<br>(under<br>15) | Male<br>child<br>(under<br>15) | DK      | Missing | Number of<br>households<br>without<br>drinking water<br>on premises |
| Region            | Corozal   | 8.0  | 519                  | (40.7)                               | (47.3)                                | (2.0)                            | (9.9)                          | (0.0)   | (0.0)   | 42  |
|                   | Orange Walk                                     | 2.1  | 607                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 13  |
|                   | Belize (Excluding<br>Belize City South<br>Side) | 1.9  | 860                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 16  |
|                   | Belize City South<br>Side                       | 3.3  | 614                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 21  |
|                   | Belize<br>District                              | 2.5  | 1474                 | (18.8)                               | (59.5)                                | (11.9)                           | (9.7)                          | (0.0)   | (0.0)   | 37  |
|                   | Cayo  | 2.5  | 918                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | (*)   |
|                   | Stann Creek                                     | 1.3  | 488                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | (*)   |
|                   | Toledo  | 7.2  | 417                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 30  |
| Area              | Urban   | 1.9  | 2170                 | (20.3)                               | (53.6)                                | (9.0)                            | (10.6)                         | (6.6)   | (0.0)   | 42  |
|                   | Rural   | 4.8  | 2254                 | (44.2)                               | (40.2)                                | (5.8)                            | (8.5)                          | (0.8)   | (0.5)   | 109   |
| Education         | None  | 7.0  | 311                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 22  |
| of                | Primary   | 4.5  | 2104                 | 35.2                                 | 42.6                                  | 9.0                              | 9.3                            | 3.9     | 0.0     | 94  |
| household<br>head | Secondary +                                     | 1.7  | 1851                 | (31.7)                               | (57.7)                                | (5.0)                            | (5.6)                          | (0.0)   | (0.0)   | 32  |
| Tiedd             | CET/ITVET/VOTEC                                 | (1.9)  | 47                   | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 1   |
|                   | Missing/DK                                      | 4.0  | 58                   | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 2   |
|                   | Other   | (0.0)  | 52                   | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     |   |
| Wealth            | Poorest   | 9.3  | 885                  | 42.1                                 | 40.0                                  | 7.1                              | 5.8                            | 4.4     | 0.7     | 82  |
| index             | Second  | 4.3  | 865                  | (30.5)                               | (45.6)                                | (8.6)                            | (15.3)                         | (0.0)   | (0.0)   | 37  |
| quintiles         | Middle  | 1.9  | 863                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 16  |
|                   | Fourth  | 1.1  | 889                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 9   |
|                   | Richest   | 0.6  | 922                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 6   |
| Ethnicity of      | Creole  | 2.5  | 1182                 | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 30  |
| household         | Mestizo   | 3.4  | 2058                 | 34.7                                 | 46.0                                  | 2.4                              | 12.3                           | 3.8     | 0.8     | 70  |
| head              | Garifuna  | 1.2  | 286                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 3   |
|                   | Maya  | 7.7  | 399                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 31  |
|                   | Other   | 3.3  | 409                  | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 14  |
|                   | Missing/DK                                      | 3.3  | 91                   | (*)                                  | (*)                                   | (*)                              | (*)                            | (*)     | (*)     | 3   |
| Total             |   | 3.4  | 4424                 | 37.6                                 | 43.9                                  | 6.7                              | 9.1                            | 2.4     | 0.4     | 151   |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

## **Use of Improved Sanitation Facilities**

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. An improved sanitation facility is defined as one that hygienically separates human excreta from human contact. Improved sanitation can reduce diarrheal disease by more than a third, and can significantly lessen the adverse health impacts of other disorders responsible for death and disease among millions of children in developing countries. Improved sanitation facilities for excreta disposal include flush or pour flush to a piped sewer system, septic tank, or latrine; ventilated improved pit latrine, pit latrine with slab, and composting toilet.

Table WS.5 indicates that use of improved sanitation facilities is linked to wealth and is quite different between urban and rural areas. In rural areas, the population is mostly using septic tanks (43.2 percent) and pit latrines with slabs (43.1 percent). In contrast, the most common facilities in urban areas are flush toilets with connection to a sewage system (22.7 percent) or septic tank (65.2 percent). Rich households mostly flush to septic tank (78.4 percent) while poorest households use a pit latrine with slab (62.8 percent)

Table WS.5: Types of sanitation facilities
Percent distribution of household population according to type of toilet facility used by the household, Belize, 2011

|                |   |                                      | Improv               | ed sanitation          | facility                                    |                       |       |                                   |
|----------------|---|--------------------------------------|----------------------|------------------------|---|-----------------------|-------|-----------------------------------|
|                |   | Flush to<br>piped<br>sewer<br>system | Flush to septic tank | Flush to pit (latrine) | Ventilated<br>Improved Pit<br>latrine (VIP) | Pit latrine with slab | Total | Number of<br>household<br>members |
| Region         | Corozal                                   | 0.0                                  | 48.1                 | 0.0                    | 12.4  | 37.9                  | 100.0 | 2290                              |
|                | Orange Walk                               | 0.0                                  | 47.8                 | 0.3                    | 9.9   | 41.1                  | 100.0 | 258                               |
|                | Belize (Excluding Belize City South Side) | 16.4                                 | 75.7                 | 0.5                    | 0.1   | 6.7                   | 100.0 | 279:                              |
|                | Belize City South Side                    | 47.4                                 | 47.1                 | 0.0                    | 0.0   | 0.6                   | 100.0 | 217                               |
|                | Belize District                           | 30.0                                 | 63.2                 | 0.3                    | 0.1   | 4.0                   | 100.0 | 4970                              |
|                | Cayo                                      | 6.7                                  | 53.8                 | 0.3                    | 1.9   | 36.3                  | 100.0 | 386                               |
|                | Stann Creek                               | 0.0                                  | 64.6                 | 0.7                    | 0.4   | 28.1                  | 100.0 | 183                               |
|                | Toledo                                    | 0.2                                  | 21.7                 | 1.0                    | 17.6  | 49.5                  | 100.0 | 173                               |
| Area           | Urban                                     | 22.7                                 | 65.2                 | 0.3                    | 0.8   | 9.4                   | 100.0 | 753                               |
|                | Rural                                     | 0.4                                  | 43.2                 | 0.4                    | 8.9   | 43.1                  | 100.0 | 975                               |
| Education of   | None                                      | 1.4                                  | 27.9                 | 0.1                    | 7.4   | 53.3                  | 100.0 | 137                               |
| household head | Primary                                   | 6.4                                  | 46.3                 | 0.4                    | 8.0   | 35.8                  | 100.0 | 878                               |
|                | Secondary +                               | 17.4                                 | 67.9                 | 0.3                    | 1.5   | 11.3                  | 100.0 | 641                               |
|                | CET/ITVET/VOTEC                           | 21.9                                 | 63.3                 | 0.0                    | 0.0   | 12.5                  | 100.0 | 17                                |
|                | Missing/DK                                | 6.8                                  | 56.1                 | 0.0                    | 2.5   | 34.6                  | 100.0 | 25                                |
|                | Other                                     | 0.6                                  | 24.2                 | 0.0                    | 7.9   | 67.2                  | 100.0 | 28                                |
| Wealth index   | Poorest                                   | 2.4                                  | 11.7                 | 0.8                    | 11.7  | 62.8                  | 100.0 | 345                               |
| quintiles      | Second                                    | 7.5                                  | 36.8                 | 0.4                    | 6.2   | 45.6                  | 100.0 | 345                               |
|                | Middle                                    | 9.8                                  | 61.9                 | 0.1                    | 5.9   | 22.2                  | 100.0 | 345                               |
|                | Fourth                                    | 12.3                                 | 75.0                 | 0.0                    | 2.6   | 9.8                   | 100.0 | 345                               |
|                | Richest                                   | 18.7                                 | 78.4                 | 0.5                    | 0.5   | 1.6                   | 100.0 | 345                               |
| Ethnicity of   | Creole                                    | 21.7                                 | 63.6                 | 0.1                    | 0.7   | 11.5                  | 100.0 | 404                               |
| nousehold head | Mestizo                                   | 5.7                                  | 50.5                 | 0.4                    | 7.0   | 34.6                  | 100.0 | 849                               |
|                | Garifuna                                  | 11.3                                 | 76.3                 | 0.5                    | 0.5   | 9.0                   | 100.0 | 95                                |
|                | Maya                                      | 1.2                                  | 20.5                 | 0.8                    | 12.9  | 52.7                  | 100.0 | 193                               |
|                | Other                                     | 11.9                                 | 61.1                 | 0.6                    | 2.7   | 23.8                  | 100.0 | 155                               |
|                | Missing/DK                                | 25.5                                 | 60.3                 | 0.0                    | 3.4   | 10.8                  | 100.0 | 29                                |
| Total          |   | 10.1                                 | 52.8                 | 0.4                    | 5.4   | 28.4                  | 100.0 | 17288                             |

Table WS.5:Types of sanitation facilities [continued]
Percent distribution of household population according to type of toilet facility used by the household, Belize, 2011

|                        |   |                                    | Unimprove                                 | d sanitatio | n facility |         |                                  |                                   |
|------------------------|---|------------------------------------|---|-------------|------------|---------|----------------------------------|-----------------------------------|
|                        |   | Flush to<br>some-<br>where<br>else | Pit latrine<br>without slab /<br>Open pit | Bucket      | Other      | Missing | No facili-<br>ty, Bush,<br>Field | Number of<br>household<br>members |
| Region                 | Corozal   | 0.0                                | 0.7                                       | 0.0         | 0.0        | 0.0     | 0.9                              | 2296                              |
|                        | Orange Walk                                     | 0.0                                | 0.7                                       | 0.0         | 0.0        | 0.0     | 0.3                              | 2584                              |
|                        | Belize (Excluding<br>Belize City South<br>Side) | 0.1                                | 0.0                                       | 0.2         | 0.0        | 0.0     | 0.4                              | 2799                              |
|                        | Belize City South<br>Side                       | 0.0                                | 0.0                                       | 3.1         | 0.2        | 0.0     | 1.6                              | 2177                              |
|                        | Belize District                                 | 0.0                                | 0.0                                       | 1.4         | 0.1        | 0.0     | 0.9                              | 4976                              |
|                        | Cayo  | 0.0                                | 0.6                                       | 0.0         | 0.0        | 0.0     | 0.4                              | 3865                              |
|                        | Stann Creek                                     | 0.0                                | 4.6                                       | 0.2         | 0.1        | 0.0     | 1.4                              | 1833                              |
|                        | Toledo  | 0.0                                | 0.1                                       | 0.1         | 0.0        | 0.1     | 9.7                              | 1733                              |
| Area                   | Urban   | 0.0                                | 0.0                                       | 0.9         | 0.1        | 0.0     | 0.7                              | 7536                              |
|                        | Rural   | 0.0                                | 1.4                                       | 0.1         | 0.0        | 0.0     | 2.4                              | 9752                              |
| Education              | None  | 0.0                                | 0.9                                       | 0.1         | 0.0        | 0.0     | 8.9                              | 1377                              |
| of house-<br>hold head | Primary   | 0.0                                | 1.2                                       | 0.5         | 0.0        | 0.0     | 1.4                              | 8782                              |
| noid nead              | Secondary +                                     | 0.0                                | 0.4                                       | 0.4         | 0.1        | 0.0     | 0.6                              | 6412                              |
|                        | CET/ITVET/VOTEC                                 | 0.0                                | 0.0                                       | 1.8         | 0.0        | 0.0     | 0.5                              | 172                               |
|                        | Missing/DK                                      | 0.0                                | 0.0                                       | 0.0         | 0.0        | 0.0     | 0.0                              | 256                               |
|                        | Other   | 0.0                                | 0.0                                       | 0.0         | 0.0        | 0.0     | 0.0                              | 288                               |
| Wealth                 | Poorest   | 0.0                                | 2.7                                       | 0.9         | 0.0        | 0.1     | 6.9                              | 3458                              |
| index quin-            | Second  | 0.0                                | 0.9                                       | 1.3         | 0.0        | 0.0     | 1.2                              | 3457                              |
| tiles                  | Middle  | 0.0                                | 0.0                                       | 0.0         | 0.0        | 0.0     | 0.1                              | 3459                              |
|                        | Fourth  | 0.0                                | 0.2                                       | 0.0         | 0.1        | 0.0     | 0.0                              | 3456                              |
|                        | Richest   | 0.0                                | 0.2                                       | 0.0         | 0.0        | 0.0     | 0.0                              | 3457                              |
| Ethnicity of           | Creole  | 0.0                                | 0.2                                       | 1.5         | 0.1        | 0.0     | 0.6                              | 4048                              |
| household              | Mestizo   | 0.0                                | 1.1                                       | 0.0         | 0.0        | 0.0     | 0.7                              | 8498                              |
| head                   | Garifuna  | 0.0                                | 0.5                                       | 1.1         | 0.1        | 0.0     | 0.8                              | 959                               |
|                        | Maya  | 0.0                                | 2.0                                       | 0.3         | 0.0        | 0.0     | 9.7                              | 1933                              |
|                        | Other   | 0.0                                | 0.0                                       | 0.0         | 0.0        | 0.0     | 0.0                              | 1552                              |
|                        | Missing/DK                                      | 0.0                                | 0.0                                       | 0.0         | 0.0        | 0.0     | 0.0                              | 298                               |
|                        | Total   | 0.0                                | 0.8                                       | 0.4         | 0.0        | 0.0     | 1.6                              | 17288                             |

Access to safe drinking-water and to basic sanitation is measured by the proportion of population using an improved sanitation facility. MDGs and WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation classify households as using an unimproved sanitation facility if they are using otherwise acceptable sanitation facilities but sharing a facility between two or more households or using a public toilet facility.

As shown in Table WS.6, 96.9 percent of the household population is using an improved sanitation facility of which 89.2 percent is not shared. Only 7.7 percent of households use an improved toilet facility that is shared with other households. Rural households are more likely than urban households to use a shared improved toilet facility (9.1 percent and 6.0 percent, respectively). Improved sanitation facilities are shared less by more educated households and by households with the richest wealth index. Households in the Corozal District share improved sanitary facilities more than households in other districts (12.2 percent).

Table WS.6: Use and sharing of sanitation facilities

Percent distribution of household population by use of private and public sanitation facilities and use of shared facilities, by users of improved and unimproved sanitation facilities, Belize, 2011

|                        |   | l                    | Jsers of in        | mproved san                                | itation faciliti                             | es             | Users o       | of unimproved                              | d sanitation fa                              | acilities       | Open  |  |
|------------------------|---|----------------------|--------------------|--|--|----------------|---------------|--|--|-----------------|---|--|
|                        |   | Not<br>shared<br>[1] | Public<br>facility | Shared by:<br>5 house-<br>holds or<br>less | Shared by:<br>More than<br>5 house-<br>holds | Missing/<br>DK | Not<br>shared | Shared by:<br>5 house-<br>holds or<br>less | Shared by:<br>More than<br>5 house-<br>holds | Miss-<br>ing/DK | defe-<br>cation<br>(no<br>facility,<br>bush<br>field) | Number<br>of house-<br>hold<br>members |
| Region                 | Corozal   | 85.5                 | 0.4                | 12.2                                       | 0.0  | 0.2            | 0.4           | 0.2  | 0.0  | 0.0             |   | 2296                                   |
|                        | Orange Walk                                     | 93.5                 | 0.5                | 3.1  | 2.0  | 0.0            | 0.7           | 0.0  | 0.0  | 0.0             | 0.3   | 2584                                   |
|                        | Belize (Excluding<br>Belize City South<br>Side) | 93.3                 | 0.3                | 5.3  | 0.5  | 0.0            | 0.2           | 0.0  | 0.0  | 0.0             | 0.4   | 2799                                   |
|                        | Belize City South<br>Side                       | 88.3                 | 0.5                | 4.7  | 1.3  | 0.3            | 2.8           | 0.5  | 0.0  | 0.0             | 1.6   | 2177                                   |
|                        | Belize District                                 | 91.1                 | 0.4                | 5.0  | 0.8  | 0.1            | 1.3           | 0.2  | 0.0  | 0.0             | 0.9   | 4976                                   |
|                        | Cayo  | 90.3                 | 0.5                | 6.1  | 2.2  | 0.0            | 0.6           | 0.0  | 0.0  | 0.0             | 0.4   | 3865                                   |
|                        | Stann Creek                                     | 86.1                 | 0.0                | 5.1  | 2.5  | 0.0            | 3.6           | 0.3  | 0.8  | 0.1             | 1.4   | 1833                                   |
|                        | Toledo  | 82.9                 | 8.0                | 4.1  | 1.9  | 0.2            | 0.2           | 0.0  | 0.1  | 0.0             | 9.7   | 1733                                   |
| Area                   | Urban   | 92.2                 | 0.3                | 4.6  | 1.1  | 0.1            | 0.8           | 0.2  | 0.0  | 0.0             | 0.7   | 7536                                   |
|                        | Rural   | 86.9                 | 0.5                | 6.8  | 1.8  | 0.1            | 1.3           | 0.1  | 0.2  | 0.0             | 2.4   | 9752                                   |
| Education              | None  | 79.5                 | 0.7                | 5.5  | 1.6  | !              | 0.7           | 0.1  | 0.2  | 0.0             | 11.7  | 1577                                   |
| of house-<br>hold head | Primary   | 86.7                 | 0.3                | 7.3  | 1.8  | 0.1            | 1.5           | 0.2  | 0.2  | 0.0             | 1.9   | 9242                                   |
| noiu neau              | Secondary +                                     | 93.1                 | 0.6                | 3.7  | 1.1  | 0.1            | 0.7           | 0.2  | 0.0  | 0.0             | 0.6   | 6412                                   |
|                        | CET/ITVET/VOTEC                                 | 93.1                 | 0.0                | 4.6  | 0.0  | 0.0            | 1.8           | 0.0  | 0.0  | 0.0             |   | 172                                    |
|                        | Missing/DK                                      | 84.2                 | 0.0                | 9.6  | 6.2  | 0.0            | 0.0           | 0.0  | 0.0  | 0.0             |   | 256                                    |
|                        | Other   | 100.0                | 0.0                | 0.0  | 0.0  | 0.0            | 0.0           | 0.0  | 0.0  | 0.0             | 0.0   | 288                                    |
| Wealth                 | Poorest   | 74.2                 | 0.4                | 11.5                                       | 3.1  | 0.1            | 3.0           | 0.5  | 0.2  | 0.1             | 6.9   | 3458                                   |
| index                  | Second  | 82.6                 | 0.6                | 10.8                                       | 2.4  | 0.2            | 1.8           | 0.2  | 0.3  | 0.0             | 1.2   | 3457                                   |
| quintiles              | Middle  | 92.3                 | 0.9                | 4.9  | 1.6  | 0.1            | 0.0           | 0.0  | 0.0  | 0.0             |   | 3459                                   |
|                        | Fourth  | 98.4                 | 0.0                | 1.3  | 0.0  | 0.0            | 0.3           | 0.0  | 0.0  | 0.0             |   | 3456                                   |
|                        | Richest   | 98.4                 | 0.3                | 0.7  | 0.4  | 0.0            | 0.2           | 0.0  | 0.0  | 0.0             | 0.0   | 3457                                   |
| Ethnicity              | Creole  | 91.2                 | 0.3                | 4.9  | 1.0  | 0.2            | 1.6           | 0.2  | 0.0  | 0.0             | 0.6   | 4048                                   |
| of house-              | Mestizo   | 88.9                 | 0.4                | 6.8  | 1.9  | 0.1            | 0.9           | 0.1  | 0.1  | 0.0             | 0.7   | 8498                                   |
| hold head              | Garifuna  | 91.0                 | 0.1                | 5.2  | 1.4  | 0.0            | 0.7           | 0.5  | 0.2  | 0.2             |   | 959                                    |
|                        | Maya  | 79.1                 | 0.5                | 6.3  | 1.8  | 0.2            | 1.9           | 0.0  | 0.4  | 0.0             |   | 1933                                   |
|                        | Other   | 96.4                 | 0.9                | 2.4  | 0.3  |                | 0.0           | 0.0  | 0.0  | 0.0             |   | 1552                                   |
|                        | Missing/DK                                      | 92.6                 | 0.5                | 6.9  | 0.0  | 0.0            | 0.0           | 0.0  | 0.0  | 0.0             | 0.0   | 298                                    |
| Total                  |   | 89.2                 | 0.4                | 5.8  | 1.5  | 0.1            | 1.1           | 0.1  | 0.1  | 0.0             | 1.6   | 17288                                  |

## [1] MICS indicator 4.3; MDG indicator 7.9

Safe disposal of a child's faeces is disposing of the stool, by the child using a toilet or by rinsing the stool into a toilet or latrine. Disposal of faeces of children 0-2 years of age is presented in Table WS.7. About a quarter of children's faeces (25.6 percent) were disposed of safely in Belize. The Toledo District (15.2 percent) and the Belize City South Side (17.7 percent) were the regions with the lowest safety disposal rates. Households in rural areas tended to dispose of children's faeces safely more often than households in urban areas (urban 17.5 percent, rural 30.7 percent). Also of interest is that households with less educated heads and richer families seem to safely dispose of children's faeses at higher rates.

Table WS.7: Disposal of child's faeces
Percent distribution of children age 0-2 years according to place of disposal of child's faeces, and the percentage of children age 0-2 years whose stools were disposed of safely the last time the child passed stools, Belize, 2011

|                          |   |                           |                                      | Dlace of                            | disposal of                | child's fo | 0000           |            |            |                |   |                                  |
|--------------------------|---|---------------------------|--------------------------------------|-------------------------------------|----------------------------|------------|----------------|------------|------------|----------------|---|----------------------------------|
|                          |   |                           |                                      | Place Oi                            | disposai oi                | Ciliu's ia | eces           |            |            |                |   |                                  |
|                          |   | Child<br>used<br>toilet / | Put /<br>Rinsed<br>into<br>toilet or | Put /<br>Rinsed<br>into<br>drain or | Thrown into garbage (solid |            | Left<br>in the |            |            |                | Percentage<br>of children<br>whose last<br>stools were<br>disposed of | Number<br>of children<br>age 0-2 |
|                          |   | latrine                   | latrine                              | ditch                               | waste)                     | Buried     | open           | Other      | DK         | Total          | safely [1]  | years                            |
| Type of                  | Improved  | 13.1                      | 12.7                                 | 0.7                                 | 68.2                       | 1.6        | 1.1            | 2.0        | 0.5        | 100.0          | 25.8  | 1110                             |
| sanitaton<br>facility in | Unimproved Open defacation                      | (*)<br>(*)                | (*)<br>(*)                           | (*)<br>(*)                          | (*)<br>(*)                 | (*)<br>(*) | (*)<br>(*)     | (*)<br>(*) | (*)<br>(*) | 100.0<br>100.0 | (*)<br>(*)  | 15<br>27                         |
| dwelling                 | _   |                           |                                      |                                     |                            |            |                |            |            |                |   |                                  |
| Region                   | Corozal   | 14.2                      | 23.0                                 | 2.5                                 | 57.1                       | 0.0        | 2.2            | 1.1        | 0.0        | 100.0          | 37.2  | 162                              |
|                          | Orange Walk                                     | 15.3                      | 26.8                                 | 0.8                                 | 50.7                       | 0.5        | 0.9            | 3.1        | 1.9        | 100.0          | 42.1  | 184                              |
|                          | Belize (Excluding<br>Belize City South<br>Side) | 17.5                      | 1.3                                  | 0.0                                 | 81.1                       | 0.0        | 0.0            | 0.0        | 0.0        | 100.0          | 18.9  | 123                              |
|                          | Belize City South<br>Side                       | 13.8                      | 3.8                                  | 0.0                                 | 81.0                       | 0.0        | 0.0            | 1.3        | 0.0        | 100.0          | 17.7  | 143                              |
|                          | Belize District                                 | 15.6                      | 2.7                                  | 0.0                                 | 81.0                       | 0.0        | 0.0            | 0.7        | 0.0        | 100.0          | 18.2  | 266                              |
|                          | Cayo  | 13.8                      | 6.5                                  | 0.6                                 | 75.8                       | 1.7        | 0.0            | 1.7        | 0.0        | 100.0          | 20.3  | 283                              |
|                          | Stann Creek                                     | 8.0                       | 17.4                                 | 0.0                                 | 56.9                       | 7.7        | 2.9            | 5.6        | 1.4        | 100.0          | 25.4  | 121                              |
|                          | Toledo  | 5.8                       | 9.3                                  | 0.9                                 | 71.9                       | 2.2        | 4.9            | 4.0        | 1.0        | 100.0          | 15.2  | 136                              |
| Area                     | Urban   | 13.5                      | 4.1                                  | 0.0                                 | 82.1                       | 0.0        | 0.0            | 0.4        | 0.0        | 100.0          | 17.5  | 443                              |
|                          | Rural   | 12.7                      | 18.0                                 | 1.2                                 | 59.1                       | 2.5        | 2.2            | 3.5        | 0.9        | 100.0          | 30.7  | 709                              |
| Mother's                 | None  | 17.2                      | 16.5                                 | 3.5                                 | 51.0                       | 2.2        | 3.9            | 4.6        | 1.2        | 100.0          | 33.7  | 62                               |
| education                | Primary   | 10.6                      | 15.7                                 | 0.7                                 | 65.8                       | 1.8        | 1.8            | 3.0        | 0.5        | 100.0          | 26.4  | 543                              |
|                          | Secondary +                                     | 15.1                      | 6.2                                  | 0.2                                 | 75.2                       | 1.3        | 0.3            | 1.4        | 0.3        | 100.0          | 21.3  | 512                              |
|                          | CET/ITVET/VOTEC                                 | (*)                       | (*)                                  | (*)                                 | (*)                        | (*)        | (*)            | (*)        | (*)        | 100.0          | (*)   | 8                                |
|                          | Other   | (*)                       | (*)                                  | (*)                                 | (*)                        | (*)        | (*)            | (*)        | (*)        | 100.0          | (*)   | 27                               |
| Wealth                   | Poorest   | 10.9                      | 20.5                                 | 2.5                                 | 50.6                       | 2.7        | 5.0            | 6.5        | 1.3        | 100.0          | 31.3  | 292                              |
| index quin-              | Second  | 12.4                      | 16.6                                 | 0.0                                 | 66.9                       | 1.9        | 0.3            | 1.8        | 0.0        | 100.0          | 29.1  | 261                              |
| tiles                    | Middle  | 12.6                      | 9.7                                  | 0.0                                 | 76.6                       | 0.3        | 0.0            | 0.4        | 0.4        | 100.0          | 22.3  | 241                              |
|                          | Fourth  | 13.2                      | 5.4                                  | 0.4                                 | 77.4                       | 2.2        | 0.0            | 0.4        | 0.9        | 100.0          | 18.6  | 190                              |
|                          | Richest   | 17.7                      | 5.3                                  | 0.0                                 | 76.5                       | 0.0        | 0.0            | 0.5        | 0.0        | 100.0          | 23.0  | 168                              |
| Ethnicity of household   | Creole  | 15.9                      | 4.4                                  | 0.0                                 | 77.1                       | 1.3        | 0.0            | 0.5        | 0.8        | 100.0          | 20.4  | 207                              |
| head                     | Mestizo   | 12.9                      | 15.3                                 | 1.0                                 | 65.2                       | 1.4        | 0.9            | 2.9        | 0.4        | 100.0          | 28.2  | 579                              |
|                          | Garifuna  | 9.5                       | 14.5                                 | 0.0                                 | 74.8                       | 0.0        | 1.3            | 0.0        | 0.0        | 100.0          | 24.0  | 65                               |
|                          | Maya  | 10.7                      | 8.2                                  | 0.7                                 | 67.7                       | 4.3        | 3.5            | 4.5        | 0.4        | 100.0          | 18.9  | 167                              |
|                          | Other   | 11.2                      | 21.3                                 | 1.3                                 | 61.1                       | 0.0        | 3.0            | 0.8        | 1.4        | 100.0          | 32.5  | 118                              |
|                          | Missing/DK                                      | (*)                       | (*)                                  | (*)                                 | (*)                        | (*)        | (*)            | (*)        | (*)        | 100.0          | (*)   | 17                               |
| Total                    |   | 13.0                      | 12.6                                 | 0.7                                 | 67.9                       | 1.6        | 1.3            | 2.3        | 0.6        | 100.0          | 25.6  | 1152                             |

<sup>[1]</sup> MICS indicator 4.4

In its 2008 report<sup>1</sup>, the JMP developed a new way of presenting the access figures, by disaggregating and refining the data on drinking-water and sanitation and reflecting them in "ladder" format. This ladder allows a disaggregated analysis of trends in a three rung ladder for drinking-water and a four-rung ladder for sanitation. For sanitation, this gives an understanding of the proportion of population with no sanitation facilities at all, of those reliant on technologies defined by JMP as "unimproved," of those sharing sanitation facilities of otherwise acceptable technology, and those using "improved" sanitation facilities. Table WS.8 presents the percentages of household population by drinking water and sanitation ladders.

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases

<sup>1</sup> WHO/UNICEF JMP (2008), MDG assessment report - http://www.wssinfo.org/download?id\_document=1279

The table also shows the percentage of household members using improved sources of drinking water and sanitary means of excreta disposal.

Almost all households (97.7 percent) have improved drinking water and 89.2 percent have improved sanitation (Table WS.8). Improved sanitation rates differ by area with 92.2 percent in urban areas and 86.9 percent in rural areas. Residents of the Toledo (82.9 percent) and Stann Creek (86.1 percent) Districts are less likely than others to use improved sanitation facilities.

Use of improved sanitary facilities increase with increasing education (no education 81.9 percent, secondary + education 93.1 percent). Also, use of improved sanitation increases with increasing wealth (poorest 74.2 percent, richest 98.4 percent). The Maya are the least likely to use improved sanitation (79.1 percent).



Table WS.8: Drinking water and sanitation ladders
Percentage of household population by drinking water and sanitation ladders, Belize, 2011

|           |   |   |                        |                                      | Percen | tage of hous                  | ehold popula               | ntion using:                  |                         |       |  |  |
|-----------|---|---|------------------------|--------------------------------------|--------|-------------------------------|----------------------------|-------------------------------|-------------------------|-------|--|--|
|           |   | Improved wate                                 |                        |                                      |        |                               | Unimp                      | roved sanit                   | ation                   |       | Improved   |  |
|           |   | Piped<br>into<br>dwelling,<br>plot or<br>yard | Other<br>im-<br>proved | Unim-<br>proved<br>drinking<br>water | Total  | Improved<br>sanitation<br>[2] | Shared improved facilities | Unim-<br>proved<br>facilities | Open<br>defeca-<br>tion | Total | drinking water sources and im- proved sanitation | Number<br>of house-<br>hold<br>members |
| Region    | Corozal   | 59.2  | 36.4                   | 4.4                                  | 100.0  | 85.5                          | 12.9                       | 0.7                           | 0.9                     | 100.0 | 82.4   | 2296                                   |
|           | Orange Walk                                     | 72.3  | 25.3                   | 2.4                                  | 100.0  | 93.5                          | 5.5                        | 0.7                           | 0.3                     | 100.0 | 92.1   | 2584                                   |
|           | Belize (Excluding<br>Belize City South<br>Side) | 77.6  | 22.2                   | 0.3                                  | 100.0  | 93.3                          | 6.1                        | 0.2                           | 0.4                     | 100.0 | 93.2   | 2799                                   |
|           | Belize City South<br>Side                       | 88.2  | 11.6                   | 0.2                                  | 100.0  | 88.3                          | 6.8                        | 3.3                           | 1.6                     | 100.0 | 88.3   | 2177                                   |
|           | Belize District                                 | 82.2  | 17.5                   | 0.2                                  | 100.0  | 91.1                          | 6.4                        | 1.6                           | 0.9                     | 100.0 | 91.1   | 4976                                   |
|           | Cayo  | 76.0  | 19.6                   | 4.4                                  | 100.0  | 90.3                          | 8.8                        | 0.6                           | 0.4                     | 100.0 | 85.9   | 3865                                   |
|           | Stann Creek                                     | 94.6  | 4.9                    | 0.5                                  | 100.0  | 86.1                          | 7.6                        | 4.9                           | 1.4                     | 100.0 | 86.0   | 1833                                   |
|           | Toledo  | 58.4  | 38.7                   | 2.9                                  | 100.0  | 82.9                          | 7.1                        | 0.3                           | 9.7                     | 100.0 | 80.9   | 1733                                   |
| Area      | Urban   | 89.3  | 10.3                   | 0.5                                  | 100.0  | 92.2                          | 6.1                        | 1.0                           | 0.7                     | 100.0 | 91.9   | 7536                                   |
|           | Rural   | 64.3  | 31.9                   | 3.8                                  | 100.0  | 86.9                          | 9.2                        | 1.6                           | 2.4                     | 100.0 | 83.9   | 9752                                   |
| Education | None  | 58.2  | 38.2                   | 3.6                                  | 100.0  | 79.5                          | 7.9                        | 1.0                           | 11.7                    | 100.0 | 77.0   | 1577                                   |
| of house- | Primary   | 71.5  | 25.2                   | 3.3                                  | 100.0  | 86.7                          | 9.6                        | 1.9                           | 1.9                     | 100.0 | 84.2   | 9242                                   |
| hold head | Secondary +                                     | 85.2  | 14.2                   | 0.5                                  | 100.0  | 93.1                          | 5.4                        | 0.9                           | 0.6                     | 100.0 | 92.7   | 6412                                   |
|           | CET/ITVET/VO-<br>TEC                            | 94.5  | 5.5                    | 0.0                                  | 100.0  | 93.1                          | 4.6                        | 1.8                           | 0.5                     | 100.0 | 93.1   | 172                                    |
|           | Missing/DK                                      | 82.3  | 15.3                   | 2.5                                  | 100.0  | 84.2                          | 15.8                       | 0.0                           | 0.0                     | 100.0 | 81.7   | 256                                    |
|           | Other   | 27.0  | 73.0                   | 0.0                                  | 100.0  | 100.0                         | 0.0                        | 0.0                           | 0.0                     | 100.0 | 100.0  | 288                                    |
| Wealth    | Poorest   | 56.6  | 37.4                   | 6.0                                  | 100.0  | 74.2                          | 15.1                       | 3.8                           | 6.9                     | 100.0 | 70.2   | 3458                                   |
| index     | Second  | 74.1  | 24.1                   | 1.7                                  | 100.0  | 82.6                          | 13.9                       | 2.3                           | 1.2                     | 100.0 | 81.2   | 3457                                   |
| quintiles | Middle  | 76.3  | 21.9                   | 1.8                                  | 100.0  | 92.3                          | 7.6                        | 0.0                           | 0.1                     | 100.0 | 90.7   | 3459                                   |
|           | Fourth  | 80.8  | 18.0                   | 1.1                                  | 100.0  | 98.4                          | 1.3                        | 0.3                           | 0.0                     | 100.0 | 97.3   | 3456                                   |
|           | Richest   | 88.1  | 10.8                   | 1.1                                  | 100.0  | 98.4                          | 1.4                        | 0.2                           | 0.0                     | 100.0 | 97.4   | 3457                                   |
| Ethnicity | Creole  | 80.4  | 19.3                   | 0.4                                  | 100.0  | 91.2                          | 6.4                        | 1.8                           | 0.6                     | 100.0 | 90.9   | 4048                                   |
| of house- | Mestizo   | 75.0  | 21.8                   | 3.2                                  | 100.0  | 88.9                          | 9.3                        | 1.1                           | 0.7                     | 100.0 | 86.3   | 8498                                   |
| hold head | Garifuna  | 94.0  | 5.8                    | 0.2                                  | 100.0  | 91.0                          | 6.6                        | 1.7                           | 0.8                     | 100.0 | 90.8   | 959                                    |
|           | Maya  | 65.3  | 30.4                   | 4.2                                  | 100.0  | 79.1                          | 8.9                        | 2.3                           | 9.7                     | 100.0 | 76.0   | 1933                                   |
|           | Other   | 61.7  | 37.3                   | 1.0                                  | 100.0  | 96.4                          | 3.6                        | 0.0                           | 0.0                     | 100.0 | 95.5   | 1552                                   |
|           | Missing/DK                                      | 85.6  | 7.9                    | 6.4                                  | 100.0  | 92.6                          | 7.4                        | 0.0                           | 0.0                     | 100.0 | 89.2   | 298                                    |
| Total     |   | 75.2  | 22.5                   | 2.3                                  | 100.0  | 89.2                          | 7.9                        | 1.3                           | 1.6                     | 100.0 | 87.4   | 17288                                  |

<sup>[1]</sup> MICS indicator 4.1; MDG indicator 7.8

## **Handwashing**

Handwashing with water and soap is the most cost effective health intervention to reduce both the incidence of diarrhoea and pneumonia in children under five. It is most effective when done using water and soap after visiting a toilet or cleaning a child, before eating or handling food and, before feeding a child. Monitoring correct hand washing behaviour at these critical times is challenging. A reliable alternative to observations or self-reported behaviour is assessing the likelihood that correct hand washing behaviour takes place by observing if a household has a specific place where people most often wash their hands and observing if water and soap (or other local cleansing materials) are present at a specific place for hand washing.

<sup>[2]</sup> MICS indicator 4.3; MDG indicator 7.9

Table WS.9: Water and soap at place for hand-washing Percentage of households where place for hand-washing was observed and percent distribution of households by availability of water and soap at place for hand-washing, Belize,

| Region Corozal Orange Walk Belize (Excluding Belize City South Side) | Percentage<br>of house-<br>holds where<br>place for<br>hand-washing<br>was observed<br>69.5<br>84.5 | Percentage of h                | ercentage of households where place<br>for hand-washing was not observed | ere place<br>bserved |       |                     | Percent di<br>place for h        | Percent distribution of households where place for hand-washing was observed, and: | f household<br>g was obser                | s where<br>ved, and:                      |       | Number   |
|--|---|--------------------------------|--|----------------------|-------|---------------------|----------------------------------|--|---|---|-------|--|
|  | Percenta<br>of hous<br>holds wh<br>place fo<br>hand-wasl  |                                |  |                      |       |                     |                                  |  |   |   |       | Number   |
|  |   | Not in dwell-<br>ing/plot/yard | No permis-<br>sion to see  | Other                | Total | Number<br>of house- | Water and soap are available [1] | Water is available, soap is not available  | Water is not available, soap is available | Water<br>and soap<br>are not<br>available | Total | of house-<br>holds where<br>place for<br>hand-wash-<br>ing was ob-<br>served |
|  |   | 9.3                            | 19.6   | 1.6                  | 100.0 | 519                 | 93.0                             | 3.6  | 3.2                                       | 0.2                                       | 100.0 | 361  |
| Belize (Excluding<br>Belize City South<br>Side)                      |   | 9.4                            | 4.4  | 1.8                  | 100.0 | 607                 | 98.5                             | 0.7  | 0.8                                       | 0.0                                       | 100.0 | 513  |
|  |   | 2.1                            | 13.9   | 5.4                  | 100.0 | 860                 | 99.4                             | 0.4  | 0.2                                       | 0.0                                       | 100.0 | 676  |
| Belize City South<br>Side  | 49.7  | 5.1                            | 18.8   | 26.5                 | 100.0 | 614                 | 93.7                             | 1.3  | 2.0                                       | 0.0                                       | 100.0 | 305  |
| Belize District  | 66.5  | 3.3                            | 15.9   | 14.2                 | 100.0 | 1474                | 97.6                             | 0.7  | 1.7                                       | 0.0                                       | 100.0 | 981  |
| Cayo   | 83.2  | 8.8                            | 3.0  | 2.0                  | 100.0 | 918                 | 98.1                             | 0.2  | 1.3                                       | 0.4                                       | 100.0 | 764  |
| Stann Creek  | 75.5  | 10.1                           | 9.2  | 5.2                  | 100.0 | 488                 | 95.3                             | 3.6  | 0.4                                       | 0.7                                       | 100.0 | 368  |
| Toledo   | 88.9  | 8.9                            | 0.3  | 1.9                  | 100.0 | 417                 | 73.2                             | 24.7   | 1.9                                       |   |       |  |
| Area Urban   | 72.4  | 4.6                            | 12.2   | 10.9                 | 100.0 | 2170                | 97.5                             | 1.0  | 1.5                                       | 0.0                                       | 100.0 | 1570   |
| Rural  | 79.3  | 6.6                            | 9.7  | 3.1                  | 100.0 | 2254                | 91.7                             | 6.4  | 1.5                                       | 0.4                                       | 100.0 | 1788   |
| _  | 81.5  | 8.6                            | 7.1  | 1.6                  | 100.0 | 311                 | 87.6                             | 10.5   | 9.0                                       | 1.3                                       | 100.0 | 254  |
|  | 75.6  | 0.6                            | 9.6  | 6.3                  | 100.0 | 2104                | 92.9                             | 5.1  | 1.9                                       | 0.1                                       | 100.0 | 1590   |
| hold head Secondary +  | 74.6  | 5.2                            | 10.9   | 9.3                  | 100.0 | 1851                | 97.0                             | 1.5  | 1.4                                       | 0.1                                       | 100.0 | 1381   |
| CET/ITVET/VOTEC  | C (87.0)  | (0.0)                          | (8.9)  | (4.1)                | 100.0 | 47                  | (100.0)                          | (0.0)  | (0.0)                                     | (0.0)                                     | 100.0 | 41   |
| Missing/DK   | 75.9  | 8.1                            | 9.4  | 9.9                  | 100.0 | 28                  | (100.0)                          | (0.0)  | (0.0)                                     | (0.0)                                     | 100.0 | 44   |
| Other  | 93.7  | 4.5                            | 1.8  | 0.0                  | 100.0 | 52                  | 98.5                             | 1.5  | 0.0                                       | 0.0                                       | 100.0 | 49   |
| Wealth Poorest   | 74.5  | 11.8                           | 7.8  | 6.3                  | 100.0 | 882                 | 84.0                             | 12.1   | 2.9                                       | 1.0                                       | 100.0 | 629  |
| x quin-  | 71.8  | 9.4                            | 11.6   | 7.3                  | 100.0 | 865                 | 93.5                             | 3.9  | 2.5                                       | 0.1                                       | 100.0 | 621  |
| tiles Middle   | 9.57  | 9.9                            | 11.1   | 6.7                  | 100.0 | 863                 | 9.96                             | 2.3  | 1.  | 0.0                                       | 100.0 | 652  |
| Fourth   | 80.0  | 4.2                            | 8.9  | 6.9                  | 100.0 | 888                 | 876                              | 6.0  | 1.3                                       | 0.0                                       | 100.0 | 711  |
| Richest  | 77.6  | 4.6                            | 10.0   | 7.9                  | 100.0 | 922                 | 99.4                             | 9.0  | 0.0                                       | 0.0                                       | 100.0 | 715  |
| Ethnicity of Creole  | 9.69  | 4.9                            | 13.1   | 12.4                 | 100.0 | 1182                | 92.6                             | 2.1  | 2.2                                       | 0.0                                       | 100.0 | 822  |
| household Mestizo  | 78.3  | 9.1                            | 8.3  | 4.3                  | 100.0 | 2058                | 95.5                             | 2.7  | 1.5                                       | 0.3                                       | 100.0 | 1611   |
| head Garifuna  | 74.8  | 5.3                            | 9.5  | 10.8                 | 100.0 | 286                 | 96.2                             | 2.4  | 1.4                                       | 0.0                                       | 100.0 | 214  |
| Maya   | 86.1  | 7.1                            | 3.1  | 3.7                  | 100.0 | 339                 | 82.7                             | 16.1   |   | 0.7                                       | 100.0 | 344  |
| Other  | 76.2  | 6.3                            | 12.7   | 4.8                  | 100.0 | 409                 | 96.5                             | 2.3  |   | 0.0                                       | 100.0 | 312  |
| Missing/DK   | 62.8  | 8.2                            | 21.0   | 8.1                  | 100.0 | 91                  | 98.5                             | 1.5  | 0.0                                       | 0.0                                       | 100.0 | 57   |
| Total  | 75.9  | 7.3                            | 6.6  | 6.9                  | 100.0 | 4424                | 94.4                             | 3.9  | 1.5                                       | 0.2                                       | 100.0 | 3359   |

[1] MICS indicator 4.5; ( ) Figures that are based on 25-49 un-weighted cases.

In Belize, a specific place for hand washing was observed in 75.9 percent of the households while 7.3 percent households could not indicate a specific place where household members usually wash their hands and 9.9 percent of the households did not give a permission to see the place used for hand washing (Table WS.9). Of those households where place for hand-washing was observed, 94.4 percent had both water and soap present at the designated place. In 3.9 percent of the households only water was available at the designated place, while in 1.5 percent of the households the place only had soap but no water. The remaining 0.2 percent of households had neither water nor soap available at the designated place for hand washing (Table WS.9).

Soaps were available at rates in excess of 93 percent in all regions except the Cayo District (73.2 percent). There is tendency for water and soap to be present at higher rates in households with more educated heads. Households with richer wealth indices tend to have higher rates of available water and soap. Households with Maya heads were the least likely to have water and soap available (Table WS.10).

Table WS.10: Availability of soap
Percent distribution of households by availability of soap in the dwelling, Belize, 2011

|           |   | Place              | for hand      | washing ob                   | served   | Place fo      | r hand wa<br>observed           |  |       |  |                      |
|-----------|---|--------------------|---------------|------------------------------|--|---------------|---------------------------------|--|-------|--|----------------------|
|           |   | Soap ob-<br>served | Soap<br>shown | No soap<br>in house-<br>hold | Not able/<br>Does not<br>want to<br>show<br>soap | Soap<br>shown | No<br>soap in<br>house-<br>hold | Not able/<br>Does not<br>want to<br>show<br>soap | Total | Percentage of house-holds with soap anywhere in the dwelling [1] | Number of households |
| Region    | Corozal                                   | 66.9               | 1.4           | 1.1                          | 0.2  | 28.0          | 0.5                             | 2.0  | 100.0 | 96.3   | 519                  |
|           | Orange Walk                               | 84.0               | 0.1           | 0.4                          | 0.0  | 14.7          | 0.3                             | 0.5  | 100.0 | 98.7   | 607                  |
|           | Belize (Excluding Belize City South Side) | 78.3               | 0.3           | 0.0                          | 0.0  | 4.5           | 0.3                             | 16.5   | 100.0 | 83.1   | 860                  |
|           | Belize City<br>South Side                 | 49.0               | 0.5           | 0.0                          | 0.2  | 38.3          | 1.6                             | 10.4   | 100.0 | 87.8   | 614                  |
|           | Belize<br>District                        | 66.1               | 0.4           | 0.0                          | 0.1  | 18.6          | 0.9                             | 14.0   | 100.0 | 85.1   | 1474                 |
|           | Cayo                                      | 82.7               | 0.2           | 0.4                          | 0.0  | 15.8          | 0.3                             | 0.7  | 100.0 | 98.6   | 918                  |
|           | Stann Creek                               | 72.3               | 3.0           | 0.2                          | 0.0  | 19.7          | 0.2                             | 4.6  | 100.0 | 95.0   | 488                  |
|           | Toledo                                    | 66.8               | 19.3          | 2.8                          | 0.0  | 9.8           | 1.0                             | 0.3  | 100.0 | 95.9   | 417                  |
| Area      | Urban                                     | 71.7               | 0.6           | 0.1                          | 0.0  | 20.1          | 0.6                             | 6.9  | 100.0 | 92.4   | 2170                 |
|           | Rural                                     | 74.0               | 4.3           | 1.0                          | 0.0  | 15.7          | 0.6                             | 4.4  | 100.0 | 94.0   | 2254                 |
| Education | None                                      | 71.9               | 6.1           | 3.5                          | 0.0  | 14.6          | 2.8                             | 1.1  | 100.0 | 92.6   | 311                  |
| of house- | Primary                                   | 71.6               | 3.3           | 0.6                          | 0.1  | 19.6          | 0.6                             | 4.3  | 100.0 | 94.5   | 2104                 |
| hold head | Secondary +                               | 73.4               | 1.2           | 0.1                          | 0.0  | 17.0          | 0.2                             | 8.2  | 100.0 | 91.6   | 1851                 |
|           | CET/ITVET/<br>VOTEC                       | (87.0)             | (0.0)         | (0.0)                        | (0.0)  | (10.1)        | (0.0)                           | (2.9)  | 100.0 | (97.1)   | 47                   |
|           | Missing/DK                                | (75.9)             | (0.0)         | (0.0)                        | (0.0)  | (17.0)        | (0.0)                           | (7.1)  | 100.0 | (92.9)   | 58                   |
|           | Other                                     | (92.4)             | (1.4)         | (0.0)                        | (0.0)  | (6.3)         | (0.0)                           | (0.0)  | 100.0 | (100.0)  | 52                   |
| Wealth    | Poorest                                   | 64.7               | 7.4           | 2.3                          | 0.1  | 18.3          | 1.8                             | 5.4  | 100.0 | 90.5   | 885                  |
| index     | Second                                    | 68.9               | 2.4           | 0.5                          | 0.0  | 21.2          | 0.8                             | 6.2  | 100.0 | 92.5   | 865                  |
| quintiles | Middle                                    | 73.8               | 1.8           | 0.0                          | 0.0  | 19.8          | 0.3                             | 4.3  | 100.0 | 95.4   | 863                  |
|           | Fourth                                    | 79.3               | 0.6           | 0.0                          | 0.1  | 14.8          | 0.0                             | 5.2  | 100.0 | 94.7   | 889                  |
|           | Richest                                   | 77.1               | 0.4           | 0.0                          | 0.0  | 15.4          | 0.0                             | 7.0  | 100.0 | 93.0   | 922                  |
| Ethnicity | Creole                                    | 68.1               | 1.3           | 0.1                          | 0.1  | 18.8          | 0.7                             | 10.9   | 100.0 | 88.2   | 1182                 |
| of house- | Mestizo                                   | 75.9               | 1.9           | 0.4                          | 0.0  | 18.4          | 0.5                             | 2.9  | 100.0 | 96.2   | 2058                 |
| hold head | Garifuna                                  | 72.9               | 1.8           | 0.0                          | 0.0  | 18.0          | 0.7                             | 6.5  | 100.0 | 92.8   | 286                  |
|           | Maya                                      | 71.7               | 10.9          | 3.5                          | 0.0  | 12.0          | 1.0                             | 0.8  | 100.0 | 94.6   | 399                  |
|           | Other                                     | 74.5               | 1.7           | 0.0                          | 0.0  | 16.4          | 0.3                             | 7.1  | 100.0 | 92.6   | 409                  |
|           | Missing/DK                                | 61.9               | 0.9           | 0.0                          | 0.0  | 25.4          | 0.0                             | 11.8   | 100.0 | 88.2   | 91                   |
| Total     |   | 72.8               | 2.5           | 0.6                          | 0.0  | 17.9          | 0.6                             | 5.6  | 100.0 | 93.2   | 4424                 |

<sup>[1]</sup> MICS indicator 4.6;

<sup>()</sup> Figures that are based on 25-49 un-weighted cases.

## VIII. REPRODUCTIVE HEALTH

## **Fertility**

In MICS4, adolescent birth rates and total fertility rates are calculated by using information on the date of last birth of each woman and are based on the one-year period (1-12 months) preceding the survey. Rates are underestimated by a very small margin due to absence of information on multiple births (twins, triplets etc) and on women having multiple deliveries during the one year period preceding the survey.

Table RH.1 shows adolescent birth rates and total fertility rate. The adolescent birth rate (age-specific fertility rate for women age 15-19) is defined as the number of births to women age 15-19 years during the one year period preceding the survey, divided by the average number of women age 15-19 (number of women-years lived between ages 15 through 19, inclusive) during the same period, expressed per 1000 women. The total fertility rate (TFR) is calculated by summing the age-specific fertility rates calculated for each of the 5-year age groups of women, from age 15 through to age 49. The TFR denotes the average number of children to which a woman will have given birth by the end of her reproductive years if current fertility rates prevailed.

Table RH.1: Adolescent birth rate and total fertility rate Adolescent birth rates and total fertility rates, Belize, 2011

|                        |   | Adolescent birth rate [1] (Age-<br>specific fertility rate for women<br>age 15-19) | Total Fertility<br>Rate |
|------------------------|---|--|-------------------------|
| Region                 | Corozal   | 61   | 2.3                     |
|                        | Orange Walk                                     | 79   | 3.0                     |
|                        | Belize (Excluding<br>Belize City South<br>Side) | 45   | 1.7                     |
|                        | Belize City South<br>Side                       | 59   | 1.9                     |
|                        | <b>Belize District</b>                          | 51   | 1.8                     |
|                        | Cayo  | 56   | 3.1                     |
|                        | Stann Creek                                     | 84   | 3.1                     |
|                        | Toledo  | 81   | 3.4                     |
| Area                   | Urban   | 39   | 2.1                     |
|                        | Rural   | 85   | 3.1                     |
| Mother's education     | None  | 0  | 6.0                     |
|                        | Primary   | 145  | 3.3                     |
|                        | Secondary+                                      | 37   | 2.0                     |
|                        | CET/ITVET/VOTEC                                 | 0  | .0                      |
| Wealth index quintile  | Poorest   | 96   | 4.2                     |
|                        | Second  | 88   | 2.8                     |
|                        | Middle  | 62   | 2.4                     |
|                        | Fourth  | 53   | 2.5                     |
|                        | Richest   | 23   | 1.7                     |
| Ethnicity of household | Creole  | 34   | 1.4                     |
| head                   | Mestizo   | 83   | 2.8                     |
|                        | Garifuna  | 64   | 3.1                     |
|                        | Maya  | 74   | 3.8                     |
|                        | Other   | 23   | 3.8                     |
| Total                  |   | 64   | 2.6                     |

<sup>[1]</sup> MICS indicator 5.1; MDG indicator 5.4

Adolescent birth rate is twice as in rural areas (85 per thousand) than in urban areas (39 per thousand). High adolescent birth rates are also found in the Mestizo (83 per thousand) and in the Stann Creek District (84 per thousand). Wealthy families are less likely to have high adolescent birth rates; for poor families the rate is 96 per thousand while for the richest it is 23 per thousand.

Sexual activity and childbearing early in life carry significant risks for young people all around the world. Table RH.2 presents some early childbearing indicators for women age 15-19 and 20-24 while Table RH.3 presents the trends for early childbearing. As shown in Table RH.2, 11.4 percent of women age 15-19 have already had a birth, 4.2 percent are pregnant with their first child, 15.6 percent have begun childbearing and 0.6 percent have had a live birth before age 15. The percentage of women age 20-24 years who have had a live birth before age 18 is 16.9.

Women with a live birth before age 15 years are slightly more likely to be from rural areas while for live births before age 18 years it is clear that rural women have higher rates (Figure RH.1). There are also some interesting patterns in the percentage of women 20 to 24 who have had a live birth before age 18 years. Richer women seem to have fewer births before age 18 years (TableRH.2). For the poorest index the rate is 32.5 percent and this reduces for the richest index at 6.0 percent. Toledo (27.6 percent) and Stann Creek (21.2 percent) are the districts with highest rates of live births before age 18 years for women 20 to 24 years. Among the ethnic groups, highest rates are observed in the Maya (21.4 percent) and the Mestizo (19.3 Percent) households.

Table RH.2: Early childbearing

Percentage of women age 15-19 who have had a live birth or who are pregnant with the first child, percentage of women age 15-19 who have begun childbearing before age 15, and the percentage of women age 20-24 who have had a live birth before age 18,

Belize, 2011

|              |                                  |               | Number o               | f women age 15 | L19                       |                     | Percentage of                    |                     |
|--------------|----------------------------------|---------------|------------------------|----------------|---------------------------|---------------------|----------------------------------|---------------------|
|              |                                  | Have          |                        | i women age is |                           |                     | women age 20-24                  |                     |
|              |                                  | had<br>a live | Are preg-<br>nant with | Have begun     | Have had a live birth be- | Number of women age | who have had a live birth before | Number of women age |
| <b>.</b>     | 0 1                              | birth         | first child            | childbearing   | fore age 15               | 15-19               | age 18 [1]                       | 20-24               |
| Region       | Corozal                          | 13.1          | 5.3                    | 18.4           | 1.6<br>0.7                | 107                 | 15.3                             |                     |
|              | Orange Walk<br>Belize (Excluding | 13.2<br>10.0  | 6.2<br>2.1             | 19.4<br>12.1   | 0.7                       | 137<br>139          | 17.4<br>13.0                     |                     |
|              | Belize City South Side)          | 10.0          | 2.1                    | 12.1           | 0.0                       | 139                 | 13.0                             | 110                 |
|              | Belize City South<br>Side        | 8.1           | 0.0                    | 8.1            | 0.8                       | 106                 | 15.8                             |                     |
|              | Belize District                  | 9.2           | 1.2                    | 10.3           | 0.4                       | 245                 | 14.4                             | 226                 |
|              | Cayo                             | 9.8           | 5.5                    | 15.3           | 0.0                       | 196                 | 14.5                             | 151                 |
|              | Stann Creek                      | 11.8          | 6.6                    | 18.4           | 2.1                       | 77                  | 21.2                             | 70                  |
|              | Toledo                           | 16.4          | 3.3                    | 19.7           | 0.0                       | 82                  | 27.6                             | 65                  |
| Area         | Urban                            | 7.1           | 3.9                    | 11.0           | 0.2                       | 383                 | 14.1                             | 343                 |
|              | Rural                            | 15.0          | 4.5                    | 19.5           | 0.9                       | 461                 | 19.4                             | 377                 |
| Education    | None                             | (*)           | (*)                    | (*)            | (*)                       | 9                   | (*)                              | 13                  |
|              | Primary                          | 25.5          | 9.3                    |                | 2.0                       | 220                 | 29.4                             |                     |
|              | Secondary +                      | 6.6           | 2.6                    | 9.1            | 0.1                       | 598                 | 10.8                             | 466                 |
|              | CET/ITVET/VOTEC                  | (*)           | (*)                    | (*)            | (*)                       | 4                   | (*)                              | 6                   |
|              | Other                            | (*)           | (*)                    | (*)            | (*)                       | 14                  | (*)                              | 12                  |
| Wealth       | Poorest                          | 17.4          | 6.4                    | 23.9           | 1.0                       | 160                 | 32.5                             | 111                 |
| index quin-  | Second                           | 15.4          | 6.7                    | 22.1           | 2.2                       | 167                 | 19.7                             | 163                 |
| tiles        | Middle                           | 9.9           | 3.2                    | 13.1           | 0.0                       |                     | 14.2                             |                     |
|              | Fourth                           | 7.4           | 3.9                    | 11.3           | 0.0                       | 159                 |                                  |                     |
|              | Richest                          | 7.2           | 1.2                    | 8.3            | 0.0                       | 167                 | 6.0                              | 132                 |
| Ethnicity of | Creole                           | 9.4           | 2.2                    | 11.6           | 0.5                       | 190                 | 12.2                             | 185                 |
| household    | Mestizo                          | 12.9          | 5.7                    | 18.7           | 1.0                       | 431                 | 19.3                             |                     |
| head         | Garifuna                         | 6.2           | 2.1                    | 8.3            | 0.0                       | 44                  | (12.7)                           | 49                  |
|              | Maya                             | 15.9          | 5.4                    | 21.4           | 0.0                       | 98                  |                                  | 80                  |
|              | Other                            | 5.1           | 0.9                    | 6.0            | 0.0                       | 69                  |                                  |                     |
|              | Missing/DK                       | (*)           | (*)                    | (*)            | (*)                       | 12                  | (*)                              | 8                   |
| Total        |                                  | 11.4          | 4.2                    | 15.6           | 0.6                       | 844                 | 16.9                             | 720                 |

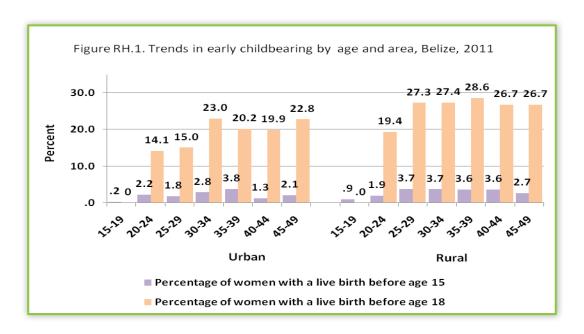
<sup>[1]</sup> MICS indicator 5.2

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Table RH.3: Trends in early childbearing
Percentage of women who have had a live birth by age 15 and 18, by age groups, Belize, 2011

|       |       |  | Url   | oan  |   |  | Ru  | ral  |   |  | А   | .II  |   |
|-------|-------|--|---|--|---|--|---|--|---|--|---|--|---|
|       |       | Percentage<br>of women<br>with a<br>live birth<br>before age<br>15 | Number<br>of wom-<br>en age<br>15-49<br>years | Percentage<br>of women<br>with a<br>live birth<br>before age<br>18 | Number<br>of wom-<br>en age<br>20-49<br>years | Percentage<br>of women<br>with a<br>live birth<br>before age<br>15 | Number<br>of wom-<br>en age<br>15-49<br>years | Percentage<br>of women<br>with a<br>live birth<br>before age<br>18 | Number<br>of wom-<br>en age<br>20-49<br>years | Percentage<br>of women<br>with a<br>live birth<br>before age<br>15 | Number<br>of wom-<br>en age<br>15-49<br>years | Percentage<br>of women<br>with a<br>live birth<br>before age<br>18 | Number<br>of wom-<br>en age<br>20-49<br>years |
| Age   | 15-19 | 0.2  | 379   | (*)  | 0   | 0.9  | 465   | (*)  | 0   | 0.6  | 844   | (*)  | 0   |
|       | 20-24 | 2.2  | 340   | 14.3   | 340   | 2.0  | 377   | 19.2   | 377   | 2.1  | 717   | 16.8   | 717   |
|       | 25-29 | 1.8  | 301   | 15.3   | 301   | 3.7  | 351   | 26.7   | 351   | 2.8  | 653   | 21.4   | 653   |
|       | 30-34 | 2.9  | 250   | 23.2   | 250   | 3.6  | 290   | 27.0   | 290   | 3.3  | 540   | 25.2   | 540   |
|       | 35-39 | 3.9  | 238   | 20.6   | 238   | 4.2  | 298   | 28.1   | 298   | 4.0  | 536   | 24.7   | 536   |
|       | 40-44 | 1.3  | 228   | 20.4   | 228   | 3.6  | 214   | 26.1   | 214   | 2.4  | 442   | 23.2   | 442   |
|       | 45-49 | 2.1  | 165   | 22.8   | 165   | 2.2  | 194   | 26.6   | 194   | 2.2  | 359   | 24.8   | 359   |
| Total |       | 1.9  | 1900  | 18.8   | 1521  | 2.7  | 2191  | 25.2   | 1725  | 2.4  | 4091  | 22.2   | 3247  |

## (\*) Figures that are based on less than 25 un-weighted cases



## **Contraception**

Appropriate family planning is important to the health of women and children by: 1) preventing pregnancies that are too early or too late; 2) extending the period between births; and 3) limiting the number of children. Access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late or too many is critical.

Current use of contraception was reported by 55.2 percent of women currently married or in union (Table RH.4). The most popular method is female sterilization which is used by 20.7 percent of married women in

Belize. The next most popular method is the pill, which accounts for 12.5 percent of married women and this is followed closely by injectables at 11.4 percent. Male condom use (5.2 percent) and use of IUD (1.6 percent) play a small role. Less than 2.1 percent use periodic abstinence, withdrawal, male sterilization, vaginal methods, or the lactational amenorrhea method (LAM).

Table RH.4: Use of contraception

Percentage of women age 15-49 years currently married or in union who are using

(or whose partner is using) a contraceptive method, Belize, 2011

|           |   | Not using any<br>method | Any modern<br>method | Any traditional method | Any method [1] | Number of wom-<br>en currently mar-<br>ried or in union |
|-----------|---|-------------------------|----------------------|------------------------|----------------|---|
| Region    | Corozal                                   | 38.2                    | 55.1                 | 6.7                    | 61.8           | 346   |
|           | Orange Walk                               | 41.1                    | 54.1                 | 4.8                    | 58.9           | 373   |
|           | Belize (Excluding Belize City South Side) | 42.8                    | 55.2                 | 2.0                    | 57.2           | 369   |
|           | Belize City South Side                    | 44.8                    | 52.6                 | 2.5                    | 55.2           | 257   |
|           | Belize District                           | 43.6                    | 54.2                 | 2.2                    | 56.4           | 625   |
|           | Cayo                                      | 43.1                    | 53.9                 | 3.0                    | 56.9           | 601   |
|           | Stann Creek                               | 43.3                    | 54.8                 | 1.9                    | 56.7           | 225   |
|           | Toledo                                    | 71.7                    | 26.4                 | 1.8                    | 28.3           | 217   |
| Area      | Urban                                     | 42.3                    | 54.3                 | 3.4                    | 57.7           | 991   |
|           | Rural                                     | 46.7                    | 50.0                 | 3.4                    | 53.3           | 1395  |
| Age       | 15-19                                     | 64.3                    | 33.8                 | 1.9                    | 35.7           | 128   |
|           | 20-24                                     | 50.2                    | 47.9                 | 1.9                    | 49.8           | 369   |
|           | 25-29                                     | 44.2                    | 52.6                 | 3.2                    | 55.8           | 488   |
|           | 30-34                                     | 41.9                    | 54.1                 | 4.0                    | 58.1           | 407   |
|           | 35-39                                     | 41.9                    | 54.8                 | 3.3                    | 58.1           | 417   |
|           | 40-44                                     | 37.0                    | 57.2                 | 5.8                    | 63.0           | 323   |
|           | 45-49                                     | 48.0                    | 49.3                 | 2.8                    | 52.0           | 254   |
| Number    | 0   | 76.3                    | 22.4                 | 1.4                    | 23.7           | 275   |
| of living | 1   | 48.6                    | 47.6                 | 3.8                    | 51.4           | 451   |
| children  | 2   | 39.5                    | 57.9                 | 2.5                    | 60.5           | 522   |
|           | 3   | 39.6                    | 56.6                 | 3.9                    | 60.4           | 425   |
|           | 4+  | 37.4                    | 58.4                 | 4.2                    | 62.6           | 713   |
| Educa-    | None                                      | 57.8                    | 38.3                 | 3.8                    | 42.2           | 119   |
| tion      | Primary                                   | 44.4                    | 52.7                 | 2.9                    | 55.6           | 1165  |
|           | Secondary +                               | 42.3                    | 53.7                 | 4.0                    | 57.7           | 1056  |
|           | CET/ITVET/VOTEC                           | (*)                     | (*)                  | (*)                    | (*)            | 13  |
|           | Other                                     | (8.6)                   | (11.4)               | (0.0)                  | (11.4)         | 34  |
| Wealth    | Poorest                                   | 57.8                    | 40.8                 | 1.4                    | 42.2           | 409   |
| index     | Second                                    | 46.0                    | 50.9                 | 3.0                    | 54.0           | 498   |
| quintiles | Middle                                    | 46.4                    | 50.5                 | 3.1                    | 53.6           | 484   |
|           | Fourth                                    | 38.8                    | 57.3                 | 3.9                    | 61.2           | 494   |
|           | Richest                                   | 37.5                    | 57.3                 | 5.2                    | 62.5           | 501   |
| Ethnic-   | Creole                                    | 43.9                    | 53.8                 | 2.3                    | 56.1           | 493   |
| ity of    | Mestizo                                   | 40.0                    | 56.1                 | 4.0                    | 60.0           | 1262  |
| house-    | Garifuna                                  | 46.8                    | 47.3                 | 5.9                    | 53.2           | 120   |
| hold      | Maya                                      | 62.0                    | 36.0                 | 2.0                    | 38.0           | 272   |
| head      | Other                                     | 54.2                    | 42.8                 | 3.1                    | 45.8           | 198   |
|           | Missing/DK                                | (41.5)                  | (56.3)               | (2.2)                  | (58.5)         | 41  |
| Total     |   | 44.8                    | 51.8                 | 3.4                    | 55.2           | 2386  |

<sup>[1]</sup> MICS indicator 5.3; MDG indicator 5.3

Contraceptive prevalence is highest in Corozal District at 61.8 percent and almost as high in Orange Walk at 58.9 percent. In the Toledo District, contraceptive use is relatively rare; only 28.3 percent of married women reported using any method. Adolescents are less likely to use contraception than older women. About 35.7 percent of married or in union women aged 15-19 currently use a method of contraception compared to 49.8 percent of 20-24 year olds and 55.8 percent of older women.

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Women's education level is associated with contraceptive prevalence. The percentage of women using any method of contraception rises from 44.1 percent among those with no education to 55.6 percent among women with primary education, and to 57.7 percent among women with secondary or higher education. In addition to differences in prevalence, the method mix varies by education. About 42.2 percent of contraceptive users with no or primary education are sterilized and 18.8 percent use the pill. In comparison, 14.0 percent of contraceptive users with secondary or higher education use the pill and 18.8 percent are sterilized.

Table RH.4: Use of contraception [continued]

Percentage of women age 15-49 years currently married or in union who are using

(or whose partner is using) a contraceptive method, Belize, 2011

|                    |   | Not<br>using any | Female        | Male          |       |             |          |        | Number of<br>women currently<br>married or in<br>union |
|--------------------|---|------------------|---------------|---------------|-------|-------------|----------|--------|--|
|                    |   | method           | sterilization | sterilization | IUD   | Injectables | Implants | Pill   |  |
| Region             | Corozal   | 38.2             | 22.8          | 0.5           | 1.4   | 12.4        | 0.0      | 12.6   | 346  |
|                    | Orange Walk                                     | 41.1             | 21.3          | 0.0           | 1.2   | 13.4        | 0.0      | 13.9   | 373  |
|                    | Belize (Excluding<br>Belize City South<br>Side) | 42.8             | 24.6          | 0.0           | 1.3   | 8.7         | 0.0      | 11.7   | 369  |
|                    | Belize City South<br>Side                       | 44.8             | 21.4          | 0.0           | 3.2   | 6.3         | 0.4      | 13.3   | 257  |
|                    | Belize District                                 | 43.6             | 23.3          | 0.0           | 2.1   | 7.7         | 0.2      | 12.4   | 625  |
|                    | Cayo  | 43.1             | 21.1          | 0.0           | 1.9   | 13.9        | 0.0      | 12.1   | 601  |
|                    | Stann Creek                                     | 43.3             | 21.0          | 0.0           | 1.4   | 12.7        | 0.0      | 15.2   | 225  |
|                    | Toledo  | 71.7             | 8.2           | 0.0           | 0.0   | 8.7         | 0.3      | 8.6    | 217  |
| Area               | Urban   | 42.3             | 21.9          | 0.0           | 2.2   | 10.0        | 0.2      | 12.8   | 991  |
|                    | Rural   | 46.7             | 19.9          | 0.1           | 1.1   | 12.4        | 0.0      | 12.3   | 1395   |
| Age                | 15-19   | 64.3             | 0.0           | 0.0           | 1.3   | 16.9        | 0.0      | 13.0   | 128  |
|                    | 20-24   | 50.2             | 4.5           | 0.0           | 1.5   | 17.5        | 0.3      | 16.2   | 369  |
|                    | 25-29   | 44.2             | 12.7          | 0.2           | 1.0   | 13.9        | 0.0      | 17.6   | 488  |
|                    | 30-34   | 41.9             | 21.7          | 0.0           | 2.5   | 10.0        | 0.1      | 13.8   | 407  |
|                    | 35-39   | 41.9             | 27.8          | 0.0           | 1.1   | 12.1        | 0.0      | 9.0    | 417  |
|                    | 40-44   | 37.0             | 36.7          | 0.3           | 2.6   | 6.4         | 0.0      | 9.0    | 323  |
|                    | 45-49   | 48.0             | 37.0          | 0.0           | 1.0   | 2.4         | 0.0      | 5.4    | 254  |
| Number             | 0   | 76.3             | 0.3           | 0.3           | 0.0   | 3.0         | 0.0      | 11.7   | 275  |
| of living          | 1   | 48.6             | 4.0           | 0.0           | 2.7   | 12.8        | 0.2      | 18.3   | 451  |
| children           | 2   | 39.5             | 20.5          | 0.0           | 2.8   | 15.3        | 0.0      | 13.9   | 522  |
|                    | 3   | 39.6             | 31.1          | 0.2           | 1.0   | 9.3         | 0.1      | 10.9   | 425  |
|                    | 4+  | 37.4             | 33.2          | 0.0           | 0.9   | 12.1        | 0.0      | 9.1    | 713  |
| Education          | None  | 57.8             | 18.7          | 0.0           | 2.2   | 10.4        | 0.0      | 5.6    | 119  |
|                    | Primary   | 44.4             | 23.2          | 0.0           | 0.8   | 12.4        | 0.0      | 12.2   | 1165   |
|                    | Secondary +                                     | 42.3             | 18.8          | 0.2           | 2.4   | 10.8        | 0.1      | 14.0   | 1056   |
|                    | CET/ITVET/VOTEC                                 | (*)              | (*)           | (*)           | (*)   | (*)         | (*)      | (*)    | 13   |
|                    | Other   | (88.6)           | (9.3)         | (0.0)         | (0.0) | (0.0)       | (0.0)    | (2.1)  | 34   |
| Wealth             | Poorest   | 57.8             | 15.9          | 0.0           | 0.9   | 15.0        | 0.0      | 7.6    | 409  |
| index<br>guintiles | Second  | 46.0             | 18.7          | 0.0           | 0.8   | 12.7        | 0.2      | 12.1   | 498  |
| quintiles          | Middle  | 46.4             | 21.2          | 0.0           | 1.0   | 9.0         | 0.0      | 12.8   | 484  |
|                    | Fourth  | 38.8             | 23.1          | 0.2           | 1.6   | 12.5        | 0.1      | 14.5   | 494  |
|                    | Richest   | 37.5             | 24.0          | 0.2           | 3.3   | 8.3         | 0.0      | 14.7   | 501  |
| Ethnicity of       | Creole  | 43.9             | 22.3          | 0.0           | 1.9   | 8.4         | 0.3      | 13.6   | 493  |
| household          | Mestizo   | 40.0             | 22.4          | 0.1           | 1.4   | 14.1        | 0.0      | 12.6   | 1262   |
| head               | Garifuna  | 46.8             | 19.2          | 0.0           | 1.5   | 7.5         | 0.0      | 16.8   | 120  |
|                    | Maya  | 62.0             | 15.6          | 0.0           | 0.0   | 11.4        | 0.0      | 7.6    | 272  |
|                    | Other   | 54.2             | 14.5          | 0.5           | 3.4   | 4.9         | 0.0      | 12.3   | 198  |
|                    | Missing/DK                                      | (41.5)           | (20.1)        | (0.0)         | (3.9) | (6.1)       | (0.0)    | (17.9) | 41   |
| Total              |   | 44.8             | 20.7          | 0.1           | 1.6   | 11.4        | 0.1      | 12.5   | 2386   |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

# Table RH.4: Use of contraception [continued] Percentage of women age 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Belize, 2011

|              |  | Male<br>condom | Female<br>condom | Diaphragm/<br>foam/jelly | Lactational<br>amenorrhoea<br>method (LAM) | Periodic<br>abstinence/<br>Rhythm | Withdrawal | Other | Number<br>of women<br>currently<br>married or<br>in union |
|--------------|--|----------------|------------------|--------------------------|--|-----------------------------------|------------|-------|---|
| Region       | Corozal  | 5.2            | 0.0              | 0.2                      | 1.5  | 3.1                               | 2.1        | 0.0   | 346   |
|              | Orange Walk  | 3.8            | 0.5              | 0.0                      | 0.0  | 3.3                               | 1.3        | 0.3   | 373   |
|              | Belize<br>(Excluding<br>Belize City<br>South Side) | 8.4            | 0.5              | 0.0                      | 0.0  | 1.2                               | 0.8        | 0.0   | 369   |
|              | Belize City<br>South Side                          | 7.0            | 1.1              | 0.0                      | 0.0  | 2.2                               | 0.4        | 0.0   | 257   |
|              | Belize<br>District                                 | 7.8            | 0.7              | 0.0                      | 0.0  | 1.6                               | 0.6        | 0.0   | 625   |
|              | Cayo   | 4.9            | 0.0              | 0.0                      | 0.0  | 2.1                               | 0.8        | 0.0   | 601   |
|              | Stann Creek  | 3.8            | 0.8              | 0.0                      | 0.0  | 0.7                               | 0.8        | 0.4   | 225   |
|              | Toledo   | 0.8            | 0.0              | 0.0                      | 0.0  | 0.8                               | 0.5        | 0.5   | 217   |
| Area         | Urban  | 6.8            | 0.4              | 0.0                      | 0.0  | 2.1                               | 1.1        | 0.2   | 991   |
|              | Rural  | 3.8            | 0.2              | 0.1                      | 0.4  | 2.0                               | 0.9        | 0.1   | 1395  |
| Age          | 15-19  | 2.7            | 0.0              | 0.0                      | 0.0  | 0.7                               | 1.2        | 0.0   | 128   |
|              | 20-24  | 7.4            | 0.7              | 0.0                      | 0.2  | 0.9                               | 0.6        | 0.2   | 369   |
|              | 25-29  | 7.1            | 0.2              | 0.0                      | 0.2  | 1.0                               | 1.8        | 0.3   | 488   |
|              | 30-34  | 5.2            | 0.6              | 0.2                      | 0.8  | 2.2                               | 0.9        | 0.0   | 407   |
|              | 35-39  | 4.7            | 0.0              | 0.0                      | 0.0  | 2.9                               | 0.5        | 0.0   | 417   |
|              | 40-44  | 1.9            | 0.3              | 0.0                      | 0.0  | 4.4                               | 1.1        | 0.3   | 323   |
|              | 45-49  | 3.2            | 0.3              | 0.0                      | 0.0  | 1.8                               | 0.9        | 0.0   | 254   |
| Number       | 0  | 6.7            | 0.3              | 0.0                      | 0.0  | 0.6                               | 0.5        | 0.2   | 275   |
| of living    | 1  | 8.8            | 0.8              | 0.0                      | 0.2  | 2.1                               | 1.4        | 0.1   | 451   |
| children     | 2  | 5.1            | 0.2              | 0.2                      | 0.2  | 1.5                               | 0.7        | 0.2   | 522   |
|              | 3  | 3.8            | 0.0              | 0.0                      | 0.0  | 2.5                               | 1.4        | 0.0   | 425   |
|              | 4+   | 2.8            | 0.4              | 0.0                      | 0.5  | 2.7                               | 0.9        | 0.1   | 713   |
| Education    | None   | 1.4            | 0.0              | 0.0                      | 2.3  | 0.8                               | 0.8        | 0.0   | 134   |
|              | Primary  | 4.0            | 0.2              | 0.0                      | 0.1  | 1.8                               | 0.9        | 0.0   | 1150  |
|              | Secondary +  | 6.8            | 0.5              | 0.1                      | 0.1  | 2.5                               | 1.2        | 0.2   | 1056  |
|              | CET/ITVET/<br>VOTEC                                | (*)            | (*)              | (*)                      | (*)  | (*)                               | (*)        | (*)   | 13  |
|              | Other  | (0.0)          | (0.0)            | (0.0)                    | (0.0)                                      | (0.0)                             | (0.00      | (0.0) | 34  |
| Wealth index | Poorest  | 1.4            | 0.0              | 0.0                      | 0.6  | 0.6                               | 0.0        | 0.1   | 409   |
| quintiles    | Second   | 5.6            | 0.7              | 0.0                      | 0.2  | 1.4                               | 1.4        | 0.1   | 498   |
|              | Middle   | 5.8            | 0.7              | 0.0                      | 0.2  | 1.6                               | 1.2        | 0.2   | 484   |
|              | Fourth   | 5.3            | 0.0              | 0.2                      | 0.0  | 3.2                               | 0.7        | 0.0   | 494   |
|              | Richest  | 6.5            | 0.2              | 0.0                      | 0.2  | 3.3                               | 1.5        | 0.2   | 501   |
| Ethnicity of | Creole   | 6.8            | 0.5              | 0.0                      | 0.0  | 1.6                               | 0.8        | 0.0   | 493   |
| household    | Mestizo  | 5.2            | 0.2              | 0.1                      | 0.2  | 2.5                               | 1.2        | 0.1   | 1262  |
| head         | Garifuna   | 2.3            | 0.0              | 0.0                      | 0.0  | 3.1                               | 2.1        | 0.7   | 120   |
|              | Maya   | 0.7            | 0.6              | 0.0                      | 0.0  | 1.4                               | 0.2        | 0.4   | 272   |
|              | Other  | 6.9            | 0.4              | 0.0                      | 1.4  | 0.8                               | 0.9        | 0.0   | 198   |
| Total        | Missing/DK   | (8.3)          | (0.0)            | (0.0)                    | (0.0)                                      | (2.2)                             | (0.0)      | (0.0) | 41  |
| Total        |  | 5.1            | 0.3              | 0.0                      | 0.2  | 2.1                               | 1.0        | 0.1   | 2386  |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

### **Unmet Need**

Unmet need for contraception refers to fecund women who are not using any method of contraception, but who wish to postpone the next birth (spacing) or who wish to stop childbearing altogether (limiting). Unmet need is identified in MICS by using a set of questions eliciting current behaviours and preferences pertaining to contraceptive use, fecundity, and fertility preferences.

Table RH.5 shows the results of the survey on contraception, unmet need, and the demand for contraception satisfied.

Unmet need for spacing is defined as percentage of women who are not using a method of contraception AND

- o are not pregnant and not postpartum amenorrheic<sup>1</sup> and are fecund<sup>2</sup> and say they want to wait two or more years for their next birth OR
- are not pregnant and not postpartum amenorrheic and are fecund and unsure whether they want another child OR
- o are pregnant and say that pregnancy was mistimed: would have wanted to wait OR
- o are postpartum amenorrheic and say that the birth was mistimed: would have wanted to wait

Unmet need for limiting is defined as percentage of women who are not using a method of contraception AND

- are not pregnant and not postpartum amenorrheic and are fecund and say they do not want any more children OR
- o are pregnant and say they didn't want to have a child OR
- o are postpartum amenorrheic and say that they didn't want the birth

Total unmet need for contraception is simply the sum of unmet need for spacing and unmet need for limiting. The percentage of women aged 15-49 years currently married or in union with an unmet need for contraception stands at 15.9 percent.

Education does not seem to be a factor in determining unmet need for contraception. However, area does show a slight difference in rates (urban 14.1 percent and rural 17.1 percent). Unmet need for contraception is quite dependent on the age of the woman and on the wealth of her family (Figure RH.2). Evidently younger women have a greater unmet need than older women and similarly unmet need for poorer women is higher than for the wealthier women.

A women is postpartum amenorrheic if she had a birth in last two years and is not currently pregnant, and her menstrual period has not returned since the birth of the last child

A women is considered not fecund if she is neither pregnant nor postpartum amenorrheic, and

<sup>(1</sup>a) has not had menstruation for at least six months, or

<sup>(1</sup>b) never menstruated, or

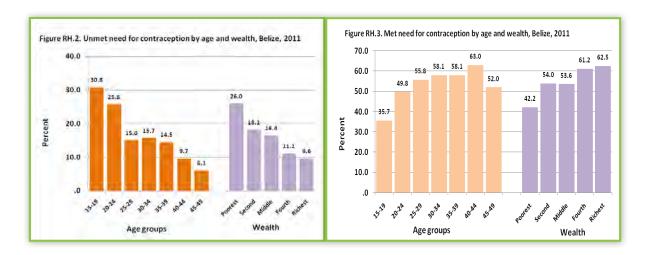
<sup>(1</sup>c) her last menstruation occurred before her last birth, or

<sup>(1</sup>d) in menopause/has had hysterectomy OR

<sup>(2)</sup> She declares that she has had hysterectomy, or that she has never menstruated or that she is menopausal, or that she has been trying to get pregnant for 2 or more years without result in response to questions on why she thinks she is not physically able to get pregnant at the time of survey OR

<sup>(3)</sup> She declares she cannot get pregnant when asked about desire for future birth OR

<sup>(4)</sup> She has not had a birth in the preceding 5 years, is currently not using contraception and is currently married and was continuously married during the last 5 years preceding the survey



Met need for limiting includes women who are using a contraceptive method and who want no more children, are using male or female sterilization or declare themselves as not fecund. Met need for spacing includes women who are using a contraceptive method and who want to have another child or undecided whether to have another child. The total of met need for spacing and limiting add up to the total met need for contraception.

Total met need for contraception is 55.2 percent and for limiting it is 38.8 percent. Urban-rural differences in both categories of met need are quite small. Met need for contraception generally correlates positively with increasing age and wealth (Figure RH.3). These trends are perhaps expected since unmet need roughly complements met need. Of interest also is that the met need for spacing and for limiting correlate in different directions with respect to age (Figure RH.4). Evidently, younger women want more children at higher rates than older women and older women want no more children at higher rates than younger women.

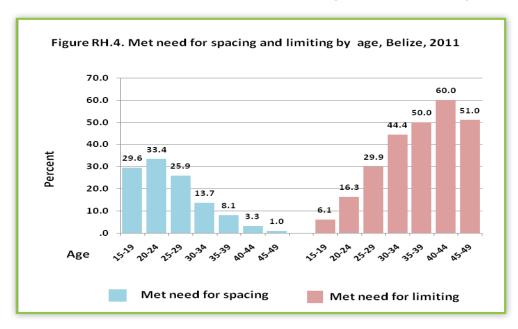


Table RH.5: Unmet need for contraception
Percentage of women aged 15-49 years currently married or in union with an unmet need for family, Belize, 2011

|                      |   | Met need<br>for contra-<br>ception -<br>For spacing | Met need<br>for contra-<br>ception -<br>For limiting | Met need<br>for contra-<br>ception -<br>Total | Unmet need<br>for contra-<br>ception -<br>For spacing | Unmet need<br>for contra-<br>ception -<br>For limiting | for contra-<br>ception -<br>Total [1] | Number of wom-<br>en currently mar-<br>ried or in union |
|----------------------|---|---|--|---|---|--|---------------------------------------|---|
| Region               | Corozal   | 17.2  | 44.9   | 61.8  | 4.7   | 6.7  | 11.4                                  | 346   |
|                      | Orange Walk Belize (Excluding Belize City South Side) | 15.8<br>15.4  | 43.1   | 58.9<br>57.2                                  | 7.4<br>9.5  | 5.6<br>6.4   | 13.0<br>15.9                          | 373<br>369  |
|                      | Belize City South Side                                | 17.5  | 37.7   | 55.2  | 8.0   | 10.0   | 18.0                                  | 257   |
|                      | Belize District                                       | 16.3  | 40.1   | 56.4  | 8.9   | 7.9  | 16.8                                  | 625   |
|                      | Cayo  | 17.2  | 39.7   | 56.9  | 6.1   | 5.7  | 11.8                                  | 601   |
|                      | Stann Creek   | 19.4  | 37.3   | 56.7  | 10.7  | 9.0  | 19.7                                  | 225   |
|                      | Toledo  | 10.7  | 17.6   | 28.3  | 18.3  | 14.5   | 32.9                                  | 217   |
| Area                 | Urban   | 18.1  | 39.7   | 57.7  | 7.0   | 7.1  | 14.1                                  | 991   |
|                      | Rural   | 15.1  | 38.3   | 53.3  | 9.4   | 7.8  | 17.1                                  | 1395  |
| Age                  | 15-19   | 29.6  | 6.1  | 35.7  | 26.4  | 4.4  | 30.8                                  | 128   |
|                      | 20-24   | 33.4  | 16.3   | 49.8  | 19.4  | 6.4  | 25.8                                  | 369   |
|                      | 25-29   | 25.9  | 29.9   | 55.8  | 8.7   | 6.3  | 15.0                                  | 488   |
|                      | 30-34   | 13.7  | 44.4   | 58.1  | 6.2   | 9.5  | 15.7                                  | 407   |
|                      | 35-39   | 8.1   | 50.0   | 58.1  | 5.5   | 9.1  | 14.5                                  | 417   |
|                      | 40-44   | 3.3   | 60.0   | 63.0  | 1.0   | 8.6  | 9.7                                   | 323   |
|                      | 45-49   | 1.0   | 51.0   | 52.0  | 0.3   | 5.7  | 6.1                                   | 254   |
| Education            | None  | 8.9   | 33.3   | 42.2  | 4.2   | 12.6   | 16.8                                  | 119   |
|                      | Primary   | 13.9  | 41.7   | 55.6  | 7.5   | 9.0  | 16.5                                  | 1165  |
|                      | Secondary +   | 20.4  | 37.4   | 57.7  | 9.7   | 5.5  | 15.2                                  | 1056  |
|                      | CET/ITVET/VOTEC                                       | (*)   | (*)  | (*)   | (*)   | (*)  | (*)                                   | 13  |
|                      | Other   | (2.1)   | (9.3)  | (11.4)  | (10.1)  | (0.0)  | (10.1)                                | 34  |
| Wealth               | Poorest   | 13.1  | 29.0   | 42.2  | 11.5  | 14.5   | 26.0                                  | 409   |
| index quin-<br>tiles | Second  | 17.2  | 36.7   | 54.0  | 10.3  | 7.8  | 18.1                                  | 498   |
|                      | Middle  | 17.3  | 36.3   | 53.6  | 9.2   | 7.3  | 16.4                                  | 484   |
|                      | Fourth  | 17.4  | 43.8   | 61.2  | 5.0   | 6.1  | 11.1                                  | 494   |
|                      | Richest   | 16.2  | 46.5   | 62.5  | 6.5   | 3.1  | 9.6                                   | 501   |
| Ethnicity of         | Creole  | 13.9  | 42.2   | 56.1  | 8.5   | 7.0  | 15.6                                  | 493   |
| household<br>head    | Mestizo   | 17.1  | 42.9   | 60.0  | 6.5   | 7.0  | 13.5                                  | 1262  |
| 544                  | Garifuna  | 18.8  | 34.4   | 53.2  | 13.3  | 12.0   | 25.4                                  | 120   |
|                      | Maya  | 14.0  | 24.0   | 38.0  | 15.4  | 11.0   | 26.4                                  | 272   |
|                      | Other   | 20.3  | 26.0   | 45.8  | 7.2   | 5.3  | 12.5                                  | 198   |
|                      | Missing/DK  | (12.5)  | (46.0)   | (58.5)  | (8.4)   | (4.0)  | (12.4)                                | 41  |
| Total                |   | 16.4  | 38.8   | 55.2  | 8.4   | 7.5  | 15.9                                  | 2386  |

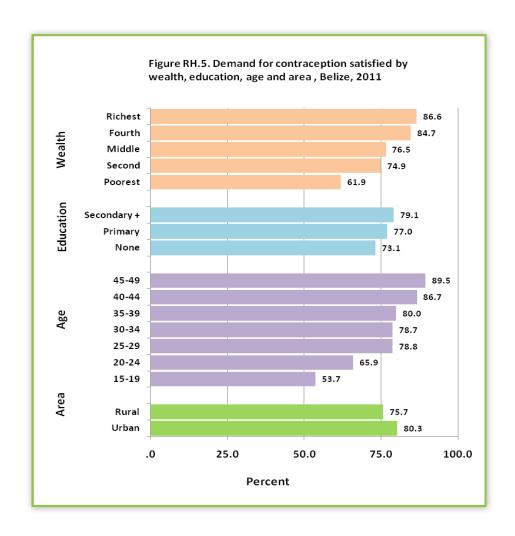
<sup>[1]</sup> MICS indicator 5.4; MDG indicator 5.6

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Using information on contraception and unmet need, the percentage of demand for contraception satisfied is also estimated from the MICS data. Percentage of demand satisfied is defined as the proportion of women currently married or in a marital union who are currently using contraception, of the total demand for contraception. The total demand for contraception includes women who currently have an unmet need (for spacing or limiting), plus those who are currently using contraception.

Among women aged 15-49 years currently married or in union 77.6 percent have satisfied their demand for contraception. Satisfied demand for contraception is linked to areas (urban 80.3 percent and rural 75.7 percent), age where younger women are less satisfied than older women, education where less educated women have less satisfied demand than older women and wealth where poorer indices are linked to less satisfied demand (Figure RH.5).

Demand for contraception is least satisfied in the Toledo District (46.3 percent) and most satisfied in the Corozal District (84.5 percent). Belize City South Side is found in between at 75.4 percent. In Maya households the demand for contraception is smallest at 59.0 percent and highest in Mestizo households at 81.6 percent.



## Table RH.5: Unmet need for contraception (c0ntinued) Percentage of women aged 15-49 years currently married or in union with demand for contraception satisfied, Belize, 2011

|              |   | Percentage of demand<br>for contraception<br>satisfied | Number of women<br>currently married or<br>in union with need for<br>contraception |
|--------------|---|--|--|
| Region       | Corozal                                   | 84.5   | 253  |
|              | Orange Walk                               | 82.0   | 268  |
|              | Belize (Excluding Belize City South Side) | 78.2   | 269  |
|              | Belize City South Side                    | 75.4   | 188  |
|              | Belize District                           | 77.1   | 457  |
|              | Cayo                                      | 82.8   | 413  |
|              | Stann Creek                               | 74.2   | 172  |
|              | Toledo                                    | 46.3   | 132  |
| Area         | Urban                                     | 80.3   | 712  |
|              | Rural                                     | 75.7   | 983  |
| Age          | 15-19                                     | 53.7   | 85   |
| 0 -          | 20-24                                     | 65.9   | 279  |
|              | 25-29                                     | 78.8   | 346  |
|              | 30-34                                     | 78.7   | 300  |
|              | 35-39                                     | 80.0   | 303  |
|              | 40-44                                     | 86.7   | 235  |
|              | 45-49                                     | 89.5   | 148  |
| Education    | None                                      | 71.5   | 70   |
|              | Primary                                   | 77.1   | 840  |
|              | Secondary +                               | 79.1   | 770  |
|              | CET/ITVET/VOTEC                           | (*)  | 8  |
|              | Other                                     | (*)  | 7  |
| Wealth index | Poorest                                   | 61.9   | 279  |
| quintiles    | Second                                    | 74.9   | 359  |
|              | Middle                                    | 76.5   | 339  |
|              | Fourth                                    | 84.7   | 357  |
|              | Richest                                   | 86.6   | 361  |
| Ethnicity of | Creole                                    | 78.3   | 354  |
| household    | Mestizo                                   | 81.6   | 928  |
| head         | Garifuna                                  | 67.7   | 94   |
|              | Maya                                      | 59.0   | 175  |
|              | Other                                     | 78.5   | 116  |
|              | Missing/DK                                | (82.6)   | 29   |
| Total        |   | 77.6   | 1695   |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases;

## **Antenatal Care**

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and that of their infants. Better understanding of foetal growth and development and its relationship to the mother's health has resulted in increased attention to the potential of antenatal care as an intervention to improve both maternal and newborn health. For example, if the antenatal period is used to inform women and families about the danger signs and symptoms and about the risks of labour and delivery, it may provide the route for ensuring that pregnant women do, in practice, deliver with the assistance of a skilled health care provider. The antenatal period also provides an opportunity to supply information on birth spacing, which is recognized as an important factor in improving infant survival. Tetanus immunization during pregnancy can be life-saving for both the mother and infant. The prevention and treatment of malaria among pregnant women, management of anaemia

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases

during pregnancy and treatment of STIs can significantly improve foetal outcomes and improve maternal health. Adverse outcomes such as low birth weight can be reduced through a combination of interventions to improve women's nutritional status and prevent infections (e.g., malaria and STIs) during pregnancy. More recently, the potential of the antenatal period as an entry point for HIV prevention and care, in particular for the prevention of HIV transmission from mother to child, has led to renewed interest in access to and use of antenatal services.

WHO recommends a minimum of four antenatal visits based on a review of the effectiveness of different models of antenatal care. WHO guidelines are specific on the content on antenatal care visits, which include:

- Blood pressure measurement
- o Urine testing for bateriuria and proteinuria
- Blood testing to detect syphilis and severe anaemia
- Weight/height measurement (optional)

Table RH.6: Antenatal care provider
Percent distribution of women age 15-49 who gave birth in the two years preceding the survey by type of personnel providing antenatal care, Belize, 2011

|              |                            |        |          | providing anter  |            | 2011      |       | At least  | Number of     |
|--------------|----------------------------|--------|----------|------------------|------------|-----------|-------|-----------|---------------|
|              |                            |        | 1 613011 | providing affect | iatai care | No        |       | once by   | women who     |
|              |                            |        |          |                  |            | antenatal |       | skilled   | gave birth in |
|              |                            |        | Nurse /  | Community        | Other/     | care      |       | personnel | the preceding |
|              |                            | Doctor | Midwife  | health worker    | missing    | received  | Total | [1]       | two years     |
| Region       | Corozal                    | 39.1   | 60.0     | 0.9              | 0.0        | 0.0       | 100.0 | 99.1      | 95            |
|              | Orange Walk                | 26.5   | 73.5     | 0.0              | 0.0        | 0.0       | 100.0 | 100.0     | 108           |
|              | Belize (Excluding          | 57.2   | 29.7     | 8.6              | 0.0        | 4.6       | 100.0 | 86.9      | 74            |
|              | Belize City South<br>Side) |        |          |                  |            |           |       |           |               |
|              | Belize City South<br>Side  | 71.8   | 24.6     | 0.0              | 0.0        | 3.6       | 100.0 | 96.4      | 77            |
|              | Belize District            | 64.6   | 27.1     | 4.2              | 0.0        | 4.1       | 100.0 | 91.7      | 151           |
|              | Cayo                       | 56.8   | 40.7     | 0.8              | 0.0        | 1.7       | 100.0 | 97.5      | 189           |
|              | Stann Creek                | 37.4   | 60.2     | 2.4              | 0.0        | 0.0       | 100.0 | 97.6      | 69            |
|              | Toledo                     | 4.6    | 86.9     | 0.7              | 1.6        | 6.2       | 100.0 | 91.5      | 73            |
| Area         | Urban                      | 57.9   | 39.4     | 0.7              | 0.0        | 2.0       | 100.0 | 97.3      | 262           |
|              | Rural                      | 35.0   | 60.5     | 2.1              | 0.3        | 2.0       | 100.0 | 95.5      | 424           |
| Mother's     | Less than 20               | 36.4   | 60.2     | 1.6              | 0.5        | 1.3       | 100.0 | 96.7      | 118           |
| age at birth | 20-34                      | 45.2   | 51.8     | 1.4              | 0.1        | 1.5       | 100.0 | 97.0      | 490           |
|              | 35-49                      | 46.1   | 44.7     | 2.6              | 0.0        | 6.5       | 100.0 | 90.8      | 78            |
| Education    | None                       | 29.9   | 59.4     | 0.0              | 0.0        | 10.7      | 100.0 | 89.3      | 41            |
|              | Primary                    | 31.6   | 64.8     | 1.7              | 0.2        | 1.8       | 100.0 | 96.4      | 311           |
|              | Secondary +                | 57.8   | 38.9     | 1.8              | 0.2        | 1.3       | 100.0 | 96.7      | 315           |
|              | CET/ITVET/VOTEC            | (*)    | (*)      | (*)              | (*)        | (*)       | 100.0 | (*)       | 3             |
|              | Other                      | (*)    | (*)      | (*)              | (*)        | (*)       | 100.0 | (*)       | 15            |
| Wealth       | Poorest                    | 20.3   | 73.8     | 1.3              | 0.3        | 4.3       | 100.0 | 94.1      | 173           |
| index        | Second                     | 50.4   | 49.0     | 0.0              | 0.0        | 0.6       | 100.0 | 99.4      | 156           |
| quintiles    | Middle                     | 41.9   | 52.8     | 2.3              | 0.0        | 3.0       | 100.0 | 94.7      | 134           |
|              | Fourth                     | 51.5   | 43.3     | 4.3              | 0.4        | 0.4       | 100.0 | 94.8      | 132           |
|              | Richest                    | 68.8   | 30.2     | 0.0              | 0.0        | 1.0       | 100.0 | 99.0      | 91            |
| Ethnicity of | Creole                     | 60.0   | 33.2     | 2.1              | 0.0        | 4.7       | 100.0 | 93.2      | 113           |
| household    | Mestizo                    | 42.3   | 56.3     | 0.5              | 0.2        | 0.7       | 100.0 | 98.7      | 355           |
| head         | Garifuna                   | (49.1) | (45.4)   | (4.2)            | (0.0)      | (1.3)     | 100.0 | (94.4)    | 43            |
|              | Maya                       | 21.9   | 71.2     | 2.1              | 0.6        | 4.1       | 100.0 | 93.2      | 96            |
|              | Other                      | 50.5   | 43.1     | 4.3              | 0.0        | 2.2       | 100.0 | 93.5      | 71            |
|              | Missing/DK                 | (*)    | (*)      | (*)              | (*)        | (*)       | 100.0 | (*)       | 8             |
| Total        |                            | 43.8   | 52.5     | 1.6              | 0.2        | 2.0       | 100.0 | 96.2      | 685           |

<sup>[1]</sup> MICS indicator 5.5a; MDG indicator 5.5

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

The type of personnel providing antenatal care to women aged 15-49 years who gave birth in the two years preceding is presented in Table RH.6. Coverage of antenatal care (by a doctor, nurse, or midwife) is high in Belize with 96.2 percent of women receiving antenatal care at least once during the pregnancy. The lowest level of antenatal care is found in the Toledo District (91.5 percent) and in the Belize District (91.7 percent). In the Belize District the lowest level is in the Belize (Excluding Belize City South Side) (86.9 percent). In Belize City South Side the rate is 96.4 percent.

Antenatal care coverage is slightly more in urban areas (97.3 percent) compared to rural areas (95.5 percent). Table RH.6 suggests that mothers who were older at birth were less likely to be seen at least once by skilled medical personnel. There is no clear link between antenatal care coverage and education, wealth and ethnicity because of small sample sizes.

Table RH.7: Number of antenatal care visits

Percentage of women who had a live birth during the two years preceding the survey by number of antenatal care visits by any provider, Belize, 2011

|                   |  |                                   |           | y uny pro                    |              |                               |                |       |  |  |
|-------------------|--|-----------------------------------|-----------|------------------------------|--------------|-------------------------------|----------------|-------|--|--|
|                   |  | No<br>antenatal<br>care<br>visits | One visit | ercent of w<br>Two<br>visits | Three visits | 4 or<br>more<br>visits<br>[1] | Missing/<br>DK | Total | Number<br>of women<br>who gave<br>birth in the<br>preceding<br>two years |  |
| Region            | Corozal  | 0.0                               | 1.8       | 1.9                          | 1.8          | 84.0                          | 10.4           | 100.0 | 95   |  |
|                   | Orange Walk  | 0.0                               | 2.4       | 5.7                          | 6.3          | 84.8                          | 0.9            | 100.0 | 108  |  |
|                   | Belize<br>(Excluding<br>Belize City<br>South Side) | 4.6                               | 0.0       | 0.0                          | 2.0          | 81.1                          | 12.3           | 100.0 | 74   |  |
|                   | Belize City<br>South Side                          | 3.6                               | 1.2       | 0.0                          | 2.2          | 82.3                          | 10.7           | 100.0 | 77   |  |
|                   | Belize<br>District                                 | 4.1                               | 0.6       | 0.0                          | 2.1          | 81.7                          | 11.5           | 100.0 | 151  |  |
|                   | Cayo   | 1.7                               | 0.0       | 1.9                          | 3.4          | 90.9                          | 2.2            | 100.0 | 189  |  |
|                   | Stann Creek  | 0.0                               | 0.0       | 3.3                          | 2.3          | 88.5                          | 5.8            | 100.0 | 69   |  |
|                   | Toledo   | 6.2                               | 0.0       | 0.0                          | 4.7          | 57.2                          | 31.8           | 100.0 | 73   |  |
| Area              | Urban  | 2.0                               | 0.3       | 1.0                          | 1.6          | 87.4                          | 7.7            | 100.0 | 262  |  |
|                   | Rural  | 2.0                               | 1.0       | 2.7                          | 4.5          | 80.5                          | 9.3            | 100.0 | 424  |  |
| Mother's          | Less than 20                                       | 1.3                               | 0.7       | 2.4                          | 4.5          | 80.5                          | 10.6           | 100.0 | 118  |  |
| age at birth      | 20-34  | 1.5                               | 0.9       | 1.9                          | 3.5          | 84.6                          | 7.7            | 100.0 | 490  |  |
|                   | 35-49  | 6.5                               | 0.0       | 2.3                          | 1.1          | 78.0                          | 12.1           | 100.0 | 78   |  |
| Education         | None   | (9.5)                             | (2.0)     | (5.9)                        | (5.4)        | (68.5)                        | (8.7)          | 100.0 | 46   |  |
|                   | Primary  | 1.8                               | 8.0       | 1.4                          | 3.1          | 83.4                          | 9.5            | 100.0 | 306  |  |
|                   | Secondary +  | 1.3                               | 0.6       | 1.4                          | 1.7          | 86.6                          | 8.4            | 100.0 | 315  |  |
|                   | CET/ITVET/<br>VOTEC                                | (*)                               | (*)       | (*)                          | (*)          | (*)                           | (*)            | 100.0 | 3  |  |
|                   | Other  | (*)                               | (*)       | (*)                          | (*)          | (*)                           | (*)            | 100.0 | 15   |  |
| Wealth            | Poorest  | 4.3                               | 1.0       | 5.4                          | 7.9          | 70.3                          | 11.1           | 100.0 | 173  |  |
| index             | Second   | 0.6                               | 1.7       | 1.2                          | 1.9          | 88.1                          | 6.5            | 100.0 | 156  |  |
| quintiles         | Middle   | 3.0                               | 0.7       | 0.6                          | 2.9          | 82.6                          | 10.2           | 100.0 | 134  |  |
|                   | Fourth   | 0.4                               | 0.0       | 1.3                          | 0.0          | 90.6                          | 7.6            | 100.0 | 132  |  |
|                   | Richest  | 1.0                               | 0.0       | 0.0                          | 2.8          | 89.0                          | 7.3            | 100.0 | 91   |  |
| Ethnicity of      | Creole   | 4.7                               | 0.0       | 0.0                          | 4.3          | 76.3                          | 14.7           | 100.0 | 113  |  |
| household<br>head | Mestizo  | 0.7                               | 1.0       | 1.7                          | 1.6          | 90.0                          | 5.0            | 100.0 | 355  |  |
| neau              | Garifuna   | (1.3)                             | (0.0)     | (1.9)                        | (0.0)        | (89.5)                        | (7.3)          | 100.0 | 43   |  |
|                   | Maya   | 4.1                               | 0.9       | 1.9                          | 6.1          | 68.5                          | 18.5           | 100.0 | 96   |  |
|                   | Other  | 2.2                               | 1.3       | 7.3                          | 9.6          | 73.3                          | 6.4            | 100.0 | 71   |  |
|                   | Missing/DK   | (*)                               | (*)       | (*)                          | (*)          | (*)                           | (*)            | 100.0 | 8  |  |
| Total             |  | 2.0                               | 0.8       | 2.0                          | 3.4          | 83.1                          | 8.7            | 100.0 | 685  |  |

<sup>[1]</sup> MICS indicator 5.5b; MDG indicator 5.5

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

UNICEF and WHO recommend a minimum of at least four antenatal care visits during pregnancy. Table RH.7 shows number of antenatal care visits during the last pregnancy during the two years preceding the survey, regardless of provider by selected characteristics. Almost nine in ten mothers (88.5 percent) receive antenatal care more than once and over three quarters of mothers received antenatal care at least four times (83.1 percent). Mothers from the poorest households and those with primary education are less likely than more advantaged mothers to receive ANC four or more times. For example, 70.3 percent of the women living in poorest households reported four or more antenatal care visits compared with 89.0 percent among those living in richest households. The Toledo District (57.2 percent) recorded the lowest rates for four or more antenatal care visits among the other districts with Cayo posting a high of 90.9 percent.

The types of services pregnant women received are shown in table RH.8. Among those women who have given birth to a child during the two years preceding the survey, 97.6 percent reported that a blood sample was taken during antenatal care visits, 97.7 percent reported that their blood pressure was checked, 96.9 percent that urine specimen was taken and in 96.6 percent of cases all three tests were administered.

Table RH.8: Content of antenatal care
Percentage of women age 15-49 years who had their blood pressure measured, urine sample taken, and blood
sample taken as part of antenatal care, Belize, 2011

|                   |   | Percent of pre                | egnant women               | who had:            | Blood pressure  | Number of women<br>who gave birth in<br>two years preceding<br>survey |  |
|-------------------|---|-------------------------------|----------------------------|---------------------|---|---|--|
|                   |   | Blood<br>pressure<br>measured | Urine<br>specimen<br>taken | Blood test<br>taken | measured, urine<br>specimen and blood<br>test taken [1] |   |  |
| Region            | Corozal                                   | 100.0                         | 98.1                       | 100.0               | 98.1  | 95  |  |
|                   | Orange Walk                               | 98.5                          | 97.8                       | 99.2                | 97.8  | 108   |  |
|                   | Belize (Excluding Belize City South Side) | 95.4                          | 91.4                       | 95.4                | 91.4  | 74  |  |
|                   | Belize City South Side                    | 96.4                          | 96.4                       | 95.2                | 95.2  | 77  |  |
|                   | Belize District                           | 95.9                          | 93.9                       | 95.3                | 93.3  | 151   |  |
|                   | Cayo                                      | 98.3                          | 98.3                       | 98.3                | 98.3  | 189   |  |
|                   | Stann Creek                               | 100.0                         | 100.0                      | 100.0               | 100.0   | 69  |  |
|                   | Toledo                                    | 93.1                          | 93.8                       | 93.0                | 92.3  | 73  |  |
| Area              | Urban                                     | 98.0                          | 97.4                       | 97.7                | 97.1  | 262   |  |
|                   | Rural                                     | 97.4                          | 96.6                       | 97.6                | 96.4  | 424   |  |
| Mother's age      | Less than 20                              | 98.7                          | 98.7                       | 98.7                | 98.7  | 118   |  |
| at birth          | 20-34                                     | 98.1                          | 97.2                       | 98.0                | 96.8  | 490   |  |
|                   | 35-49                                     | 93.5                          | 92.3                       | 93.5                | 92.3  | 78  |  |
| Education         | None                                      | (90.5)                        | (86.6)                     | (90.5)              | (86.6)  | 46  |  |
|                   | Primary                                   | 98.0                          | 98.2                       | 98.0                | 97.9  | 306   |  |
|                   | Secondary +                               | 98.7                          | 97.8                       | 98.4                | 97.5  | 315   |  |
|                   | CET/ITVET/VOTEC                           | (*)                           | (*)                        | (*)                 | (*)   | 3   |  |
|                   | Other                                     | (*)                           | (*)                        | (*)                 | (*)   | 15  |  |
| Wealth index      | Poorest                                   | 94.5                          | 93.3                       | 94.9                | 92.7  | 173   |  |
| quintiles         | Second                                    | 99.4                          | 99.4                       | 98.8                | 98.8  | 156   |  |
|                   | Middle                                    | 97.0                          | 95.8                       | 97.0                | 95.8  | 134   |  |
|                   | Fourth                                    | 99.6                          | 98.4                       | 99.6                | 98.4  | 132   |  |
|                   | Richest                                   | 99.0                          | 99.0                       | 99.0                | 99.0  | 91  |  |
| Ethnicity of      | Creole                                    | 95.3                          | 94.0                       | 94.5                | 93.1  | 113   |  |
| household<br>head | Mestizo                                   | 99.1                          | 98.9                       | 99.3                | 98.7  | 355   |  |
|                   | Garifuna                                  | (98.7)                        | (98.7)                     | (98.7)              | (98.7)  | 43  |  |
|                   | Maya                                      | 95.9                          | 95.9                       | 95.3                | 95.3  | 96  |  |
|                   | Other                                     | 95.5                          | 91.9                       | 96.6                | 91.9  | 71  |  |
|                   | Missing/DK                                | (*)                           | (*)                        | (*)                 | (*)   | 8   |  |
| Total             |   | 97.7                          | 96.9                       | 97.6                | 96.6  | 685   |  |

<sup>[1]</sup> MICS indicator 5.6

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

## **Assistance at Delivery**

Three quarters of all maternal deaths occur during delivery and the immediate post-partum period. The single most critical intervention for safe motherhood is to ensure a competent health worker with midwifery skills is present at every birth, and transport is available to a referral facility for obstetric care in case of emergency. A World Fit for Children goal is to ensure that women have ready and affordable access to skilled attendance at delivery. The indicators are the proportion of births with a skilled attendant and proportion of institutional deliveries. The skilled attendant at delivery indicator is also used to track progress toward the Millennium Development target of reducing the maternal mortality ratio by three quarters between 1990 and 2015.

The MICS included a number of questions to assess the proportion of births attended by a skilled attendant. *A skilled attendant* includes a doctor, nurse, midwife or auxiliary midwife.

About 96.2 percent of births occurring in the two years preceding the MICS survey were delivered by skilled personnel (Table RH.9). This percentage is highest in Orange Walk at 99.3 percent and lowest in Toledo at 87.8 percent. The more educated a woman is, the more likely she is to have delivered with the assistance of a skilled attendant.

Delivery by C-section occurred in 28.1 percent of births. Older women tended to have more deliveries by C-section than younger mothers (mothers less than 20 years at 25.8 percent and mothers 35 to 49 at 38.6 percent). Generally richer mothers tended to give birth by C-section more frequently than poor mothers. Private sector hospitals delivered by C-section more frequently than public sector hospitals (37.8 percent and 28.2 percent).

Almost a half of the births (45.5 percent) in the two years preceding the MICS survey were delivered with assistance by a midwife (Table RH.9). Doctors assisted with the delivery of 49.7 percent of births and nurses assisted with 45.4 percent. Overall, about 96.2 percent of births were delivered by skilled attendants. In the Toledo District, about 19.7 percent of births are delivered by doctors, 62.5 percent by a nurse or midwife, 5.6 percent by auxiliary midwife and 3.0 percent by a friend or relative. In the other regions, between 27.6 and 73.1 percent of births are delivered by a doctor while 24.8-70.1 percent are delivered with the assistance of a midwife. Traditional birth attendants are most active in the Corozal District (5.4 percent) with Cayo next at 2.5 percent.

Doctors delivered almost twice as many babies in private sector health facilities than in public sector health facilities (47.1 percent to 79.2 percent) and were most active in urban areas (urban 56.9 percent, rural 45.3 percent). Babies from families with rich wealth index tended to be delivered more frequently by doctors than babies from poorer families: the richest scored 64.2 percent and the poorest was 31.0 percent.

Nurses or midwives delivered most frequently in rural areas (41.3 percent to 47.9 percent), in public health facilities (public 52.5 percent to private 17.1 percent) and in poorer families (poorest 55.4 percent, richest 33.9 percent).

Traditional birth attendant plays a small role when compared to doctors and nurses and midwives. The traditional birth attendants operated mainly in rural areas (0.3 percent to rural 2.7 percent), in homes (20.8 percent) and in the poorest families (6.1 percent).

Table RH.9: Assistance during delivery
Percent distribution of women age 15-49 who had a live birth in the two years preceding the survey by person assisting at delivery and percentage of births delivered by C-section, Belize, 2011

|                                   |   | Any skilled personnel [1] | Percent delivered by<br>C-section [2] | Number of women who gave birth in preceding two years |
|-----------------------------------|---|---------------------------|---------------------------------------|---|
| Region                            | Corozal                                   | 94.6                      | 30.2                                  | 95  |
|                                   | Orange Walk                               | 99.3                      | 17.3                                  | 108   |
|                                   | Belize (Excluding Belize City South Side) | 97.9                      | 27.1                                  | 74  |
|                                   | Belize City South Side                    | 97.5                      | 35.4                                  | 77  |
|                                   | Belize District                           | 97.7                      | 31.3                                  | 151   |
|                                   | Cayo                                      | 96.6                      | 39.6                                  | 189   |
|                                   | Stann Creek                               | 97.8                      | 19.4                                  | 69  |
|                                   | Toledo                                    | 87.8                      | 13.4                                  | 73  |
| Area                              | Urban                                     | 98.4                      | 29.7                                  | 262   |
|                                   | Rural                                     | 94.8                      | 27.1                                  | 424   |
| Mother's                          | Less than 20                              | 97.2                      | 25.8                                  | 118   |
| age at birth                      | 20-34                                     | 96.4                      | 27.0                                  | 490   |
|                                   | 35-49                                     | 93.3                      | 38.6                                  | 78  |
| Place of delivery                 | Public sector health facility             | 99.9                      | 28.2                                  | 526   |
|                                   | Private sector health facility            | 97.0                      | 37.8                                  | 117   |
|                                   | Home                                      | (50.3)                    | (0.0)                                 | 39  |
|                                   | Other                                     | (*)                       | (*)                                   | 4   |
| Education                         | None                                      | (80.4)                    | (19.9)                                | 46  |
|                                   | Primary                                   | 95.6                      | 25.5                                  | 306   |
|                                   | Secondary +                               | 98.8                      | 32.0                                  | 315   |
|                                   | CET/ITVET/VOTEC                           | (*)                       | (*)                                   | 3   |
|                                   | Other                                     | (*)                       | (*)                                   | 15  |
| Wealth                            | Poorest                                   | 89.4                      | 19.3                                  | 173   |
| index<br>quintiles                | Second                                    | 98.5                      | 27.7                                  | 156   |
| quintiles                         | Middle                                    | 97.6                      | 32.8                                  | 134   |
|                                   | Fourth                                    | 99.6                      | 26.8                                  | 132   |
|                                   | Richest                                   | 98.1                      | 40.6                                  | 91  |
| Ethnicity of<br>household<br>head | Creole                                    | 97.8                      | 35.1                                  | 113   |
|                                   | Mestizo                                   | 96.6                      | 28.0                                  | 355   |
|                                   | Garifuna                                  | (96.9)                    | (23.2)                                | 43  |
|                                   | Maya                                      | 92.0                      | 22.8                                  | 96  |
|                                   | Other                                     | 96.2                      | 29.3                                  | 71  |
|                                   | Missing/DK                                | (*)                       | (*)                                   | 8   |
| Total                             |   | 96.2                      | 28.1                                  | 685   |

<sup>[1]</sup> MICS indicator 5.7; MDG indicator 5.2 [2] MICS indicator 5.9 ( ) Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases 7 un-weighted cases in "CET/ITVET/VOTEC" and "Missing/DK" on the Mother's Education are excluded from the table

|                      |   | Person assisting at delivery |                    |                      |                                   |                               |                      |                   |                 |       |                 |
|----------------------|---|------------------------------|--------------------|----------------------|-----------------------------------|-------------------------------|----------------------|-------------------|-----------------|-------|-----------------|
|                      |   | Doctor                       | Nurse /<br>Midwife | Auxiliary<br>midwife | Traditional<br>birth<br>attendant | Community<br>health<br>worker | Relative /<br>Friend | Other/<br>missing | No<br>attendant | Total | Number of women |
| Region               | Corozal   | 59.8                         | 33.8               | 0.9                  | 5.4                               | 0.0                           | 0.0                  | 0.0               | 0.0             | 100.0 | 95              |
|                      | Orange Walk                                     | 36.8                         | 60.9               | 1.6                  | 0.0                               | 0.0                           | 0.7                  | 0.0               | 0.0             | 100.0 | 108             |
|                      | Belize (Excluding<br>Belize City South<br>Side) | 73.1                         | 24.8               | 0.0                  | 0.0                               | 0.0                           | 0.0                  | 2.1               | 0.0             | 100.0 | 74              |
|                      | Belize City South<br>Side                       | 61.3                         | 35.2               | 1.0                  | 1.2                               | 0.0                           | 1.3                  | 0.0               | 0.0             | 100.0 | 77              |
|                      | Belize District                                 | 67.1                         | 30.1               | 0.5                  | 0.6                               | 0.0                           | 0.7                  | 1.0               | 0.0             | 100.0 | 151             |
|                      | Cayo  | 57.7                         | 38.9               | 0.0                  | 2.5                               | 0.0                           | 0.9                  | 0.0               | 0.0             | 100.0 | 189             |
|                      | Stann Creek                                     | 27.6                         | 70.1               | 0.0                  | 2.2                               | 0.0                           | 0.0                  | 0.0               | 0.0             | 100.0 | 69              |
|                      | Toledo  | 19.7                         | 62.5               | 5.6                  | 0.0                               | 0.8                           | 3.0                  | 6.1               | 2.4             | 100.0 | 73              |
| Area                 | Urban   | 56.9                         | 41.3               | 0.3                  | 0.3                               | 0.0                           | 1.0                  | 0.2               | 0.0             | 100.0 | 262             |
| 71100                | Rural   | 45.3                         | 47.9               | 1.6                  | 2.7                               | 0.1                           | 0.7                  | 1.3               | 0.4             | 100.0 | 424             |
| Mother's             | Less than 20                                    | 48.2                         | 47.8               | 1.2                  | 1.4                               | 0.0                           | 0.0                  | 1.4               | 0.0             | 100.0 | 118             |
| age at birth         | 20-34   | 48.8                         | 46.4               | 1.1                  | 1.7                               | 0.1                           | 1.1                  | 0.5               | 0.1             | 100.0 | 490             |
|                      | 35-49   | 57.5                         | 35.0               | 0.8                  | 3.1                               | 0.0                           | 0.0                  | 2.2               | 1.4             | 100.0 | 78              |
| Place of<br>delivery | Public sector health facility                   | 47.1                         | 52.5               | 0.3                  | 0.0                               | 0.0                           | 0.0                  | 0.1               | 0.0             | 100.0 | 526             |
|                      | Private sector health facility                  | 79.2                         | 17.1               | 0.8                  | 3.0                               | 0.0                           | 0.0                  | 0.0               | 0.0             | 100.0 | 117             |
|                      | Home  | (0.0)                        | (38.4)             | (11.9)               | (20.8)                            | (1.4)                         | (14.5)               | (8.6)             | (4.4)           | 100.0 | 39              |
|                      | Other   | (*)                          | (*)                | (*)                  | (*)                               | (*)                           | (*)                  | (*)               | `(*)            | 100.0 | 4               |
| Education            | None  | (46.2)                       | (31.0)             | (3.1)                | (12.8)                            | (0.0)                         | (1.7)                | (2.5)             | (2.5)           | 100.0 | 46              |
|                      | Primary   | 44.4                         | 49.6               | 1.5                  | 1.8                               | 0.2                           | 1.1                  | 1.2               | 0.2             | 100.0 | 306             |
|                      | Secondary +                                     | 56.1                         | 42.3               | 0.4                  | 0.3                               | 0.0                           | 0.5                  | 0.4               | 0.0             | 100.0 | 315             |
|                      | CET/ITVET/VOTEC                                 | (*)                          | (*)                | (*)                  | (*)                               | (*)                           | (*)                  | (*)               | (*)             | 100.0 | 3               |
|                      | Other   | (*)                          | (*)                | (*)                  | (*)                               | (*)                           | (*)                  | (*)               | (*)             | 100.0 | 15              |
| Wealth               | Poorest   | 31.0                         | 55.4               | 3.0                  | 6.1                               | 0.3                           | 1.3                  | 1.9               | 1.0             | 100.0 | 173             |
| index                | Second  | 57.8                         | 40.2               | 0.4                  | 0.0                               | 0.0                           | 1.2                  | 0.4               | 0.0             | 100.0 | 156             |
| quintiles            | Middle  | 52.0                         | 44.3               | 1.3                  | 0.0                               | 0.0                           | 1.2                  | 1.2               | 0.0             | 100.0 | 134             |
|                      | Fourth  | 52.2                         | 47.3               | 0.0                  | 0.0                               | 0.0                           | 0.0                  | 0.4               | 0.0             | 100.0 | 132             |
|                      | Richest   | 64.2                         | 33.9               | 0.0                  | 1.9                               | 0.0                           | 0.0                  | 0.0               | 0.0             | 100.0 | 91              |
| Ethnicity of         | Creole  | 55.3                         | 42.5               | 0.0                  | 0.8                               | 0.0                           | 0.0                  | 1.4               | 0.0             | 100.0 | 113             |
| household            | Mestizo   | 52.3                         | 43.7               | 0.7                  | 2.3                               | 0.0                           | 1.0                  | 0.2               | 0.0             | 100.0 | 355             |
| head                 | Garifuna  | (37.0)                       | (58.1)             | (1.8)                | (1.7)                             | (0.0)                         | (0.0)                | (1.3)             | (0.0)           | 100.0 | 43              |
|                      | Maya  | 37.3                         | 51.7               | 3.0                  | 0.0                               | 0.6                           | 2.3                  | 3.4               | 1.8             | 100.0 | 96              |
|                      | Other   | 49.7                         | 44.2               | 2.2                  | 3.8                               | 0.0                           | 0.0                  | 0.0               | 0.0             | 100.0 | 71              |
|                      | Missing/DK                                      | (*)                          | (*)                | (*)                  | (*)                               | (*)                           | (*)                  | (*)               | (*)             | 100.0 | 8               |
| Total                |   | 49.7                         | 45.4               | 1.1                  | 1.8                               | 0.1                           | 0.8                  | 0.9               | 0.3             | 100.0 | 685             |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

## **Place of Delivery**

Increasing the proportion of births that are delivered in health facilities is an important factor in reducing the health risks to both the mother and the baby. Proper medical attention and hygienic conditions during delivery can reduce the risks of complications and infection that can cause morbidity and mortality to either the mother or the baby. Table RH.10 presents the percent distribution of women age 15-49 who had a live birth in the two years preceding the survey by place of delivery and the percentage of births delivered in a health facility, according to background characteristics.

Over 90 percent (93.8 percent) of births in Belize are delivered in a health facility; 76.8 percent of deliveries occur in public sector facilities and 17.0 percent occur in private sector facilities. A small percentage (5.6 percent) of delivery occurs at home. By age, women less than 20 are most likely to deliver in a health facility (95.5 percent) while 91.4 percent of women age 35 to 49 years deliver in a health facility. Women in urban areas are likely to deliver in a health facility more frequently than their rural counterparts ([97.5 percent compared with [91.6 percent). The Corozal District has the highest proportion of institutional deliveries (98.2 percent), followed by Belize City South Side (97.5 percent), while the Toledo District has the lowest proportion (80.7 percent). Women with higher levels of educational attainment are more likely to deliver in a health facility than women with less education or no education (no education 83.1 percent, secondary + education 98.6 percent). The proportion of births occurring in a health facility increases with increasing wealth quintile, from 84.2 percent of births in the lowest wealth quintile to 97.1 percent among those in the highest quintile.

Table RH.10: Place of delivery
Percent distribution of women age 15-49 with a birth in two years preceding the survey by place of delivery, Belize, 2011

|              |   |  | delivery,                      | Belize, 2 | 011   |       |  |  |
|--------------|---|--|--------------------------------|-----------|-------|-------|--|--|
|              |   |  | Place of de                    | elivery   |       |       |  | Number of  |
|              |   | Public<br>sector<br>health<br>facility | Private sector health facility | Home      | Other | Total | Delivered<br>in health<br>facility [1] | women who<br>gave birth in<br>preceding two<br>years |
| Region       | Corozal   | 73.7                                   | 24.5                           | 1.8       | 0.0   | 100.0 | 98.2                                   | 95   |
|              | Orange Walk                                     | 72.8                                   | 18.8                           | 8.4       | 0.0   | 100.0 | 91.6                                   | 108  |
|              | Belize (Excluding<br>Belize City South<br>Side) | 67.2                                   | 28.3                           | 2.4       | 2.1   | 100.0 | 95.5                                   | 74   |
|              | Belize City South<br>Side                       | 87.3                                   | 10.1                           | 1.3       | 1.2   | 100.0 | 97.5                                   | 77   |
|              | <b>Belize District</b>                          | 77.4                                   | 19.1                           | 1.9       | 1.6   | 100.0 | 96.5                                   | 151  |
|              | Cayo  | 75.3                                   | 19.4                           | 5.3       | 0.0   | 100.0 | 94.7                                   | 189  |
|              | Stann Creek                                     | 88.9                                   | 7.9                            | 3.2       | 0.0   | 100.0 | 96.8                                   | 69   |
|              | Toledo  | 77.7                                   | 3.0                            | 17.7      | 1.6   | 100.0 | 80.7                                   | 73   |
| Area         | Urban   | 79.3                                   | 18.2                           | 1.9       | 0.6   | 100.0 | 97.5                                   | 262  |
|              | Rural   | 75.2                                   | 16.3                           | 7.9       | 0.5   | 100.0 | 91.6                                   | 424  |
| Mother's     | Less than 20                                    | 91.1                                   | 4.8                            | 4.1       | 0.0   | 100.0 | 95.9                                   | 118  |
| age at birth | 20-34   | 74.1                                   | 19.6                           | 5.5       | 0.7   | 100.0 | 93.7                                   | 490  |
|              | 35-49   | 72.1                                   | 19.3                           | 8.6       | 0.0   | 100.0 | 91.4                                   | 78   |
| Percent of   | None  | (*)                                    | (*)                            | (*)       | (*)   | 100.0 | (*)                                    | 14   |
| women        | 1-3 visits                                      | (71.6)                                 | (22.6)                         | (5.8)     | (0.0) | 100.0 | (94.2)                                 | 42   |
| who had:     | 4+ visits                                       | 77.1                                   | 18.0                           | 4.8       | 0.1   | 100.0 | 95.1                                   | 570  |
|              | Missing/DK                                      | 85.4                                   | 7.6                            | 7.0       | 0.0   | 100.0 | 93.0                                   | 60   |
| Education    | None  | (51.2)                                 | (31.9)                         | (16.9)    | (0.0) | 100.0 | (83.1)                                 | 46   |
|              | Primary   | 81.5                                   | 9.7                            | 8.1       | 0.7   | 100.0 | 91.2                                   | 306  |
|              | Secondary +                                     | 78.7                                   | 19.9                           | 1.0       | 0.5   | 100.0 | 98.6                                   | 315  |
|              | CET/ITVET/VOTEC                                 | (*)                                    | (*)                            | (*)       | (*)   | 100.0 | (*)                                    | 3  |
|              | Other   | (*)                                    | (*)                            | (*)       | (*)   | 100.0 | (*)                                    | 15   |
| Wealth       | Poorest   | 70.6                                   | 13.6                           | 15.4      | 0.3   | 100.0 | 84.2                                   | 173  |
| index        | Second  | 88.9                                   | 9.9                            | 1.2       | 0.0   | 100.0 | 98.8                                   | 156  |
| quintiles    | Middle  | 81.7                                   | 12.6                           | 4.5       | 1.2   | 100.0 | 94.3                                   | 134  |
|              | Fourth  | 78.5                                   | 19.3                           | 1.8       | 0.4   | 100.0 | 97.7                                   | 132  |
|              | Richest   | 58.1                                   | 39.0                           | 1.9       | 1.0   | 100.0 | 97.1                                   | 91   |
| Ethnicity of | Creole  | 88.0                                   | 9.8                            | .0        | 2.2   | 100.0 | 97.8                                   | 113  |
| household    | Mestizo   | 78.1                                   | 16.0                           | 5.7       | 0.2   | 100.0 | 94.1                                   | 355  |
| head         | Garifuna  | (95.1)                                 | (1.9)                          | (1.7)     | (1.3) | 100.0 | (96.9)                                 | 43   |
|              | Maya  | 81.5                                   | 4.4                            | 14.2      | 0.0   | 100.0 | 85.8                                   | 96   |
|              | Other   | 37.0                                   | 57.4                           | 5.6       | 0.0   | 100.0 | 94.4                                   | 71   |
| Total        | Missing/DK                                      | (*)                                    | (*)                            | (*)       | (*)   | 100.0 | (*)                                    | 8  |
| Total        |   | 76.8                                   | 17.0                           | 5.6       | 0.5   | 100.0 | 93.8                                   | 685  |

<sup>[1]</sup> MICS indicator 5.8

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

#### **Post Natal Health Checks**

The time of birth and immediately after is a critical window of opportunity to deliver lifesaving interventions for both the mother and newborn. Across the world, approximately 3 million newborns annually die in the first month of life<sup>3</sup> and the majority of these deaths occur within a day or two of birth<sup>4</sup>, which is also the time when the majority of maternal deaths occur<sup>5</sup>.

Despite the importance of the first few days following birth, large-scale, nationally representative household survey programmes have not systematically included questions on the post-natal period and care for the mother and newborn. In 2008, the Countdown to 2015 initiative, which monitors progress on maternal, newborn and child health interventions, highlighted this data gap, and called not only for post-natal care (PNC) programmes to be strengthened, but also for better data availability and quality<sup>6</sup>.

Following the establishment and discussions of an Inter-Agency Group on PNC and drawing on lessons learned from earlier attempts of collecting PNC data, a new questionnaire module for MICS was developed and validated. Named the Post-natal Health Checks (PNHC) module, the objective is to collect information on newborns' and mothers' contact with a provider, not content of care. The rationale for this is that as PNC programmes scale up, it is important to measure the coverage of that scale up and ensure that the platform for providing essential services is in place. Content is considered more difficult to measure, particularly because the respondent is asked to recall services delivered up to two years preceding the interview.

After delivery, 92.3 percent of women remained in the health facility for 12 hours or more (Table RH.11). About 66.4 percent remained for 1 to 2 days and 25.1 percent remained for 3 days or more. There is little difference between urban and rural areas in the duration of stay at the health facility if the stay is 12 hours or more. However, for stays of 6 to 11 hours rates for rural women is about twice as much as for urban women (1.8 percent to 3.9 percent). For stays less than 6 hours rates for rural women are less than rate for urban women (urban 5.1 percent, rural 4.4 percent).

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Lawn JE, Cousens S, Zupan J. 4 million neonatal deaths: When? Where? Why? Lancet 2005; 365:891-900.

WHO, UNICEF, UNFPA, The World Bank. Trends in Maternal Mortality: 1990-2010. Geneva: World Health Organization 2012.

<sup>5</sup> 6 Countdown to 2015: Tracking Progress in Maternal, Newborn & Child Survival, The 2008 Report. New York: UNICEF 2008.

# Table RH.11: Post-partum stay in health facility Percent distribution of women age 15-49 years who gave birth in a health facility in the two years preceding the survey

by duration of stay in health facility following their last live birth, Belize, 2011

|              | by duran  | Duration of stay in health facility: |               |                |          |                   |            | ,     |                            | Number   |
|--------------|---|--------------------------------------|---------------|----------------|----------|-------------------|------------|-------|----------------------------|--|
|              |   | Less<br>than 6<br>hours              | 6-11<br>hours | 12-23<br>hours | 1-2 days | 3 days or<br>more | Missing/DK | Total | 12 hours<br>or more<br>[1] | Number of women who gave birth in a health facility in the preceding two years |
| Region       | Corozal   | 1.8                                  | 6.5           | 0.9            | 64.7     | 26.0              | 0.0        | 100.0 | 91.6                       | 93   |
|              | Orange Walk                                     | 5.2                                  | 9.2           | 0.0            | 62.5     | 23.1              | 0.0        | 100.0 | 85.6                       | 99   |
|              | Belize (Excluding<br>Belize City South<br>Side) | (8.5)                                | (4.5)         | (0.0)          | (65.3)   | (21.7)            | (0.0)      | 100.0 | (87.0)                     | 71   |
|              | Belize City South<br>Side                       | 5.1                                  | 0.0           | 1.3            | 69.6     | 24.0              | 0.0        | 100.0 | 94.9                       | 75   |
|              | <b>Belize District</b>                          | 6.8                                  | 2.2           | 0.7            | 67.5     | 22.9              | 0.0        | 100.0 | 91.1                       | 146  |
|              | Cayo  | 5.9                                  | 0.7           | 1.5            | 66.2     | 25.6              | 0.0        | 100.0 | 93.3                       | 179  |
|              | Stann Creek                                     | 2.2                                  | 0.0           | 0.0            | 70.9     | 26.9              | 0.0        | 100.0 | 97.8                       | 67   |
|              | Toledo  | 1.9                                  | 0.0           | 0.0            | 68.8     | 29.4              | 0.0        | 100.0 | 98.1                       | 59   |
| Area         | Urban   | 5.1                                  | 1.8           | 0.8            | 66.8     | 25.6              | 0.0        | 100.0 | 93.2                       | 255  |
|              | Rural   | 4.4                                  | 3.9           | 0.6            | 66.2     | 24.8              | 0.0        | 100.0 | 91.7                       | 388  |
| Mother's     | Less than 20                                    | 2.3                                  | 0.0           | 0.0            | 63.2     | 34.5              | 0.0        | 100.0 | 97.7                       | 113  |
| age at birth |   | 5.9                                  | 4.3           | 1.0            | 65.9     | 22.9              | 0.0        | 100.0 | 89.8                       | 459  |
| ago at sitti | 35-49   | 0.0                                  | 0.0           | 0.0            | 75.1     | 24.9              | 0.0        | 100.0 | 100.0                      | 71   |
| Percent of   | None  | (*)                                  | (*)           | (*)            | (*)      | (*)               | (*)        | 100.0 | (*)                        | 6  |
| women        | 1-3 visits                                      | (6.7)                                | (15.2)        | (0.0)          | (48.8)   | (29.3)            | (0.0)      | 100.0 | (78.1)                     | 40   |
| who had:     | 4+ visits                                       | 5.0                                  | 2.3           | 0.8            | 68.0     | 23.8              | 0.0        | 100.0 | 92.6                       | 542  |
|              | Missing/DK                                      | (0.0)                                | (1.6)         | (0.0)          | (63.8)   | (34.5)            | (0.0)      | 100.0 | (98.4)                     | 55   |
| Education    | None  | (2.7)                                | (18.9)        | (0.0)          | (49.5)   | (28.8)            | (0.0)      | 100.0 | (78.4)                     | 33   |
|              | Primary   | 4.9                                  | 1.2           | 0.0            | 65.6     | 28.4              | 0.0        | 100.0 | 93.9                       | 284  |
|              | Secondary +                                     | 4.3                                  | 1.4           | 1.5            | 70.7     | 22.1              | 0.0        | 100.0 | 94.2                       | 310  |
|              | CET/ITVET/VOTEC                                 | (*)                                  | (*)           | (*)            | (*)      | (*)               | (*)        | 100.0 | (*)                        | 3  |
|              | Other   | (*)                                  | (*)           | (*)            | (*)      | (*)               | (*)        | 100.0 | (*)                        | 12   |
| Wealth       | Poorest   | 4.5                                  | 9.3           | 0.0            | 57.1     | 29.1              | 0.0        | 100.0 | 86.2                       | 146  |
| index        | Second  | 4.7                                  | 0.8           | 1.2            | 65.1     | 28.3              | 0.0        | 100.0 | 94.5                       | 154  |
| quintiles    | Middle  | 5.5                                  | 0.0           | 1.2            | 72.0     | 21.3              | 0.0        | 100.0 | 94.5                       | 126  |
|              | Fourth  | 6.0                                  | 1.3           | 0.9            | 71.0     | 20.8              | 0.0        | 100.0 | 92.7                       | 129  |
|              | Richest   | 1.8                                  | 3.5           | 0.0            | 69.7     | 25.0              | 0.0        | 100.0 | 94.7                       | 88   |
| Ethnicity of | Creole  | 3.2                                  | 0.0           | 0.0            | 68.9     | 27.9              | 0.0        | 100.0 | 96.8                       | 110  |
| household    | Mestizo   | 5.6                                  | 2.3           | 0.9            | 65.9     | 25.3              | 0.0        | 100.0 | 92.1                       | 334  |
| head         | Garifuna  | (0.0)                                | (0.0)         | (0.0)          | (75.9)   | (24.1)            | (0.0)      | 100.0 | (100.0)                    | 42   |
|              | Maya  | 2.4                                  | 0.0           | 0.0            | 65.9     | 31.7              | 0.0        | 100.0 | 97.6                       | 82   |
|              | Other   | 8.7                                  | 17.9          | 2.3            | 57.2     | 13.9              | 0.0        | 100.0 | 73.4                       | 67   |
|              | Missing/DK                                      | (*)                                  | (*)           | (*)            | (*)      | (*)               | (*)        | 100.0 | (*)                        | 8  |
| Total        |   | 4.7                                  | 3.1           | 0.7            | 66.4     | 25.1              | 0.0        | 100.0 | 92.3                       | 643  |

<sup>[1]</sup> MICS indicator 5.10

Safe motherhood programmes have recently increased emphasis on the importance of post-natal care, recommending that all women and newborns receive a health check within two days of delivery. To assess the extent of post-natal care utilization, women were asked whether they and their newborn received a health check after the delivery, the timing of the first check, and the type of health provider for the woman's last birth in the two years preceding the survey.

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Post natal health checks are conducted for both child and mother shortly after birth. A distinction is made whether the checks were made in a health facility or not and also whether the checks were made by the health professionals involved in the delivery. Information is collected on those women with a live birth in the 2 years preceding the date of interview.

Table RH.12 shows the percentage of newborns born in the last two years who received health checks and post-natal care visits from any health provider after birth. Please note that health checks following birth while in facility or at home refer to checks provided by any health provider regardless of timing (column 1), whereas post-natal care visits refer to a separate visit to check on the health of the newborn and provide preventive care services and therefore do not include health checks following birth while in facility or at home. The indicator, Post-natal health checks, include any health check after birth received while in the health facility and at home (column 1), regardless of timing, as well as PNC visits within two days of delivery (columns 2, 3, and 4).



#### Table RH.12: Post-natal health checks for newborns Percentage of newborns born in the last two years who received health checks and post-natal care (PNC) visits from any health provider after birth, Belize, 2011

|                        |   |   | DNO visit      |            |                     |                    |   |                            |          |                |   |  |
|------------------------|---|---|----------------|------------|---------------------|--------------------|---|----------------------------|----------|----------------|---|--|
|                        |   | Health check following birth while in facility or | Same           |            | 2 days<br>following | 3-6 days following | After<br>the first<br>week<br>following | No<br>post-na-<br>tal care | Missing/ |                | Post-natal<br>health<br>check for<br>the new- | Number of<br>last births<br>in the two<br>years pre-<br>ceding the |
| Pogion                 | Corozal   | at home   | <b>day</b> 0.9 | birth      | birth<br>5.3        | birth              | birth<br>38.1                           | visit<br>35.1              | DK 7.7   | Total<br>100.0 | born [1]<br>99.1                              | survey   |
| Region                 | Corozal<br>Orange Walk                          | 99.1<br>97.7                                      | 12.3           | 1.8<br>3.1 | 3.0                 | 11.0<br>3.6        | 7.1                                     | 70.9                       | 0.0      | 100.0          | 99.1  | 95   |
|                        |   |   | (10.1)         |            |                     |                    | (50.3)                                  |                            |          | 100.0          |   | 74   |
|                        | Belize (Excluding<br>Belize City South<br>Side) | (95.8)  | (10.1)         | (2.0)      | (2.1)               | (6.3)              | (50.3)                                  | (25.4)                     | (3.8)    | 100.0          | (95.8)  | /4   |
|                        | Belize City South<br>Side                       | 96.2  | 16.1           | 5.9        | 2.6                 | 8.5                | 43.7                                    | 23.2                       | 0.0      | 100.0          | 96.2  | 77   |
|                        | Belize District                                 | 96.0  | 13.2           | 4.0        | 2.3                 | 7.4                | 47.0                                    | 24.3                       | 1.9      | 100.0          | 96.0  | 151  |
|                        | Cayo  | 98.3  | 18.7           | 5.3        | 3.9                 | 7.9                | 28.3                                    | 35.9                       | 0.0      | 100.0          | 99.1  | 189  |
|                        | Stann Creek                                     | 100.0   | 5.9            | 0.9        | 1.2                 | 9.7                | 31.7                                    | 50.6                       | 0.0      | 100.0          | 100.0   | 69   |
|                        | Toledo  | 88.4  | 35.4           | 3.0        | .0                  | 4.0                | 3.0                                     | 47.1                       | 7.5      | 100.0          | 88.4  | 73   |
| Area                   | Urban   | 97.2  | 9.8            | 1.7        | 2.3                 | 8.8                | 35.7                                    | 40.2                       | 1.5      | 100.0          | 97.8  | 262  |
|                        | Rural   | 96.7  | 17.4           | 4.6        | 3.3                 | 6.4                | 23.4                                    | 42.2                       | 2.8      | 100.0          | 96.9  | 424  |
| Mother's               | Less than 20                                    | 99.1  | 15.6           | 2.9        | 4.4                 | 7.3                | 23.0                                    | 43.7                       | 3.2      | 100.0          | 99.1  | 118  |
| age at<br>birth        | 20-34   | 97.0  | 14.6           | 3.7        | 2.6                 | 7.3                | 29.4                                    | 40.0                       | 2.4      | 100.0          | 97.5  | 490  |
| Dirar                  | 35-49   | 93.3  | 12.0           | 3.4        | 3.0                 | 7.1                | 27.4                                    | 47.0                       | 0.0      | 100.0          | 93.3  | 78   |
| Place of birth         | Public sector health facility                   | 98.9  | 14.5           | 3.1        | 3.0                 | 7.1                | 28.7                                    | 41.2                       | 2.5      | 100.0          | 98.9  | 526  |
|                        | Private sector health facility                  | 99.3  | 11.9           | 4.9        | 3.7                 | 6.0                | 34.8                                    | 36.9                       | 1.8      | 100.0          | 99.3  | 117  |
|                        | Home  | (71.5)  | (23.7)         | (5.0)      | (0.0)               | (14.3)             | (3.0)                                   | (52.6)                     | (1.4)    | 100.0          | (77.6)  | 39   |
|                        | Other   | (*)   | (*)            | (*)        | (*)                 | (*)                | (*)                                     | (*)                        | (*)      | 100.0          | (*)   | 4  |
| Education              | None  | (90.2)  | (15.4)         | (6.1)      | (0.0)               | (0.0)              | (27.8)                                  | (49.3)                     | (1.3)    | 100.0          | (92.1)  | 41   |
|                        | Primary   | 96.6  | 14.0           | 4.0        | 2.5                 | 6.2                | 24.9                                    | 44.5                       | 4.0      | 100.0          | 96.6  | 311  |
|                        | Secondary +                                     | 97.9  | 13.9           | 2.8        | 3.7                 | 9.8                | 32.5                                    | 36.5                       | 0.8      | 100.0          | 98.4  | 315  |
|                        | CET/ITVET/VOTEC                                 | (*)   | (*)            | (*)        | (*)                 | (*)                | (*)                                     | (*)                        | (*)      | 100.0          | (*)   | 3  |
|                        | Other   | (*)   | (*)            | (*)        | (*)                 | (*)                | (*)                                     | (*)                        | (*)      | 100.0          | (*)   | 15   |
| Wealth                 | Poorest   | 94.7  | 21.1           | 3.6        | 2.0                 | 3.5                | 19.2                                    | 46.2                       | 4.5      | 100.0          | 94.7  | 173  |
| index<br>quintiles     | Second  | 97.8  | 13.4           | 4.5        | 2.4                 | 7.5                | 31.6                                    | 38.8                       | 1.9      | 100.0          | 98.3  | 156  |
| 4                      | Middle  | 97.0  | 10.7           | 5.0        | 4.3                 | 6.9                | 28.6                                    | 43.4                       | 1.0      | 100.0          | 98.2  | 134  |
|                        | Fourth  | 98.5  | 11.6           | 2.4        | 5.4                 | 11.0               | 27.9                                    | 39.5                       | 2.1      | 100.0          | 98.5  | 132  |
|                        | Richest   | 97.3  | 13.3           | 0.9        | 0.0                 | 9.5                | 38.8                                    | 36.6                       | 0.8      | 100.0          | 97.3  | 91   |
| Ethnicity              | Creole  | 95.5  | 17.0           | 4.6        | 3.1                 | 11.4               | 28.5                                    | 34.6                       | 0.8      | 100.0          | 95.5  | 113  |
| of house-<br>hold head | Mestizo   | 97.6  | 11.3           | 2.8        | 3.8                 | 6.5                | 26.8                                    | 47.3                       | 1.6      | 100.0          | 98.3  | 355  |
|                        | Garifuna  | (98.7)  | (2.6)          | (0.0)      | (0.0)               | (16.7)             | (45.3)                                  | (33.4)                     | (2.0)    | 100.0          | (98.7)  | 43   |
|                        | Maya  | 93.6  | 28.9           | 4.2        | 0.9                 | 4.6                | 15.7                                    | 38.5                       | 7.1      | 100.0          | 93.6  | 96   |
|                        | Other   | 98.7  | 13.8           | 6.9        | 3.2                 | 1.6                | 38.4                                    | 35.3                       | 0.8      | 100.0          | 98.7  | 71   |
|                        | Missing/DK                                      | (*)   | (*)            | (*)        | (*)                 | (*)                | (*)                                     | (*)                        | (*)      | 100.0          | (*)   | 8  |
| Total                  |   | 96.9  | 14.5           | 3.5        | 2.9                 | 7.3                | 28.1                                    | 41.4                       | 2.3      | 100.0          | 97.3  | 685  |

<sup>[1]</sup> MICS indicator 5.11

<sup>(</sup>i) Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Note: Health checks following birth while in facility or at home refer to checks provided by any health provider regardless of timing.

Post-natal care visits (PNC) refer to a separate visit to check on the health of the newborn and provide preventive care services. PNC visits do not include health checks following birth while in facility or at home (Column 1).

Post-natal health checks include any health check after birth performed while in the health facility and at home, regardless of timing, as well as PNC visits within two days of delivery

96.9 percent of newborns receive a health check following birth while in a facility or at home. With regards to PNC visits, these predominantly occur either after one week following birth or on the first day after the delivery (28.1 percent and 14.5 percent, respectively). As a result, a total of 97.3 percent of all newborns receive a post-natal health check.

Almost three quarters of the first PNC visits for newborns occur in a public facility. About 94 percent of the first PNC visits for newborns are provided by a doctor/nurse/midwife in Belize, with few differences across most characteristics (See Table RH 13).

Table RH.13: Post-natal care (PNC) visits for newborns within one week of birth
Percentage of newborns who were born in the last two years and received a PNC visit within one week of birth
by location and provider of the first PNC visit, Belize, 2011

|                 |   |        | Loca             | tion of           | first PN          | C visit        |       |                              | Provid               | er of firs                         | st PNC v                                    | risit  |       | Number of newborns   |
|-----------------|---|--------|------------------|-------------------|-------------------|----------------|-------|------------------------------|----------------------|------------------------------------|---|--------|-------|--|
|                 |   | Home   | Public<br>Sector | Private<br>Sector | Other<br>location | Missing/<br>DK | Total | Doctor/<br>nurse/<br>midwife | Auxiliary<br>midwife | Com-<br>munity<br>health<br>worker | Tradi-<br>tional<br>birth<br>atten-<br>dant | Other/ | Total | born in the preceding two years with a PNC visit within the first week of life |
| Region          | Corozal   | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 18   |
|                 | Orange Walk                                     | (17.0) | (45.3)           | (37.7)            | (0.0)             | (0.0)          | 100.0 | (94.1)                       | (2.9)                | (0.0)                              | (2.9)                                       | (0.0)  | 100.0 | 24   |
|                 | Belize (Excluding<br>Belize City South<br>Side) | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 15   |
|                 | Belize City South<br>Side                       | (3.7)  | (92.5)           | (3.8)             | (0.0)             | (0.0)          | 100.0 | (100.0)                      | (0.0)                | (0.0)                              | (0.0)                                       | (0.0)  | 100.0 | 25   |
|                 | Belize District                                 | (6.0)  | (91.6)           | (2.4)             | (0.0)             | (0.0)          | 100.0 | (96.2)                       | (0.0)                | (3.8)                              | (0.0)                                       | (0.0)  | 100.0 | 41   |
|                 | Cayo  | (9.8)  | (67.7)           | (22.5)            | (0.0)             | (0.0)          | 100.0 | (93.0)                       | (0.0)                | (2.3)                              | (4.8)                                       | (0.0)  | 100.0 | 67   |
|                 | Stann Creek                                     | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 12   |
|                 | Toledo  | (13.1) | (85.2)           | (1.8)             | (0.0)             | (0.0)          | 100.0 | (92.5)                       | (5.7)                | (1.8)                              | (0.0)                                       | (0.0)  | 100.0 |  |
| Area            | Urban   | 8.8    | 74.5             | 16.7              | 0.0               | 0.0            | 100.0 | 100.0                        | 0.0                  | 0.0                                | 0.0   | 0.0    | 100.0 | 59   |
|                 | Rural   | 10.5   | 74.2             | 15.3              | 0.0               | 0.0            | 100.0 | 91.3                         | 1.8                  | 2.7                                | 4.2   | 0.0    | 100.0 | 134  |
| Mother's        | Less than 20                                    | (2.4)  | (87.3)           | (10.3)            | (0.0)             | (0.0)          | 100.0 | (97.6)                       | (0.0)                | (0.0)                              | (2.4)                                       | (0.0)  | 100.0 | 35   |
| age at<br>birth | 20-34   | 11.2   | 73.0             | 15.8              | 0.0               | 0.0            | 100.0 | 93.9                         | 1.8                  | 1.5                                | 2.8   | 0.0    | 100.0 | 138  |
| DITTI           | 35-49   | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 20   |
| Place of birth  | Public sector health facility                   | 4.2    | 93.4             | 2.4               | 0.0               | 0.0            | 100.0 | 98.5                         | 0.5                  | 1.1                                | 0.0   | 0.0    | 100.0 | 146  |
|                 | Private sector health facility                  | 7.3    | 6.0              | 86.7              | 0.0               | 0.0            | 100.0 | 90.5                         | 2.3                  | 5.0                                | 2.3   | 0.0    | 100.0 | 31   |
|                 | Home  | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 17   |
| Educa-          | None  | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 9  |
| tion            | Primary   | 12.1   | 73.7             | 14.2              | 0.0               | 0.0            | 100.0 | 91.4                         | 2.1                  | 2.5                                | 4.0   | 0.0    | 100.0 | 83   |
|                 | Secondary +                                     | 6.5    | 81.6             | 11.9              | 0.0               | 0.0            | 100.0 | 98.4                         | 0.0                  | 1.6                                | 0.0   | 0.0    | 100.0 | 95   |
|                 | Other   | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 6  |
| Wealth          | Poorest   | 17.2   | 67.2             | 15.6              | 0.0               | 0.0            | 100.0 | 86.4                         | 3.4                  | 1.0                                | 9.1   | 0.0    | 100.0 | 52   |
| index           | Second  | (3.5)  | (81.0)           | (15.5)            | (0.0)             | (0.0)          | 100.0 | (98.5)                       | (1.5)                | (0.0)                              | (0.0)                                       | (0.0)  | 100.0 | 43   |
| quintiles       | Middle  | (2.4)  | (84.1)           | (13.6)            | (0.0)             | (0.0)          | 100.0 | (95.7)                       | (0.0)                | (4.3)                              | (0.0)                                       | (0.0)  | 100.0 | 36   |
|                 | Fourth  | (10.4) | (77.1)           | (12.5)            | (0.0)             | (0.0)          | 100.0 | (96.1)                       | (0.0)                | (3.9)                              | (0.0)                                       | (0.0)  | 100.0 | 40   |
|                 | Richest   | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 22   |
| Ethnicity       | Creole  | (6.0)  | (83.1)           | (10.9)            | (0.0)             | (0.0)          | 100.0 | (96.2)                       | (0.0)                | (3.8)                              | (0.0)                                       | (0.0)  | 100.0 | 41   |
| of house-       | Mestizo   | 10.4   | 76.7             | 12.9              | 0.0               | 0.0            | 100.0 | 94.3                         | 0.0                  | 0.0                                | 5.7   | 0.0    | 100.0 | 86   |
| hold<br>head    | Garifuna  | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 8  |
|                 | Maya  | 14.2   | 79.6             | 6.2               | 0.0               | 0.0            | 100.0 | 95.5                         | 3.0                  | 1.5                                | 0.0   | 0.0    | 100.0 | 37   |
|                 | Other   | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 18   |
|                 | Missing/DK                                      | (*)    | (*)              | (*)               | (*)               | (*)            | 100.0 | ( <del>*</del> )             | (*)                  | (*)                                | (*)   | (*)    | 100.0 | 3  |
| Total           | <b>3</b>  | 10.0   | 74.3             | 15.7              | 0.0               | 0.0            | 100.0 | 93.9                         | 1.3                  | 1.9                                | 2.9   | 0.0    | 100.0 | 193  |
| ( ) =:- · · ·   | That are based as                               | 25.40  | 74.0             | 10.7              | (*) F:            | 0.0            | .00.0 | 00.0                         |                      |                                    | 2.0   | 0.0    | .00.0 | 100  |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Tables RH.14 and RH.15 present information collected on post-natal health checks and visits of the mother and are identical to Tables RH.12 and RH.13 that presented the data collected for newborns. Please be reminded that that health checks following birth while in facility or at home refer to checks provided by any health provider regardless of timing (column 1), whereas post-natal care visits refer to a separate visit to check on the health of the mother and provide preventive care services and therefore do not include health checks following birth while in facility or at home. The indicator, Post-natal health checks, include any health check after birth received while in the health facility and at home (column 1), regardless of timing, as well as PNC visits within two days of delivery (columns 2, 3, and 4).

Table RH.14 shows that 94.1 percent of mothers have a health check following birth while in a facility. With regards to post natal health checks, 94.6 percent of women have these checks. However, this is lowest in Cayo (86.1 percent).



Table RH.14: Post-natal health checks for mothers Percentage of women age 15-49 years who gave birth in the 2 years preceding the survey who received health checks and post-natal care (PNC) visits from any health provider after birth, Belize, 2011

|                |   |  | PNC visit   |                             |                              |                                |                                      |                                |                |       |  | Number   |
|----------------|---|--|-------------|-----------------------------|------------------------------|--------------------------------|--------------------------------------|--------------------------------|----------------|-------|--|--|
|                |   | Health<br>check<br>following<br>birth while<br>in facility<br>or at home | Same<br>day | 1 day<br>following<br>birth | 2 days<br>following<br>birth | 3-6 days<br>following<br>birth | After the first week following birth | No<br>post-natal<br>care visit | Missing/<br>DK | Total | Post-natal<br>health<br>check for<br>the moth-<br>er [1] | of women<br>who gave<br>birth in<br>the two<br>years<br>preceding<br>the sur-<br>vey |
| Region         | Corozal                                   | 95.6   | 0.0         | 0.0                         | 4.4                          | 4.9                            | 32.4                                 | 54.9                           | 3.4            | 100.0 | 95.6   | 95   |
|                | Orange Walk                               | 97.9   | 7.9         | 2.8                         | 2.5                          | 3.3                            | 2.5                                  | 81.1                           | 0.0            | 100.0 | 98.6   | 108  |
|                | Belize (Excluding Belize City South Side) | (87.1)   | (2.0)       | (0.0)                       | (0.0)                        | (0.0)                          | (42.0)                               | (54.0)                         | (1.9)          | 100.0 | (87.1)   | 74   |
|                | Belize City<br>South Side                 | 91.3   | 2.6         | 2.5                         | 1.2                          | 2.3                            | 21.8                                 | 69.6                           | 0.0            | 100.0 | 92.6   | 77   |
|                | Belize District                           | 89.2   | 2.3         | 1.3                         | 0.6                          | 1.2                            | 31.7                                 | 62.0                           | 0.9            | 100.0 | 89.9   | 151  |
|                | Cayo                                      | 96.6   | 7.7         | 7.2                         | 3.5                          | 2.5                            | 19.9                                 | 58.1                           | 0.9            | 100.0 | 97.4   | 189  |
|                | Stann Creek                               | 98.8   | 3.5         | 1.2                         | 0.0                          | 4.3                            | 18.5                                 | 71.5                           | 0.9            | 100.0 | 98.8   | 69   |
|                | Toledo                                    | 85.3   | 30.0        | 3.8                         | 0.0                          | 1.6                            | 0.0                                  | 59.3                           | 5.2            | 100.0 | 86.1   | 73   |
| Area           | Urban                                     | 93.3   | 3.1         | 1.0                         | 2.0                          | 2.5                            | 21.7                                 | 68.9                           | 0.8            | 100.0 | 94.3   | 262  |
|                | Rural                                     | 94.5   | 10.1        | 4.6                         | 2.2                          | 2.9                            | 17.7                                 | 60.4                           | 2.1            | 100.0 | 94.8   | 424  |
| Mother's       | Less than 20                              | 96.7   | 5.2         | 5.4                         | 2.2                          | 3.0                            | 19.8                                 | 62.8                           | 1.7            | 100.0 | 97.1   | 118  |
| age at birth   | 20-34                                     | 93.2   | 8.0         | 2.6                         | 1.8                          | 2.7                            | 19.2                                 | 63.9                           | 1.8            | 100.0 | 93.9   | 490  |
|                | 35-49                                     | 95.5   | 7.1         | 4.3                         | 4.2                          | 2.8                            | 18.4                                 | 63.1                           | 0.0            | 100.0 | 95.5   | 78   |
| Place of birth | Public sector health facility             | 96.1   | 7.5         | 2.4                         | 1.8                          | 2.9                            | 17.1                                 | 66.4                           | 1.8            | 100.0 | 96.1   | 526  |
|                | Private sector health facility            | 96.5   | 5.9         | 3.9                         | 3.5                          | 2.4                            | 35.0                                 | 48.6                           | 0.7            | 100.0 | 96.5   | 117  |
|                | Home                                      | (67.7)   | (12.2)      | (12.7)                      | (2.2)                        | (1.6)                          | (2.2)                                | (67.7)                         | (1.4)          | 100.0 | (77.9)   | 39   |
|                | Other                                     | (*)  | (*)         | (*)                         | (*)                          | (*)                            | (*)                                  | 100.0                          | (*)            | 100.0 | (*)  | 4  |
| Type of        | Vaginal birth                             | 93.0   | 8.2         | 3.0                         | 2.2                          | 2.7                            | 16.6                                 | 65.6                           | 1.6            | 100.0 | 93.8   | 493  |
| delivery       | C-section                                 | 96.9   | 5.5         | 3.8                         | 1.8                          | 3.0                            | 26.0                                 | 58.5                           | 1.5            | 100.0 | 96.9   | 193  |
| Education      | None                                      | (85.9)   | (7.2)       | (8.2)                       | (0.0)                        | (0.0)                          | (19.3)                               | (64.0)                         | (1.3)          | 100.0 | (87.8)   | 41   |
|                | Primary                                   | 94.9   | 9.1         | 2.5                         | 2.4                          | 3.0                            | 15.1                                 | 65.3                           | 2.6            | 100.0 | 95.4   | 311  |
|                | Secondary +                               | 94.2   | 5.7         | 3.1                         | 2.2                          | 3.1                            | 24.4                                 | 60.8                           | 0.7            | 100.0 | 94.7   | 315  |
|                | CET/ITVET/<br>VOTEC                       | (*)  | (*)         | (*)                         | (*)                          | (*)                            | (*)                                  | 100.0                          | (*)            | 100.0 | (*)  | 3  |
|                | Other                                     | (*)  | (*)         | (*)                         | (*)                          | (*)                            | (*)                                  | 100.0                          | (*)            | 100.0 | (*)  | 15   |
| Wealth         | Poorest                                   | 91.4   | 11.3        | 5.0                         | 1.0                          | 1.4                            | 7.4                                  | 70.4                           | 3.6            | 100.0 | 91.7   | 173  |
| index quin-    | Second                                    | 94.9   | 8.1         | 3.2                         | 2.8                          | 2.8                            | 14.0                                 | 68.6                           | 0.5            | 100.0 | 96.1   | 156  |
| tiles          | Middle                                    | 93.6   | 3.1         | 1.8                         | 3.9                          | 2.6                            | 22.7                                 | 65.9                           | 0.0            | 100.0 | 94.8   | 134  |
|                | Fourth                                    | 96.2   | 7.6         | 2.5                         | 0.7                          | 4.2                            | 24.4                                 | 58.2                           | 2.4            | 100.0 | 96.2   | 132  |
|                | Richest                                   | 95.3   | 5.1         | 3.1                         | 2.7                          | 3.5                            | 38.2                                 | 46.7                           | 0.8            | 100.0 | 95.3   | 91   |
| Ethnicity of   | Creole                                    | 90.6   | 6.1         | 0.9                         | 2.5                          | 1.6                            | 27.5                                 | 61.4                           | 0.0            | 100.0 | 90.6   | 113  |
| household      | Mestizo                                   | 96.0   | 5.5         | 3.3                         | 2.6                          | 3.2                            | 16.6                                 | 66.9                           | 1.9            | 100.0 | 97.0   | 355  |
| head           | Garifuna                                  | (94.1)   | (2.6)       | (1.9)                       | (2.1)                        | (5.8)                          | (29.4)                               | (58.2)                         | (0.0)          | 100.0 | (94.1)   | 43   |
|                | Maya                                      | 90.3   | 20.3        | 6.7                         | 0.0                          | 2.1                            | 5.7                                  | 60.9                           | 4.3            | 100.0 | 90.8   | 96   |
|                | Other                                     | 95.3   | 5.6         | 3.2                         | 2.2                          | 0.7                            | 29.0                                 | 59.3                           | 0.0            | 100.0 | 95.3   | 71   |
|                | Missing/DK                                | (*)  | (*)         | (*)                         | (*)                          | (*)                            | (*)                                  | 100.0                          | (*)            | 100.0 | (*)  | 8  |
| Total          |   | 94.1   | 7.4         |                             | 2.1                          | 2.8                            | 19.2                                 | 63.6                           | 1.6            | 100.0 | 94.6   | 685  |

<sup>[1]</sup> MICS indicator 5.12

visits within two days of delivery

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Note: Health checks following birth while in facility or at home refer to checks provided by any health provider regardless of timing.

Post-natal care visits (PNC) refer to a separate visit to check on the health of the mother and provide preventive care services. PNC visits do not include health checks following birth while in facility or at home (Column 1).

Post-natal health checks include any health check after birth performed while in the health facility and at home, regardless of timing, as well as PNC

Table RH.15: Post-natal care (PNC) visits for mothers within one week of birth

Percentage of women age 15-49 years who gave birth in the preceding 2 years and received a PNC visit within one week of birth,

by location and provider of the first PNC visit, Belize, 2011

|                | Location of first PNC visit |        |                  |                   |                |                | F     | Provider of f                | irst PNC visit       |                                    |                                     |                   |       |   |
|----------------|-----------------------------|--------|------------------|-------------------|----------------|----------------|-------|------------------------------|----------------------|------------------------------------|-------------------------------------|-------------------|-------|---|
|                |                             | Home   | Public<br>Sector | Private<br>Sector | Other location | Missing/<br>DK | Total | Doctor/<br>nurse/<br>midwife | Auxiliary<br>midwife | Com-<br>munity<br>health<br>worker | Traditional<br>birth atten-<br>dant | Other/<br>missing | Total | Number of women who gave birth in the two years preceding survey and received a PNC visit within one week of delivery |
| Type of deliv- | Vaginal<br>birth            | 10.2   | 72.6             | 15.2              | 2.0            | 0.0            | 100.0 | 90.7                         | 0.7                  | 2.6                                | 6.0                                 | 0.0               | 100.0 | 79  |
| ery            | C-section                   | (18.0) | (58.3)           | (23.7)            | (0.0)          | (0.0)          | 100.0 | 100.0                        | (0.0)                | (0.0)                              | (0.0)                               | (0.0)             | 100.0 | 27  |
| Educa-         | None                        | (*)    | (*)              | (*)               | (*)            | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)                                 | (*)               | 100.0 | 6   |
| tion           | Primary                     | 11.5   | 74.3             | 14.2              | 0.0            | 0.0            | 100.0 | 90.4                         | 1.0                  | 4.0                                | 4.6                                 | 0.0               | 100.0 | 53  |
|                | Second-<br>ary +            | (10.5) | (71.9)           | (14.0)            | (3.6)          | (0.0)          | 100.0 | (100.0)                      | (0.0)                | (0.0)                              | (0.0)                               | (0.0)             | 100.0 | 44  |
|                | Other                       | (*)    | (*)              | (*)               | (*)            | (*)            | 100.0 | (*)                          | (*)                  | (*)                                | (*)                                 | (*)               | 100.0 | 3   |
| Total          |                             | 12.2   | 68.9             | 17.4              | 1.5            | 0.0            | 100.0 | 93.1                         | 0.5                  | 2.0                                | 4.4                                 | 0.0               | 100.0 | 107   |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Table RH.15 matches Table RH.13, but now deals with PNC visits for mothers by location and type of provider. As defined above, a visit does not include a check in the facility or at home following birth.

68.9 percent of the first PNC visits occur in a public facility. This proportion varies across background characteristics. In 93.1 percent of the cases, a doctor, nurse or midwife is the provider of the first PNC visit. Due to the small denominators across the various subgroups, not all usual background characteristics are presented. Details are shown in table RH15.

Table RH.16 presents the distribution of women with a live birth in the two years preceding the survey by receipt of health checks or PNC visits within 2 days of birth for the mother and the newborn, thus combining the indicators presented in tables RH.12 and RH.14.

Table RH.16: Post-natal health checks for mothers and newborns

Percent distribution of women age 15-49 who gave birth in the two years preceding the survey by receipt of health checks and post-natal care (PNC) visits within 2 days of birth, for the mother and newborn, Belize, 2011

|                |   | Heal            | th checks o | ays           |                   | Number of |                |                            |
|----------------|---|-----------------|-------------|---------------|-------------------|-----------|----------------|----------------------------|
|                |   |                 |             | of birth for: |                   |           |                | women age<br>15-49 years   |
|                |   | Both<br>mothers |             |               | Neither<br>mother |           |                | who gave birth in the      |
|                |   | and new-        | Mothers     | Newborns      | nor new-          |           |                | 2 years pre-<br>ceding the |
|                |   | borns           | only        | only          | born              | Missing   | Total          | survey                     |
| Region         | Corozal                                   | 91.3            | 0.9         | 4.4           | 0.0               | 3.4       | 100.0          | 95                         |
|                | Orange Walk                               | 97.8            | 0.8         | 0.6           | 0.8               | 0.0       | 100.0          | 108                        |
|                | Belize (Excluding Belize City South Side) | (85.2)          | (0.0)       | (8.7)         | (4.2)             | (1.9)     | 100.0          | 74                         |
|                | Belize City South Side                    | 91.3            | 1.3         | 4.9           | 2.5               | 0.0       | 100.0          | 77                         |
|                | Belize District                           | 88.3            | 0.7         | 6.7           | 3.3               | 0.9       | 100.0          | 151                        |
|                | Cayo                                      | 96.6            | 0.9         | 2.6           | 0.0               | 0.0       | 100.0          | 189                        |
|                | Stann Creek                               | 98.8            | 0.0         | 1.2           | 0.0               | 0.0       | 100.0          | 69                         |
|                | Toledo                                    | 80.8            | 0.7         | 3.1           | 10.8              | 4.5       | 100.0          | 73                         |
| Area           | Urban                                     | 93.2            | 0.4         | 3.9           | 1.8               | 0.8       | 100.0          | 262                        |
|                | Rural                                     | 92.5            | 0.9         | 3.0           | 2.2               | 1.4       | 100.0          | 424                        |
| Mother's       | Less than 20                              | 95.4            | 0.5         | 2.4           | 0.5               | 1.2       | 100.0          | 118                        |
| age at         | 20-34                                     | 92.2            | 0.4         | 4.0           | 2.1               | 1.3       | 100.0          | 490                        |
| birth          | 35-49                                     | 92.2            | 3.2         | 1.0           | 3.5               | 0.0       | 100.0          | 78                         |
| Place of birth | Public sector health facility             | 94.4            | 0.5         | 3.3           | 0.6               | 1.3       | 100.0          | 526                        |
|                | Private sector health facility            | 95.8            | 0.0         | 2.8           | 0.7               | 0.7       | 100.0          | 117                        |
|                | Home                                      | (70.2)          | (6.3)       | (6.0)         | (16.1)            | (1.4)     | 100.0          | 39                         |
|                | Other                                     | (*)             | (*)         | (*)           | (*)               | (*)       | 100.0          | 4                          |
| Type of        | Vaginal birth                             | 91.8            | 0.8         | 3.6           | 2.6               | 1.2       | 100.0          | 493                        |
| delivery       | C-section C-section                       | 95.2            | 0.5         | 2.6           | 0.5               | 1.1       | 100.0          | 193                        |
| Education      | None                                      | (84.2)          | (2.2)       | (6.5)         | (5.7)             | (1.3)     | 100.0          | 41                         |
|                | Primary                                   | 91.9            | 1.3         | 2.5           | 2.1               | 2.2       | 100.0          | 311                        |
|                | Secondary +                               | 94.5            | 0.0         | 3.8           | 1.6               | 0.2       | 100.0          | 315                        |
|                | CET/ITVET/VOTEC                           | (*)             | (*)         | (*)           | (*)               | (*)       | 100.0          | 3                          |
|                | Other                                     | (*)             | (*)         | (*)           | (*)               | (*)       | 100.0          | 15                         |
| Wealth         | Poorest                                   | 88.0            | 0.8         | 3.8           | 4.5               | 2.9       | 100.0          | 173                        |
| index          | Second                                    | 93.8            | 1.7         | 3.9           | 0.0               | 0.5       | 100.0          | 156                        |
| quintiles      | Middle                                    | 94.1            | 0.7         | 4.1           | 1.2               | 0.0       | 100.0          | 134                        |
|                | Fourth                                    | 95.1            | 0.0         | 2.4           | 1.5               | 1.0       | 100.0          | 132                        |
|                | Richest                                   | 94.5            | 0.0         | 1.9           | 2.7               | 0.8       | 100.0          | 91                         |
| Ethnicity      | Creole                                    | 90.6            | 0.0         | 4.9           | 4.5               | 0.0       | 100.0          | 113                        |
| of house-      | Mestizo                                   | 94.8            | 1.0         | 2.3           | 0.7               | 1.2       | 100.0          | 355                        |
| hold head      | Garifuna                                  | (94.1)          | (0.0)       | (4.6)         | (1.3)             | (0.0)     | 100.0          | 43                         |
|                | Maya                                      | 86.5            | 0.6         | 3.4           | 5.8               | 3.7       | 100.0          | 96                         |
|                | Other                                     | 94.0            | 1.3         | 4.7           | 0.0               | 0.0       | 100.0          | 71                         |
| Total          | Missing/DK                                | (*)<br>92.7     | (*)<br>0.7  | (*)<br>3.4    | (*)               | (*)       | 100.0<br>100.0 | 8<br>685                   |
| Total          | that are based on 25-49 up                |                 |             |               |                   | 1.2       |                |                            |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

The Belize MICS shows that for 92.7 percent of live births, both the mothers and their newborns receive either a health check following birth or a timely PNC visit, whereas for 2 percent of births neither receive health checks or timely visits. Given the high levels of coverage, there are few notable differences. Wealth, however, is one exception where the poorest households are least likely to have both the mother and the child checked (88 percent) compared with the richest households, who have close to 95 percent covered.



#### IX. CHILD DEVELOPMENT

## **Early Childhood Education and Learning**

ttendance to pre-school education in an organized learning or child education program is important for the readiness of children to school.

31.7 percent of children aged 36-59 months are attending pre-school (Table CD.1). Urban-rural and regional differentials are observed the figure is as high as 40.4 percent in urban areas, compared to 26.4 percent in rural areas. Among children aged 36-59 months, attendance to pre-school is more prevalent in the Belize District (52.9 percent), and lowest in the Toledo District (12.8 percent). A small gender differential exists, but differentials by socioeconomic status are pronounced. 59.1 percent of children living in rich households attend pre-school, while the figure drops to 16.1 percent in poor households. The proportions of children attending pre-school at ages 36-47 months and 48-59 months also show some differentials (36-47 months 18.2 percent and 48-59 months 45.2 percent).

Table CD.1: Early childhood education Percentage of children age 36-59 months who are attending some form of organized early childhood education programme, Belize, 2011

|                |   | Percentage of children age<br>36-59 months currently<br>attending early childhood<br>education [1] | Number of<br>children aged<br>36-59 months |
|----------------|---|--|--|
| Sex            | Male<br>Female                            | 29.5   | 393<br>399                                 |
| Region         | Corozal                                   | 19.1   | 101  |
| negion         | Orange Walk                               | 16.3   | 118  |
|                | Belize (Excluding Belize City South Side) | 56.2   | 115  |
|                | Belize City South Side                    | 49.5   | 109  |
|                | Belize District                           | 52.9   | 224  |
|                | Cayo                                      | 24.7   | 167  |
|                | Stann Creek                               | 45.0   | 92   |
|                | Toledo                                    | 12.8   | 90   |
| Area           | Urban                                     | 40.4   | 300  |
|                | Rural                                     | 26.4   | 492  |
| Age of child   | 36-47 months                              | 18.2   | 395  |
|                | 48-59 months                              | 45.2   | 397  |
| Mother's       | None                                      | (2.3)  | 38   |
| education      | Primary                                   | 23.3   | 403  |
|                | Secondary +                               | 46.6   | 325  |
|                | Other                                     | (*)  | 19   |
| Wealth index   | Poorest                                   | 16.1   | 198  |
| quintiles      | Second                                    | 28.5   | 189  |
|                | Middle                                    | 25.6   | 166  |
|                | Fourth                                    | 46.0   | 140  |
|                | Richest                                   | 59.1   | 99   |
| Ethnicity of   | Creole                                    | 51.1   | 172  |
| household head | Mestizo                                   | 27.6   | 368  |
|                | Garifuna                                  | (52.4)   | 40   |
|                | Maya                                      | 19.4   | 121  |
|                | Other                                     | 14.8   | 77   |
| Total          |   | 31.7   | 792  |

<sup>[1]</sup> MICS indicator 6.7

<sup>()</sup> Figures that are based on 25-49 un-weighted cases;

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases 4 un-weighted cases in "CET/ITVET/VOTEC" and 1 un-weighted case in "Missing/DK" on the Mother's Education are excluded from the table

It is well recognized that a period of rapid brain development occurs in the first 3-4 years of life, and the quality of home care is the major determinant of the child's development during this period. In this context, engagement of adults in activities with children, presence of books in the home, for the child, and the conditions of care are important indicators of quality of home care. Children should be physically healthy, mentally alert, emotionally secure, socially competent and ready to learn.

Information on a number of activities that support early learning was collected in the survey. These included the involvement of adults with children in the following activities: reading books or looking at picture books, telling stories, singing songs, taking children outside the home, compound or yard, playing with children, and spending time with children naming, counting, or drawing things.

For almost more than three-quarters (85.6 percent) of under-five children, an adult household member engaged in four or more activities that promote learning and school readiness during the 3 days preceding the survey (Table CD.2). The average number of activities that adults engaged with children was 5.1. Father's involvement with one or more activities was 50.0 percent. 25.1 percent of children were living in a household without their fathers. In the Belize City South Side, father's involvement with one or more activities was lower than in other regions (34.0 percent). Cayo had the highest father involvement at 56.3 percent. The percentage of children not living with their fathers was highest in Belize City South Side (43.8 percent) and lowest in Toledo (13.0 percent).

There is a small gender differential in terms of engagement of adults in activities with children (male 88.3 percent, female 83.0 percent) and fathers engaged in activities with male children (55.0 percent) than with female children (45.2 percent). Larger proportions of adults engaged in learning and school readiness activities with children in urban areas (88.5 percent) than in rural areas (83.9 percent). Differentials by region and socio-economic status are also observed: adult engagement in activities with children was greatest in the Cayo District (91.2 percent) and lowest in the region of Belize (Excluding Belize City South Side) (80.6 percent), while the proportion was 94.0 percent for children living in the richest households, as opposed to those living in the poorest households (72.5 percent).

Exposure to books in early years not only provides the child with greater understanding of the nature of print, but may also give the child opportunities to see others reading, such as older siblings doing school work. Presence of books is important for later school performance and IQ scores. The mother/caretaker of all children under-5 were asked about number of children's books or picture books they have for the child, household objects or outside objects, and homemade toys or toys that came from a shop that are available at home.

Table CD.2: Support for learning Percentage of children age 36-59 months with whom an adult household member engaged in activities that promote learning and school readiness during the last three days, Belize, 2011

|              |  | Percentage of childs<br>month   | •  | Mean numbe  | of activities                           |   |   |
|--------------|--|---|--|---|---|---|---|
|              |  | With whom adult<br>household members<br>engaged in four or<br>more activities [1] | With whom the father engaged in one or more activities [2] | Any adult<br>household<br>member en-<br>gaged with the<br>child | The father<br>engaged with<br>the child | Percentage of<br>children not<br>living with<br>their natural<br>father | Number<br>of children<br>aged 36-59<br>months |
| Sex          | Male   | 88.3  | 55.0   | 5.2   | 2.1                                     | 22.9  | 393   |
|              | Female                                       | 83.0  | 45.2   | 4.9   | 1.6                                     | 27.3  | 399   |
| Region       | Corozal                                      | 84.0  | 55.4   | 5.0   | 1.7                                     | 17.1  | 101   |
|              | Orange Walk                                  | 83.1  | 41.9   | 5.1   | 1.6                                     | 20.7  | 118   |
|              | Belize (Excluding Belize<br>City South Side) | 80.6  | 55.5   | 4.8   | 2.0                                     | 26.4  | 115   |
|              | Belize City South Side                       | 88.2  | 34.0   | 5.1   | 1.1                                     | 43.8  | 109   |
|              | Belize District                              | 84.3  | 45.0   | 4.9   | 1.5                                     | 34.9  | 224   |
|              | Cayo   | 91.2  | 56.3   | 5.4   | 2.6                                     | 25.7  | 167   |
|              | Stann Creek                                  | 86.1  | 54.2   | 5.0   | 1.9                                     | 26.6  | 92  |
|              | Toledo                                       | 83.6  | 51.3   | 4.8   | 1.9                                     | 13.0  | 90  |
| Area         | Urban  | 88.5  | 43.6   | 5.2   | 1.7                                     | 37.5  | 300   |
|              | Rural  | 83.9  | 54.0   | 5.0   | 2.0                                     | 17.6  | 492   |
| Age          | 36-47 months                                 | 89.4  | 53.7   | 5.2   | 2.1                                     | 25.3  | 395   |
|              | 48-59 months                                 | 81.9  | 46.3   | 4.9   | 1.6                                     | 25.0  | 397   |
| Mother's     | None   | (60.7)  | (42.6)   | (3.8)   | (1.4)                                   | (10.7)  | 38  |
| education    | Primary                                      | 82.9  | 51.9   | 5.0   | 1.9                                     | 19.2  | 403   |
|              | Secondary +                                  | 93.6  | 49.4   | 5.4   | 2.0                                     | 35.3  | 325   |
| Father's     | None   | 58.7  | 51.0   | 3.8   | 1.4                                     | na  | 44  |
| education    | Primary                                      | 84.8  | 57.6   | 5.1   | 2.1                                     | na  | 276   |
|              | Secondary +                                  | 94.3  | 68.2   | 5.4   | 2.7                                     | na  | 240   |
|              | Father not in household                      | 84.3  | 16.0   | 4.9   | na                                      | na  | 199   |
| Wealth       | Poorest                                      | 72.5  | 52.0   | 4.4   | 1.9                                     | 15.3  | 198   |
| index quin-  | Second                                       | 84.6  | 41.9   | 5.1   | 1.5                                     | 28.6  | 189   |
| tiles        | Middle                                       | 88.9  | 51.1   | 5.2   | 1.8                                     | 25.3  | 166   |
|              | Fourth                                       | 95.8  | 52.8   | 5.4   | 2.1                                     | 30.6  | 140   |
|              | Richest                                      | 94.0  | 55.9   | 5.5   | 2.4                                     | 30.1  | 99  |
| Ethnicity of | Creole                                       | 89.2  | 43.5   | 5.1   | 1.4                                     | 38.8  | 172   |
| household    | Mestizo                                      | 85.7  | 52.3   | 5.1   | 2.0                                     | 24.0  | 368   |
| head         | Garifuna                                     | (89.6)  | (45.4)   | (5.3)   | (2.1)                                   | (42.2)  | 40  |
|              | Maya   | 84.7  | 51.4   | 4.9   | 2.0                                     | 10.5  | 121   |
|              | Other  | 74.1  | 53.1   | 4.7   | 2.0                                     | 17.2  | 77  |
| Total        |  | 85.6  | 50.0   | 5.1   | 1.9                                     | 25.1  | 792   |

<sup>[1]</sup> MICS indicator 6.1 [2] MICS Indicator 6.2

In Belize, 39.6 percent of children age 0-59 months live in households where at least 3 children's books are present (Table CD.3). The percentage of children with 10 or more books declines to 19.5] percent. Urban children appear to have more access to children's books than those living in rural households. The proportion of under-5 children who have 3 or more children's books is 49.9 percent in urban areas, compared to 33.3 percent in rural areas. The presence of children's books is positively correlated with the child's age; in the

na = Not Applicable

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

<sup>5</sup> un-weighted cases in "CET/ITVET/VOTEC" and "Missing/DK" and

<sup>22</sup> un-weighted cases of "Other" on the Mother's Education are excluded from the table 11 un-weighted cases in "CET/ITVET/VOTEC" and "Missing/DK" and

<sup>22</sup> un-weighted cases of "Other" on the Father's Education are excluded from the table

<sup>13</sup> un-weighted cases in "Missing/DK" on the Ethnicity of Head of Household are excluded from the table

homes of 48.7 percent of children aged 24-59 months, there are 3 or more children's books, while the figure is 25.5 percent for children aged 0-23 months.

When children for whom there are 10 or more children's books or picture books are considered, the patterns observed for 3 or more children's books remain and in some instances become more pronounced. For mother's education at the secondary level the rate is 33.7 percent while it is 4.2 percent for children whose mothers have no education. In the case of the sex of the child, rates are equal at 19.5 percent

Table CD.3: Learning materials
Percentage of children under age 5 by numbers of children's books present in the household, and by playthings that child plays with, Belize, 2011

|              |   | Household                            | has for the                       |                  |  |   |                                       |                                  |
|--------------|---|--------------------------------------|-----------------------------------|------------------|--|---|---------------------------------------|----------------------------------|
|              |   | chi                                  | ld:                               |                  | Child plays with:                      |   | Two or                                | Number                           |
|              |   | 3 or more<br>children's<br>books [1] | 10 or more<br>children's<br>books | Homemade<br>toys | Toys from a shop/<br>manufactured toys | Household<br>objects/objects<br>found outside | more<br>types of<br>playthings<br>[2] | of<br>children<br>under<br>age 5 |
| Sex          | Male  | 38.8                                 | 19.4                              | 21.6             | 88.4                                   | 56.3  | 57.4                                  | 984                              |
|              | Female  | 40.5                                 | 19.5                              | 19.3             | 90.4                                   | 56.1  | 57.3                                  | 962                              |
| Region       | Corozal   | 27.7                                 | 10.3                              | 22.8             | 93.6                                   | 60.6  | 63.4                                  | 263                              |
|              | Orange Walk                                     | 42.8                                 | 16.6                              | 26.3             | 92.3                                   | 72.3  | 73.6                                  | 302                              |
|              | Belize (Excluding<br>Belize City South<br>Side) | 53.3                                 | 37.4                              | 19.9             | 91.6                                   | 55.3  | 60.1                                  | 240                              |
|              | Belize City South<br>Side                       | 42.3                                 | 23.1                              | 5.5              | 88.4                                   | 37.3  | 38.6                                  | 252                              |
|              | Belize District                                 | 47.6                                 | 30.1                              | 12.5             | 89.9                                   | 46.1  | 49.1                                  | 492                              |
|              | Cayo  | 44.6                                 | 21.2                              | 24.4             | 87.4                                   | 60.7  | 59.0                                  | 450                              |
|              | Stann Creek                                     | 39.3                                 | 20.0                              | 8.5              | 91.4                                   | 65.2  | 63.4                                  | 212                              |
|              | Toledo  | 22.2                                 | 7.0                               | 30.6             | 81.4                                   | 34.1  | 37.7                                  | 226                              |
| Area         | Urban   | 49.9                                 | 27.5                              | 15.2             | 90.7                                   | 51.6  | 54.1                                  | 743                              |
|              | Rural   | 33.3                                 | 14.6                              | 23.7             | 88.6                                   | 59.1  | 59.4                                  | 1203                             |
| Age          | 0-23 months                                     | 25.5                                 | 11.6                              | 14.4             | 81.6                                   | 42.8  | 43.0                                  | 761                              |
|              | 24-59 months                                    | 48.7                                 | 24.5                              | 24.3             | 94.4                                   | 64.8  | 66.6                                  | 1185                             |
| Mother's     | None  | 8.3                                  | 1.9                               | 33.3             | 75.0                                   | 63.9  | 59.3                                  | 108                              |
| education    | Primary   | 25.8                                 | 7.9                               | 21.4             | 87.6                                   | 53.8  | 54.6                                  | 994                              |
|              | Secondary +                                     | 56.2                                 | 33.7                              | 18.1             | 92.4                                   | 54.6  | 56.7                                  | 839                              |
|              | Other   | (41.2)                               | (8.0)                             | (35.0)           | (90.9)                                 | (63.8)  | (78.1)                                | 47                               |
| Wealth       | Poorest   | 16.9                                 | 3.9                               | 25.3             | 79.4                                   | 57.0  | 54.8                                  | 490                              |
| index        | Second  | 29.7                                 | 9.5                               | 18.4             | 90.6                                   | 57.6  | 59.6                                  | 450                              |
| quintiles    | Middle  | 43.5                                 | 21.6                              | 17.8             | 91.8                                   | 54.9  | 58.2                                  | 407                              |
|              | Fourth  | 55.3                                 | 27.0                              | 20.1             | 94.5                                   | 54.5  | 56.6                                  | 330                              |
|              | Richest   | 72.8                                 | 52.4                              | 19.5             | 95.6                                   | 56.5  | 57.8                                  | 268                              |
| Ethnicity of | Creole  | 55.3                                 | 29.3                              | 15.2             | 94.4                                   | 53.1  | 56.2                                  | 379                              |
| household    | Mestizo   | 34.9                                 | 16.9                              | 19.7             | 88.6                                   | 58.3  | 57.2                                  | 949                              |
| head         | Garifuna  | 43.6                                 | 24.4                              | 5.7              | 88.5                                   | 48.2  | 46.6                                  | 105                              |
|              | Maya  | 26.8                                 | 9.8                               | 29.2             | 83.7                                   | 54.2  | 57.1                                  | 288                              |
|              | Other   | 45.9                                 | 21.7                              | 26.8             | 91.5                                   | 59.2  | 66.2                                  | 195                              |
|              | Missing/DK                                      | (59.5)                               | (37.7)                            | (36.0)           | (94.1)                                 | (56.9)  | (60.1)                                | 31                               |
| Total        |   | 39.6                                 | 19.5                              | 20.4             | 89.4                                   | 56.2  | 57.3                                  | 1946                             |

<sup>[1]</sup> MICS indicator 6.3 [2] MICS indicator 6.4

Table CD.3 also shows that 57.3 percent of children aged 0-59 months had 2 or more playthings to play with in their homes. The playthings in MICS included homemade toys (such as dolls and cars, or other toys made at home), toys that came from a store, and household objects (such as pots and bowls) or objects and materials found outside the home (such as sticks, rocks, animal shells, or leaves). It is interesting to note that 89.4 percent of children play with toys that come from a store as compared to home made toys (20.4).

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

<sup>12</sup> un-weighted cases in "CET/ITVET/VOTEC" and "Missing/DK" on the Mother's Education are excluded from the table

percent). The proportion of children who have 2 or more playthings to play with is about 57.4 percent for both male and female children. A small urban-rural differential is observed in this respect (urban 54.1 percent, rural 59.4 percent). No differences are observed in terms of mother's education and across socioeconomic status of the households. Children who have 2 or more playthings to play appear in equal rates (about 57 percent) for heads of household with different ethnicities except for the Garifuna with a rate of 46.6 percent.

Leaving children alone or in the presence of other young children is known to increase the risk of accidents. In MICS, two questions were asked to find out whether children aged 0-59 months were left alone during the week preceding the interview, and whether children were left in the care of other children under 10 years of age.

Table CD.4: Inadequate care

Percentage of children under age 5 left alone or left in the care of other children under the age of 10 years for more than one hour at least once during the past week, Belize, 2011

|              |   | Por | rcentage of children unde   | or ago 5                                       |                                      |
|--------------|---|-----|---|--|--------------------------------------|
|              |   |     | Left in the care of another child younger than 10 years of age in the past week | Left with inadequate care in the past week [1] | Number<br>of children<br>under age 5 |
| Sex          | Male                                      | 1.4 | 2.1   | 2.8  | 984                                  |
| COX          | Female                                    | 0.9 | 1.6   | 2.1  | 962                                  |
| Region       | Corozal                                   | 0.3 | 2.2   | 2.2  | 263                                  |
|              | Orange Walk                               | 0.0 | 0.3   | 0.3  | 302                                  |
|              | Belize (Excluding Belize City South Side) | 0.0 | 0.0   | 0.0  | 240                                  |
|              | Belize City South Side                    | 0.4 | 1.5   | 1.5  | 252                                  |
|              | Belize District                           | 0.2 | 0.8   | 0.8  | 492                                  |
|              | Cayo                                      | 2.5 | 2.2   | 4.0  | 450                                  |
|              | Stann Creek                               | 1.2 | 4.2   | 5.0  | 212                                  |
|              | Toledo                                    | 2.9 | 2.8   | 3.7  | 226                                  |
| Area         | Urban                                     | 0.1 | 0.5   | 0.5  | 743                                  |
|              | Rural                                     | 1.8 | 2.7   | 3.6  | 1203                                 |
| Age          | 0-23                                      | 1.1 | 1.4   | 1.9  | 761                                  |
|              | 24-59                                     | 1.2 | 2.1   | 2.8  | 1185                                 |
| Mother's     | None                                      | 0.9 | 5.8   | 5.8  | 100                                  |
| education    | Primary                                   | 1.2 | 1.9   | 2.5  | 946                                  |
|              | Secondary +                               | 1.2 | 1.4   | 2.1  | 839                                  |
| Wealth       | Poorest                                   | 1.5 | 4.0   | 4.3  | 490                                  |
| index        | Second                                    | 1.2 | 1.1   | 1.5  | 450                                  |
| quintiles    | Middle                                    | 2.0 | 1.4   | 3.4  | 407                                  |
|              | Fourth                                    | 0.5 | 1.2   | 1.2  | 330                                  |
|              | Richest                                   | 0.0 | 0.6   | 0.6  | 268                                  |
| Ethnicity of | Creole                                    | 0.7 | 1.4   | 1.9  | 379                                  |
| household    | Mestizo                                   | 1.2 | 2.1   | 2.9  | 949                                  |
| head         | Garifuna                                  | 0.0 | 0.0   | 0.0  | 105                                  |
|              | Maya                                      | 2.5 | 3.2   | 3.9  | 288                                  |
|              | Other                                     | 0.5 | 0.9   | 0.9  | 195                                  |
| Total        |   | 1.1 | 1.8   | 2.4  | 1946                                 |

<sup>[1]</sup> MICS indicator 6.5

Table CD.4 shows that 1.8 percent of children aged 0-59 months were left in the care of other children, while 1.1 percent were left alone during the week preceding the interview. Combining the two care indicators, it is

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

<sup>11</sup> un-weighted cases in "CET/ITVET/VOTEC" and 1 un-weighted case in "Missing/DK" on the Mother's Education are excluded from the table

<sup>28</sup> un-weighted cases in "Missing/DK" on the Ethnicity of Household Head are excluded from the table

calculated that 2.4 percent of children were left with inadequate care during the week preceding the survey, either by being left alone or in the care of another child. Children from rural areas tended to be left more frequently without adequate care than children from urban areas (urban 0.5 percent, rural 3.6 percent). Inadequate care was more prevalent among children whose mothers had no education (5.8 percent), as opposed to children whose mothers had at least secondary education (2.1 percent). Children aged 24-59 months were left with inadequate care more (2.8 percent) than those who were aged 0-23 months (1.9 percent). Children with wealth index poorest were more likely to leave children without adequate care (4.3 percent).

### **Early Childhood Development**

Early child development is defined as an orderly, predictable process along a continuous path, in which a child learns to handle more complicated levels of moving, thinking, speaking, feeling and relating to others. Physical growth, literacy and numeracy skills, socio-emotional development and readiness to learn are vital domains of a child's overall development, which is a basis for overall human development.

A 10-item module that has been developed for the MICS programme was used to calculate the Early Child Development Index (ECDI). The indicator is based on some benchmarks that children would be expected to have if they are developing as the majority of children in that age group. The primary purpose of the ECDI is to inform public policy regarding the developmental status of children in Belize.

Each of the 10 items is used in one of the four domains, to determine if children are developmentally on track in that domain. The domains in question are:

- O Literacy-numeracy: Children are identified as being developmentally on track based on whether they can identify/name at least ten letters of the alphabet, whether they can read at least four simple, popular words, and whether they know the name and recognize the symbols of all numbers from 1 to 10. If at least two of these is true, then the child is considered developmentally on track.
- O Physical: If the child can pick up a small object with two fingers, like a stick or a rock from the ground and/or the mother/caretaker does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.
- In the social-emotional domain, children are considered to be developmentally on track if two of the following is true: If the child gets along well with other children, if the child does not kick, bite, or hit other children and if the child does not get distracted easily
- Learning: If the child follows simple directions on how to do something correctly and/or when given something to do, is able to do it independently, then the child is considered to be developmentally on track in the learning domain.

ECDI is then calculated as the percentage of children who are developmentally on track in at least three of these four domains.

Table CD.5: Early child development index Percentage of children age 36-59 months who are developmentally on track in literacy-numeracy, physical, socialemotional, and learning domains, and the early child development index score, Belize, 2011

|                                    |  |                       |          | ge 36-59 mont<br>ck for indicate |          | Early child development | Number of children age |
|------------------------------------|--|-----------------------|----------|----------------------------------|----------|-------------------------|------------------------|
|                                    |  | Literacy-<br>numeracy | Physical | Social-<br>Emotional             | Learning | index score [1]         | 36-59 months           |
| Sex                                | Male   | 43.1                  | 98.8     | 80.1                             | 98.2     | 87.3                    | 393                    |
|                                    | Female                                       | 48.7                  | 99.2     | 77.0                             | 98.7     | 87.8                    | 399                    |
| Region                             | Corozal                                      | 52.9                  | 99.2     | 77.6                             | 98.3     | 87.4                    | 101                    |
|                                    | Orange Walk                                  | 40.7                  | 99.2     | 81.4                             | 99.2     | 91.5                    | 118                    |
|                                    | Belize (Excluding Belize<br>City South Side) | 55.3                  | 100.0    | 70.2                             | 100.0    | 85.0                    | 115                    |
|                                    | Belize City South Side                       | 34.4                  | 100.0    | 87.0                             | 100.0    | 93.7                    | 109                    |
|                                    | Belize District                              | 45.1                  | 100.0    | 78.4                             | 100.0    | 89.2                    | 224                    |
|                                    | Cayo   | 48.2                  | 98.9     | 72.3                             | 98.0     | 82.0                    | 167                    |
|                                    | Stann Creek                                  | 49.9                  | 97.2     | 87.8                             | 98.2     | 93.3                    | 92                     |
|                                    | Toledo                                       | 38.6                  | 98.0     | 78.4                             | 94.8     | 82.6                    | 90                     |
| Area                               | Urban  | 49.1                  | 98.8     | 79.8                             | 99.7     | 91.1                    | 300                    |
|                                    | Rural  | 44.0                  | 99.1     | 77.8                             | 97.7     | 85.3                    | 492                    |
| Age                                | 36-47 months                                 | 32.5                  | 98.9     | 78.2                             | 98.2     | 84.2                    | 395                    |
|                                    | 48-59 months                                 | 59.4                  | 99.1     | 78.9                             | 98.7     | 90.8                    | 397                    |
| Attendance                         | Attending preschool                          | 70.8                  | 99.7     | 80.2                             | 99.7     | 93.8                    | 251                    |
| to early<br>childhood<br>education | Not attending preschool                      | 34.4                  | 98.7     | 77.8                             | 97.9     | 84.6                    | 541                    |
|                                    |  |                       |          |                                  |          |                         |                        |
| Mother's education                 | None   | (29.0)                | (98.0)   | (70.3)                           | (90.2)   | (77.3)                  | 38                     |
|                                    | Primary                                      | 44.7                  | 99.1     | 76.8                             | 98.5     | 86.7                    | 403                    |
|                                    | Secondary +                                  | 51.0                  | 98.9     | 81.1                             | 99.2     | 89.5                    | 325                    |
|                                    | Other  | (13.6)                | (100.0)  | (94.9)                           | (100.0)  | (94.9)                  | 19                     |
| Wealth index                       | Poorest                                      | 31.6                  | 99.1     | 75.3                             | 96.4     | 81.4                    | 198                    |
| quintiles                          | Second                                       | 39.4                  | 99.2     | 78.1                             | 99.6     | 86.2                    | 189                    |
|                                    | Middle                                       | 47.9                  | 98.4     | 79.5                             | 98.4     | 88.3                    | 166                    |
|                                    | Fourth                                       | 52.0                  | 98.7     | 81.0                             | 98.8     | 91.5                    | 140                    |
|                                    | Richest                                      | 75.0                  | 100.0    | 80.9                             | 100.0    | 95.2                    | 99                     |
| Ethnicity of                       | Creole                                       | 46.3                  | 98.5     | 81.3                             | 98.1     | 88.8                    | 172                    |
| household                          | Mestizo                                      | 46.5                  | 99.3     | 74.9                             | 98.9     | 84.0                    | 368                    |
| head                               | Garifuna                                     | (57.3)                | (97.6)   | (83.6)                           | (100.0)  | (95.4)                  | 40                     |
|                                    | Maya   | 46.2                  | 98.5     | 81.4                             | 96.6     | 90.9                    | 121                    |
|                                    | Other  | 35.4                  | 100.0    | 82.8                             | 98.8     | 91.8                    | 77                     |
| Total                              |  | 45.9                  | 99.0     | 78.5                             | 98.4     | 87.5                    | 792                    |

<sup>[1]</sup> MICS indicator 6.6
() Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases 5 un-weighted cases in "CET/ITVET/VOTEC" and "Missing/DK" on the Mother's Education are excluded from the table 13 un-weighted cases in "Missing/DK" on the Ethnicity of Household Head are excluded from the table

The results are presented in Table CD.5. In Belize, 87.5 percent of children aged 36-59 months are developmentally on track. ECDI is virtually the same among boys (87.3 percent) and girls (87.8 percent). As expected, ECDI is higher in older age group (90.8 percent among 48-59 months old compared to 84.2 percent among 36-47 months old), since children develop more skills with increasing age. Higher ECDI is seen in children attending an early childhood education programme (93.8 percent compared to 84.6 percent for those who are not attending preschool). Children living in poorest households have lower ECDI (81.4 percent) compared to children living in richest households (95.2 percent of children developmentally on track). The analysis of four domains of child development shows that 98.4 percent of children are on track in the learning domain, 99.0 percent in physical, but 78.5 percent in the social-emotional and only 45.9 percent in the literacy-numeracy domain. In each individual domain the higher score is associated with children living in richest households, and with children from the Belize District. Girls perform better than boys in all domains except in the socio-emotional domain (boys 80.1percent, girls 77.0 percent).





## X. LITERACY AND EDUCATION

## **Literacy among Young Women**

ne of the World Fit for Children goals is to assure adult literacy. Adult literacy is also an MDG indicator, relating to both men and women. In MICS, since only a women's questionnaire was administered, the results are based only on females age 15-24. Literacy was assessed on the ability of women to read a short simple statement or on school attendance. The percent literate is presented in Table ED.1. Table ED.1 indicates that over ninety percent (91.1 percent) of women in Belize are literate and that literacy status varied considerably by area. The most literate women are found in Belize District (98.5 percent) and the least literate in the Orange Walk District (82.0 percent).

There is a ten percent gap between urban (96.6 percent) and rural (86.4 percent) women. Literacy is also linked to wealth. Only 74.6 percent of women with poorest wealth index were literate and rates steadily increased to women from the richest wealth quintile at a rate of 99.2 percent. Women from households with Garifuna heads had a 100 percent literacy rate while women from Maya households had a literacy rate of 88.7 percent.

Table ED.1: Literacy among young women
Percentage of women age 15-24 years who are literate, Belize, 2011

|              | r ercentage of women age                  | Percentage   | Percentage | Number of women age |
|--------------|---|--------------|------------|---------------------|
|              |   | literate [1] | not known  | 15-24 years         |
| Region       | Corozal                                   | 86.0         | 8.8        | 194                 |
|              | Orange Walk                               | 82.0         | 11.5       | 258                 |
|              | Belize (Excluding Belize City South Side) | 98.8         | 0.6        | 255                 |
|              | Belize City South Side                    | 98.2         | 0.0        | 216                 |
|              | Belize District                           | 98.5         | 0.3        | 471                 |
|              | Cayo                                      | 91.6         | 3.7        | 347                 |
|              | Stann Creek                               | 90.9         | 4.2        | 147                 |
|              | Toledo                                    | 89.6         | 1.1        | 147                 |
| Area         | Urban                                     | 96.6         | 1.0        | 726                 |
|              | Rural                                     | 86.4         | 7.4        | 838                 |
| Education    | None                                      | (*)          | (*)        | 22                  |
|              | Primary/Infant                            | 79.0         | 7.5        | 443                 |
|              | Secondary +                               | 100.0        | 0.0        | 1064                |
|              | CET/ITVET/VOTEC                           | (*)          | (*)        | 10                  |
|              | Other                                     | (0.0)        | (89.2)     | 25                  |
| Age          | 15-19                                     | 91.6         | 4.5        | 844                 |
|              | 20-24                                     | 90.6         | 4.3        | 720                 |
| Wealth index | Poorest                                   | 74.6         | 14.4       | 271                 |
| quintiles    | Second                                    | 88.8         | 4.3        | 330                 |
|              | Middle                                    | 95.1         | 2.1        | 356                 |
|              | Fourth                                    | 96.0         | 2.1        | 308                 |
|              | Richest                                   | 99.2         | 0.6        | 299                 |
| Ethnicity of | Creole                                    | 98.1         | 0.4        | 376                 |
| household    | Mestizo                                   | 91.0         | 3.7        | 784                 |
| head         | Garifuna                                  | 100.0        | 0.0        | 93                  |
|              | Maya                                      | 88.7         | 1.0        | 179                 |
|              | Other                                     | 65.6         | 31.5       | 113                 |
|              | Missing/DK                                | (*)          | (*)        | 19                  |
| Total        | nator 71: MDG indicator 2.2               | 91.1         | 4.4        | 1564                |

<sup>[1]</sup> MICS indicator 7.1; MDG indicator 2.3

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

#### **School Readiness**

Attendance to pre-school education in an organised learning or child education programme is important for the readiness of children to school. Table ED.2 shows the proportion of children in the first grade of primary school (infant 1) who attended pre-school the previous year. Overall, 32.9 percent of children who are currently attending the infant 1 of primary school were attending pre-school the previous year. The proportion among females is higher (35.5 percent) than males (30.2 percent), and urban rates (39 percent) were higher than rural rates (28.6 percent). By District, rates were lowest in Orange Walk (16.6 percent) and highest in Belize City South Side at 42.5 percent.

Table ED.2: School readiness

Percentage of children attending first grade of primary school who attended pre-school the previous year, Belize, 2011

|           |   | Percentage of children attending first grade who attended preschool in previous year [1] | Number of children<br>attending first grade<br>of primary school |
|-----------|---|--|--|
| Sex       | Male                                      | 30.2   | 425  |
|           | Female                                    | 35.5   | 418  |
| Region    | Corozal                                   | 32.4   | 100  |
|           | Orange Walk                               | 16.6   | 106  |
|           | Belize (Excluding Belize City South Side) | 37.7   | 110  |
|           | Belize City South Side                    | 42.5   | 105  |
|           | Belize District                           | 40.0   | 215  |
|           | Cayo                                      | 35.0   | 202  |
|           | Stann Creek                               | 37.8   | 109  |
|           | Toledo                                    | 26.3   | 111  |
| Area      | Urban                                     | 39.0   | 343  |
|           | Rural                                     | 28.6   | 500  |
| Mother's  | None                                      | 10.9   | 58   |
| education | Primary                                   | 29.6   | 468  |
|           | Secondary +                               | 41.9   | 312  |
| Wealth    | Poorest                                   | 23.5   | 213  |
| index     | Second                                    | 33.9   | 201  |
| quintiles | Middle                                    | 30.1   | 158  |
|           | Fourth                                    | 42.1   | 154  |
|           | Richest                                   | 39.6   | 116  |
| Ethnicity | Creole                                    | 40.4   | 185  |
| of house- | Mestizo                                   | 29.6   | 436  |
| hold head | Garifuna                                  | 43.2   | 53   |
|           | Maya                                      | 29.8   | 117  |
|           | Other                                     | (26.9)   | 43   |
|           | Missing/DK                                | (*)  | 9  |
| Total     |   | 32.9   | 843  |

<sup>[1]</sup> MICS indicator 7.2

### **Primary and Secondary School Participation**

Universal access to basic education and the achievement of primary education by the world's children is one of the most important goals of the Millennium Development Goals and A World Fit for Children. Education is a vital prerequisite for combating poverty, empowering women, protecting children from hazardous and exploitative labour and sexual exploitation, promoting human rights and democracy, protecting the environment, and influencing population growth.

The indicators for primary and secondary school attendance include:

<sup>()</sup> Figures that are based on 25-49 un-weighted cases;

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases

- Net intake rate in primary education
- o Primary school net attendance ratio (adjusted)
- Secondary school net attendance ratio (adjusted)
- o Female to male education ratio (or gender parity index GPI) in primary and secondary school

The indicators of school progression include:

- o Children reaching last grade of primary
- Primary completion rate
- Transition rate to secondary school

In Belize formal schooling is divided into three main parts, primary, secondary and tertiary. Students attend primary school for eight years: infant 1 and 2 and standard 1 to 6. Secondary school attendance is for four years and tertiary education is for two or more years.

Of children who are of primary school entry age (age 5) in Belize, 85.3 percent of children of school entry age are entering grade 1 (Table ED.3). By region and urban-rural areas, there are notable differentials; (urban 94.5 percent, rural 79.0 percent). In Belize City South Side, for instance, the value of the indicator reaches 100 percent, while it is 80.0 percent in the Toledo District. In rich households, the proportion is around 93.1 percent, while it is 70.8 percent among children living in the poorest households.

Table ED.3: Primary school entry
Percentage of children of primary school entry age entering grade 1 (net intake rate), Belize, 2011

|              |   | Percentage of children<br>of primary school entry<br>age entering grade 1 [1] | Number of children of primary school entry age |
|--------------|---|---|--|
| Sex          | Male                                      | 85.3  | 191  |
|              | Female                                    | 85.3  | 212  |
| Region       | Corozal                                   | 83.2  | 51   |
|              | Orange Walk                               | 77.9  | 74   |
|              | Belize (Excluding Belize City South Side) | 84.9  | 43   |
|              | Belize City South Side                    | 100.0   | 48   |
|              | Belize District                           | 92.9  | 91   |
|              | Cayo                                      | 86.1  | 77   |
|              | Stann Creek                               | 89.4  | 52   |
|              | Toledo                                    | 80.0  | 58   |
| Area         | Urban                                     | 94.5  | 163  |
|              | Rural                                     | 79.0  | 239  |
| Mother's     | None                                      | (42.6)  | 29   |
| education    | Primary                                   | 89.8  | 212  |
|              | Secondary +                               | 92.0  | 151  |
|              | CET/ITVET/VOTEC                           | (*)   | 1  |
|              | Missing/DK                                | (*)   | 1  |
|              | Other                                     | (*)   | 9  |
| Wealth       | Poorest                                   | 70.8  | 108  |
| index quin-  | Second                                    | 88.6  | 93   |
| tiles        | Middle                                    | 87.9  | 69   |
|              | Fourth                                    | 93.6  | 75   |
|              | Richest                                   | 93.1  | 57   |
| Ethnicity of | Creole                                    | 97.8  | 84   |
| household    | Mestizo                                   | 86.4  | 191  |
| head         | Garifuna                                  | 86.4  | 25   |
|              | Maya                                      | 88.2  | 67   |
|              | Other                                     | (36.8)  | 32   |
|              | Missing/DK                                | (*)   | 4  |
| Total        |   | 85.3  | 403  |

<sup>[1]</sup> MICS indicator 7.3

<sup>( )</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Table ED.4A provides the percentage of children of primary school age 5 to 12 years who are attending primary or secondary school<sup>1</sup>. The majority of children of primary school age are attending school (94.4 percent). In urban areas 98.0 percent of children attend school while in rural areas attendance is only 92.2 percent. As the educational level of the mother increases the total net attendance ratio also increases (from 79.0 percent for no education to 98.1 percent for mothers with secondary or better education). This trend is similar for males and females (Figure ED.1).

For wealth as the wealth index increases so does the net attendance ratios. This is true for both sexes and for the country in general (Figure ED.2).

Table ED.4A: Primary school attendance
Percentage of children of primary school age attending primary or secondary school (Net attendance ratio), Belize, 2011

|              |   | Male                            | 2                  | Fem                                   | nale               | Tot  | al                 |
|--------------|---|---------------------------------|--------------------|---------------------------------------|--------------------|--|--------------------|
|              |   | Net attendance ratio (adjusted) | Number of children | Net<br>attendance<br>ratio (adjusted) | Number of children | Net<br>attendance<br>ratio (adjusted)<br>[1] | Number of children |
| Region       | Corozal                                   | 92.6                            | 214                | 93.3                                  | 207                | 92.9   | 421                |
|              | Orange Walk                               | 83.7                            | 250                | 81.9                                  | 223                | 82.8   | 473                |
|              | Belize (Excluding Belize City South Side) | 97.9                            | 215                | 97.2                                  | 230                | 97.5   | 446                |
|              | Belize City South Side                    | 97.1                            | 195                | 98.6                                  | 203                | 97.9   | 398                |
|              | Belize District                           | 97.5                            | 410                | 97.9                                  | 433                | 97.7   | 843                |
|              | Cayo                                      | 97.9                            | 389                | 97.1                                  | 393                | 97.5   | 783                |
|              | Stann Creek                               | 97.3                            | 182                | 96.2                                  | 188                | 96.8   | 370                |
|              | Toledo                                    | 93.9                            | 198                | 95.7                                  | 198                | 94.8   | 396                |
| Area         | Urban                                     | 97.6                            | 638                | 98.4                                  | 647                | 98.0   | 1285               |
|              | Rural                                     | 92.4                            | 1005               | 92.0                                  | 996                | 92.2   | 2001               |
| Age at       | 5   | 85.3                            | 191                | 85.3                                  | 212                | 85.3   | 403                |
| beginning of | 6   | 94.9                            | 194                | 93.7                                  | 189                | 94.3   | 384                |
| school year  | 7   | 96.8                            | 226                | 96.7                                  | 178                | 96.8   | 404                |
|              | 8   | 94.1                            | 213                | 95.9                                  | 203                | 95.0   | 416                |
|              | 9   | 97.6                            | 234                | 96.8                                  | 233                | 97.2   | 466                |
|              | 10  | 94.7                            | 199                | 97.7                                  | 212                | 96.3   | 411                |
|              | 11  | 96.5                            | 197                | 96.1                                  | 209                | 96.3   | 406                |
|              | 12  | 94.1                            | 189                | 93.7                                  | 207                | 93.9   | 395                |
| Mother's     | None                                      | 79.4                            | 135                | 78.6                                  | 131                | 79.0   | 266                |
| education    | Primary                                   | 97.8                            | 886                | 96.9                                  | 869                | 97.4   | 1756               |
|              | Secondary +                               | 97.7                            | 576                | 98.5                                  | 607                | 98.1   | 1183               |
|              | CET/ITVET/VOTEC                           | (*)                             | 6                  | (*)                                   | 5                  | (*)  | 11                 |
|              | Missing/DK                                | (*)                             | 8                  | (*)                                   | 3                  | (*)  | 11                 |
|              | Other                                     | (5.2)                           | 31                 | (2.6)                                 | 27                 | 4.0  | 58                 |
| Wealth index | Poorest                                   | 87.9                            | 413                | 87.4                                  | 384                | 87.7   | 797                |
| quintiles    | Second                                    | 94.4                            | 347                | 92.9                                  | 374                | 93.6   | 721                |
|              | Middle                                    | 96.8                            | 340                | 97.2                                  | 299                | 97.0   | 639                |
|              | Fourth                                    | 98.3                            | 303                | 99.2                                  | 311                | 98.8   | 614                |
|              | Richest                                   | 97.1                            | 240                | 98.2                                  | 275                | 97.7   | 515                |
| Ethnicity of | Creole                                    | 98.0                            | 359                | 99.4                                  | 383                | 98.7   | 742                |
| household    | Mestizo                                   | 97.6                            | 837                | 97.2                                  | 784                | 97.4   | 1621               |
| head         | Garifuna                                  | 94.3                            | 88                 | 96.8                                  | 86                 | 95.5   | 174                |
|              | Maya                                      | 95.9                            | 211                | 95.3                                  | 224                | 95.6   | 435                |
|              | Other                                     | 61.1                            | 131                | 64.6                                  | 149                | 63.0   | 280                |
|              | Missing/DK                                | (*)                             | 17                 | (*)                                   | 17                 | (100.0)                                      | 34                 |
| Total        |   | 94.4                            | 1643               | 94.5                                  | 1643               | 94.4   | 3286               |

<sup>[1]</sup> MICS indicator 7.4; MDG indicator 2.1;

<sup>()</sup> Figures that are based on 25-49 un-weighted cases;

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases

<sup>1</sup> Ratios presented in this table are "adjusted" since they include not only primary school attendance, but also secondary school attendance in the numerator.

In the report, results are also presented using the International Standard Classification of Education (ISCED) categories, which in the case of Belize, differs from what occurs in-country. These figures are presented mainly for the use of international data comparisons (Table ED.4B)

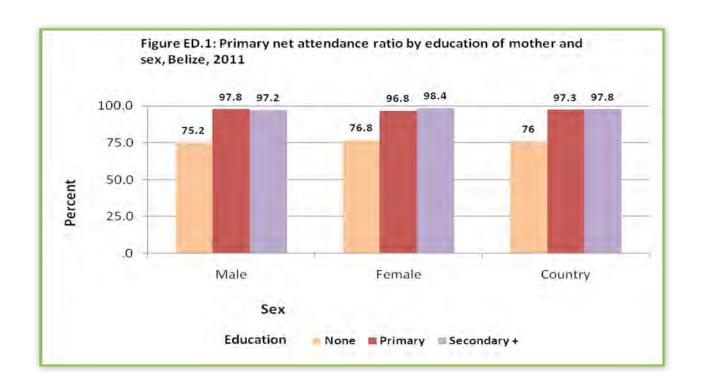
Table ED.4B: Primary school attendance (ISCED)

Percentage of children of primary school age attending primary or secondary school (Net attendance ratio),

Belize, 2011

|                                 |  | M                                     | ale                | Fen                                   | nale               | То                                    | tal                |
|---------------------------------|--|---------------------------------------|--------------------|---------------------------------------|--------------------|---------------------------------------|--------------------|
|                                 |  | Net attendance<br>ratio<br>(adjusted) | Number of children | Net attendance<br>ratio<br>(adjusted) | Number of children | Net attendance<br>ratio<br>(adjusted) | Number of children |
| Region                          | Corozal  | 90.9                                  | 153                | 93.6                                  | 161                | 92.2                                  | 314                |
|                                 | Orange Walk  | 83.5                                  | 195                | 82.9                                  | 170                | 83.2                                  | 365                |
|                                 | Belize<br>(Excluding<br>Belize City<br>South Side) | 98.1                                  | 168                | 96.5                                  | 182                | 97.3                                  | 350                |
|                                 | Belize City<br>South Side                          | 97.4                                  | 149                | 99.3                                  | 145                | 98.4                                  | 294                |
|                                 | Belize<br>District                                 | 97.8                                  | 317                | 97.7                                  | 327                | 97.8                                  | 643                |
|                                 | Cayo   | 97.7                                  | 294                | 96.4                                  | 281                | 97.1                                  | 575                |
|                                 | Stann Creek  | 97.7                                  | 141                | 94.9                                  | 140                | 96.3                                  | 281                |
|                                 | Toledo   | 93.2                                  | 157                | 96.3                                  | 149                | 94.7                                  | 306                |
| Area                            | Urban  | 97.3                                  | 492                | 98.4                                  | 478                | 97.8                                  | 971                |
|                                 | Rural  | 92.1                                  | 764                | 91.8                                  | 749                | 91.9                                  | 1514               |
| Age at beginning of school year | 5  | 85.3                                  | 191                | 85.3                                  | 212                | 85.3                                  | 403                |
|                                 | 6  | 94.9                                  | 194                | 93.7                                  | 189                | 94.3                                  | 384                |
|                                 | 7  | 96.8                                  | 226                | 96.7                                  | 178                | 96.8                                  | 404                |
|                                 | 8  | 94.1                                  | 213                | 95.9                                  | 203                | 95.0                                  | 416                |
|                                 | 9  | 97.6                                  | 234                | 96.8                                  | 233                | 97.2                                  | 466                |
|                                 | 10   | 94.7                                  | 199                | 97.7                                  | 212                | 96.3                                  | 411                |
| Mother's education              | None   | 75.2                                  | 96                 | 76.8                                  | 95                 | 76.0                                  | 191                |
|                                 | Primary  | 97.8                                  | 685                | 96.8                                  | 654                | 97.3                                  | 1339               |
|                                 | Secondary +  | 97.2                                  | 444                | 98.4                                  | 452                | 97.8                                  | 897                |
|                                 | CET/ITVET/<br>VOTEC                                | (*)                                   | 6                  | (*)                                   | 5                  | (*)                                   | 11                 |
|                                 | Missing/DK   | (*)                                   | 3                  | (*)                                   | 1                  | (*)                                   | 4                  |
|                                 | Other  | (3.1)                                 | 23                 | (3.6)                                 | 20                 | 3.3                                   | 43                 |
| Wealth index quintiles          | Poorest  | 87.6                                  | 318                | 86.3                                  | 290                | 87.0                                  | 607                |
|                                 | Second   | 94.1                                  | 267                | 93.6                                  | 281                | 93.9                                  | 548                |
|                                 | Middle   | 96.8                                  | 263                | 97.2                                  | 228                | 97.0                                  | 491                |
|                                 | Fourth   | 97.7                                  | 221                | 99.3                                  | 221                | 98.5                                  | 441                |
|                                 | Richest  | 97.1                                  | 188                | 98.0                                  | 208                | 97.6                                  | 396                |
| Ethnicity of household head     | Creole   | 97.8                                  | 282                | 99.5                                  | 282                | 98.6                                  | 564                |
|                                 | Mestizo  | 97.6                                  | 629                | 96.7                                  | 594                | 97.2                                  | 1222               |
|                                 | Garifuna   | 92.5                                  | 67                 | 97.2                                  | 64                 | 94.8                                  | 132                |
|                                 | Maya   | 95.8                                  | 172                | 96.3                                  | 166                | 96.0                                  | 338                |
|                                 | Other  | 56.6                                  | 93                 | 61.6                                  | 106                | 59.2                                  | 199                |
|                                 | Missing/DK   | (*)                                   | 15                 | (*)                                   | 15                 | (100.0)                               | 30                 |
| Total                           | _  | 94.1                                  | 1257               | 94.3                                  | 1228               | 94.2                                  | 2484               |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases



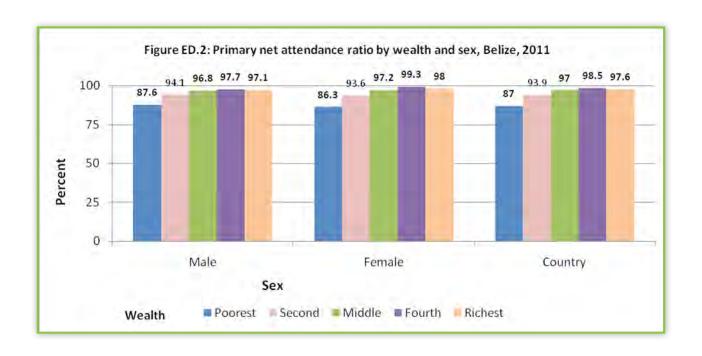


Table ED.5A: Secondary school attendance
Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance ratio), and percentage of children attending primary school, Belize, 2011

|                     |   |  | Male                                      |                          |  | Female                                    |                          |  | Total                                     |                          |
|---------------------|---|--|---|--------------------------|--|---|--------------------------|--|---|--------------------------|
|                     |   |  |   |                          |  |   |                          |  |   |                          |
|                     |   | Net<br>attendance<br>ratio<br>(adjusted) | Percent<br>attending<br>primary<br>school | Number<br>of<br>children | Net<br>attendance<br>ratio<br>(adjusted) | Percent<br>attending<br>primary<br>school | Number<br>of<br>children | Net<br>attendance<br>ratio<br>(adjusted) [1] | Percent<br>attending<br>primary<br>school | Number<br>of<br>children |
| Region              | Corozal   | 43.8                                     | 18.7                                      | 102                      | 46.6                                     | 12.6                                      | 98                       | 45.2   | 15.8                                      | 201                      |
|                     | Orange Walk                                     | 41.1                                     | 14.4                                      | 108                      | 48.2                                     | 10.2                                      | 107                      | 44.6   | 12.3                                      | 216                      |
|                     | Belize (Excluding<br>Belize City South<br>Side) | 64.4                                     | 25.2                                      | 99                       | 73.8                                     | 16.7                                      | 124                      | 69.6   | 20.5                                      | 223                      |
|                     | Belize City South<br>Side                       | 63.7                                     | 20.3                                      | 77                       | 83.4                                     | 9.5                                       | 98                       | 74.7   | 14.2                                      | 175                      |
|                     | Belize District                                 | 64.1                                     | 23.0                                      | 176                      | 78.1                                     | 13.5                                      | 222                      | 71.9   | 17.7                                      | 398                      |
|                     | Cayo  | 46.3                                     | 28.7                                      | 183                      | 61.7                                     | 20.4                                      | 199                      | 54.3   | 24.4                                      | 382                      |
|                     | Stann Creek                                     | 51.9                                     | 33.5                                      | 89                       | 59.4                                     | 18.9                                      | 84                       | 55.6   | 26.4                                      | 173                      |
|                     | Toledo  | 41.0                                     | 27.4                                      | 82                       | 48.2                                     | 18.8                                      | 79                       | 44.6   | 23.2                                      | 161                      |
| Area                | Urban   | 60.3                                     | 25.9                                      | 288                      | 76.9                                     | 14.3                                      | 336                      | 69.2   | 19.7                                      | 625                      |
|                     | Rural   | 42.6                                     | 23.3                                      | 452                      | 49.2                                     | 16.9                                      | 454                      | 45.9   | 20.1                                      | 906                      |
| Age at              | 13  | 37.3                                     | 53.6                                      | 200                      | 44.8                                     | 40.2                                      | 217                      | 41.2   | 46.6                                      | 417                      |
| beginning of school | 14  | 54.1                                     | 28.2                                      | 191                      | 65.9                                     | 12.2                                      | 171                      | 59.7   | 20.6                                      | 361                      |
| year                | 15  | 56.1                                     | 5.9                                       | 190                      | 68.8                                     | 6.8                                       | 224                      | 62.9   | 6.4                                       | 414                      |
|                     | 16  | 51.5                                     | 4.9                                       | 160                      | 66.3                                     | .9  | 178                      | 59.3   | 2.8                                       | 338                      |
| Mother's            | None  | 25.4                                     | 37.2                                      | 77                       | 30.3                                     | 25.8                                      | 66                       | 27.6   | 32.0                                      | 142                      |
| education           | Primary   | 40.6                                     | 29.7                                      | 363                      | 53.5                                     | 21.1                                      | 364                      | 47.1   | 25.4                                      | 727                      |
|                     | Secondary +                                     | 75.6                                     | 18.6                                      | 184                      | 84.8                                     | 12.4                                      | 233                      | 80.7   | 15.1                                      | 416                      |
|                     | CET/ITVET/VOTEC                                 | (*)                                      | (*)                                       | 5                        | (*)                                      | (*)                                       | 4                        | (*)  | (*)                                       | 9                        |
|                     | Mother not in household                         | 59.0                                     | 9.4                                       | 95                       | 59.6                                     | 2.2                                       | 104                      | 59.3   | 5.6                                       | 199                      |
|                     | Missing/DK                                      | (*)                                      | (*)                                       | 1                        | (*)                                      | (*)                                       | 4                        | (*)  | (*)                                       | 5                        |
|                     | Other   | (*)                                      | (*)                                       | 16                       | (*)                                      | (*)                                       | 15                       | (4.8)  | (0.0)                                     | 32                       |
| Wealth              | Poorest   | 22.9                                     | 33.8                                      | 168                      | 29.4                                     | 21.8                                      | 144                      | 25.9   | 28.3                                      | 312                      |
| index<br>quintiles  | Second  | 37.9                                     | 28.9                                      | 148                      | 44.6                                     | 15.6                                      | 150                      | 41.3   | 22.2                                      | 298                      |
| 4,                  | Middle  | 40.8                                     | 28.5                                      | 123                      | 63.4                                     | 19.5                                      | 184                      | 54.4   | 23.1                                      | 307                      |
|                     | Fourth  | 67.3                                     | 19.8                                      | 156                      | 76.4                                     | 11.8                                      | 158                      | 71.9   | 15.8                                      | 314                      |
|                     | Richest   | 80.4                                     | 9.9                                       | 145                      | 87.7                                     | 10.1                                      | 154                      | 84.2   | 10.0                                      | 299                      |
| Ethnicity of        | Creole  | 69.1                                     | 17.5                                      | 157                      | 80.9                                     | 11.5                                      | 179                      | 75.3   | 14.3                                      | 336                      |
| household<br>head   | Mestizo   | 44.4                                     | 25.2                                      | 371                      | 56.4                                     | 15.7                                      | 391                      | 50.5   | 20.3                                      | 761                      |
|                     | Garifuna  | (45.9)                                   | (42.0)                                    | 35                       | (80.6)                                   | (14.9)                                    | 40                       | 64.3   | 27.6                                      | 75                       |
|                     | Maya  | 38.0                                     | 33.1                                      | 93                       | 38.8                                     | 26.4                                      | 97                       | 38.4   | 29.7                                      | 190                      |
|                     | Other   | 46.4                                     | 14.7                                      | 70                       | 54.3                                     | 12.9                                      | 76                       | 50.5   | 13.8                                      | 146                      |
|                     | Missing/DK                                      | (*)                                      | (*)                                       | 14                       | (*)                                      | (*)                                       | 7                        | (*)  | (*)                                       | 21                       |
| Total               |   | 49.5                                     | 24.3                                      | 740                      | 61.0                                     | 15.8                                      | 790                      | 55.4   | 19.9                                      | 1530                     |

<sup>[1]</sup> MICS indicator 7.5

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

The secondary school net attendance ratio is presented in Table ED.5A. Table ED.5A shows that only about half of the children of secondary school age are attending secondary school (55.4 percent). Of the remaining half some of them are either out of school or attending primary school; almost two in five (19.9 percent) of the children of secondary school age are attending primary school when they should be attending secondary school.

Differences exist in net rates for males (49.5 percent) and females (61.0 percent) and also for urban (69.2 percent) and rural (45.9 percent) areas. Mother's education and wealth seem to correlate positively with increasing net ratios (Figure ED.3).

It is interesting to note that the largest percentage of secondary age children attending primary school come from Maya households (29.7 percent) and from the Stann Creek District (26.4 percent).

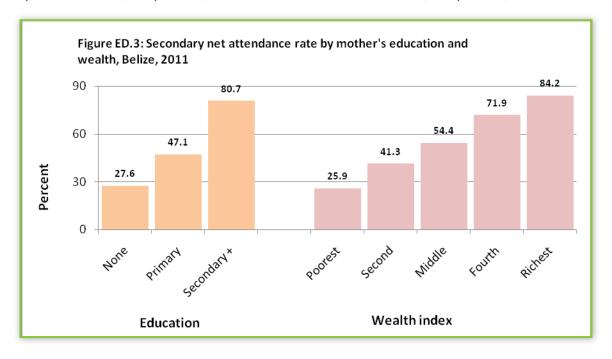


Table ED.5B below presents the figures for secondary education according to International Standard Classification of Education (ISCED) categories.

Table ED.5B: Secondary school attendance (ISCED)

Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance ratio), and percentage of children attending primary school, Belize, 2011

|                     |   |  | Male                                      |                          |  | Female                                    |                          |   | Total                                     |                          |
|---------------------|---|--|---|--------------------------|--|---|--------------------------|---|---|--------------------------|
|                     |   | Net<br>attendance<br>ratio<br>(adjusted) | Percent<br>attending<br>primary<br>school | Number<br>of<br>children | Net<br>attendance<br>ratio<br>(adjusted) | Percent<br>attending<br>primary<br>school | Number<br>of<br>children | Net<br>attendance<br>ratio<br>(adjusted)<br>[1] | Percent<br>attending<br>primary<br>school | Number<br>of<br>children |
| Region              | Corozal   | 32.0                                     | 42.8                                      | 163                      | 33.4                                     | 36.5                                      | 145                      | 32.6  | 39.8                                      | 308                      |
|                     | Orange Walk                                     | 28.9                                     | 36.3                                      | 163                      | 35.1                                     | 30.1                                      | 160                      | 32.0  | 33.2                                      | 323                      |
|                     | Belize (Excluding<br>Belize City South<br>Side) | 46.4                                     | 45.5                                      | 146                      | 54.7                                     | 38.5                                      | 173                      | 50.9  | 41.7                                      | 319                      |
|                     | Belize City South<br>Side                       | 41.5                                     | 46.9                                      | 123                      | 58.6                                     | 35.8                                      | 155                      | 51.1  | 40.7                                      | 279                      |
|                     | Belize District                                 | 44.2                                     | 46.1                                      | 269                      | 56.6                                     | 37.2                                      | 328                      | 51.0  | 41.2                                      | 598                      |
|                     | Cayo  | 32.6                                     | 50.4                                      | 279                      | 41.4                                     | 46.3                                      | 311                      | 37.3  | 48.2                                      | 590                      |
|                     | Stann Creek                                     | 39.6                                     | 49.2                                      | 130                      | 41.0                                     | 45.2                                      | 132                      | 40.3  | 47.2                                      | 262                      |
|                     | Toledo  | 29.8                                     | 48.1                                      | 123                      | 33.2                                     | 44.1                                      | 128                      | 31.5  | 46.1                                      | 250                      |
| Area                | Urban   | 41.9                                     | 48.5                                      | 434                      | 55.3                                     | 38.0                                      | 505                      | 49.1  | 42.9                                      | 939                      |
|                     | Rural   | 31.1                                     | 44.2                                      | 693                      | 33.8                                     | 41.7                                      | 700                      | 32.4  | 42.9                                      | 1393                     |
| Age at              | 11  | 1.8                                      | 94.7                                      | 197                      | 0.8                                      | 94.8                                      | 209                      | 1.2   | 94.8                                      | 406                      |
| beginning of school | 12  | 14.4                                     | 79.2                                      | 189                      | 15.8                                     | 78.0                                      | 207                      | 15.1  | 78.6                                      | 395                      |
| year                | 13  | 37.3                                     | 53.6                                      | 200                      | 44.8                                     | 40.2                                      | 217                      | 41.2  | 46.6                                      | 417                      |
|                     | 14  | 54.1                                     | 28.2                                      | 191                      | 65.9                                     | 12.2                                      | 171                      | 59.7  | 20.6                                      | 361                      |
|                     | 15  | 56.1                                     | 5.9                                       | 190                      | 68.8                                     | 6.8                                       | 224                      | 62.9  | 6.4                                       | 414                      |
|                     | 16  | 51.5                                     | 4.9                                       | 160                      | 66.3                                     | 0.9                                       | 178                      | 59.3  | 2.8                                       | 338                      |
| Mother's            | None  | 17.5                                     | 54.2                                      | 116                      | 20.1                                     | 45.7                                      | 102                      | 18.8  | 50.2                                      | 218                      |
| education           | Primary   | 28.5                                     | 51.5                                      | 565                      | 35.0                                     | 48.0                                      | 579                      | 31.8  | 49.7                                      | 1144                     |
|                     | Secondary +                                     | 49.2                                     | 47.1                                      | 315                      | 57.5                                     | 40.1                                      | 388                      | 53.7  | 43.2                                      | 703                      |
|                     | CET/ITVET/VOTEC                                 | (*)                                      | (*)                                       | 5                        | (*)                                      | (*)                                       | 4                        | (*)   | (*)                                       | 9                        |
|                     | Mother not in household                         | 59.0                                     | 9.4                                       | 95                       | 59.6                                     | 2.2                                       | 104                      | 59.3  | 5.6                                       | 199                      |
|                     | Missing/DK                                      | (*)                                      | (*)                                       | 6                        | (*)                                      | (*)                                       | 5                        | (*)   | (*)                                       | 11                       |
|                     | Other   | 0.0                                      | 3.7                                       | 24                       | 6.6                                      | 0.0                                       | 23                       | 3.2   | 1.9                                       | 47                       |
| Wealth              | Poorest   | 15.6                                     | 52.7                                      | 264                      | 18.2                                     | 48.6                                      | 239                      | 16.8  | 50.8                                      | 503                      |
| index<br>quintiles  | Second  | 26.0                                     | 50.8                                      | 227                      | 28.8                                     | 43.1                                      | 243                      | 27.5  | 46.8                                      | 470                      |
| quintiloo           | Middle  | 28.3                                     | 51.2                                      | 200                      | 48.0                                     | 39.0                                      | 254                      | 39.3  | 44.3                                      | 454                      |
|                     | Fourth  | 48.6                                     | 43.0                                      | 239                      | 52.4                                     | 39.7                                      | 248                      | 50.6  | 41.3                                      | 487                      |
|                     | Richest   | 63.2                                     | 29.0                                      | 197                      | 68.1                                     | 29.5                                      | 221                      | 65.8  | 29.3                                      | 418                      |
| Ethnicity of        | Creole  | 48.3                                     | 42.2                                      | 235                      | 56.5                                     | 38.3                                      | 281                      | 52.8  | 40.1                                      | 515                      |
| household<br>head   | Mestizo   | 31.5                                     | 48.1                                      | 579                      | 40.4                                     | 40.1                                      | 580                      | 35.9  | 44.1                                      | 1160                     |
|                     | Garifuna  | 30.2                                     | 62.2                                      | 56                       | 55.5                                     | 40.1                                      | 61                       | 43.4  | 50.6                                      | 117                      |
|                     | Maya  | 27.8                                     | 50.8                                      | 132                      | 25.5                                     | 49.8                                      | 155                      | 26.6  | 50.3                                      | 287                      |
|                     | Other   | 35.6                                     | 29.4                                      | 109                      | 36.7                                     | 32.2                                      | 119                      | 36.2  | 30.8                                      | 228                      |
|                     | Missing/DK                                      | (*)                                      | (*)                                       | 15                       | (*)                                      | (*)                                       | 9                        | (*)   | (*)                                       | 25                       |
| Total               |   | 35.3                                     | 45.9                                      | 1126                     | 42.8                                     | 40.1                                      | 1205                     | 39.2  | 42.9                                      | 2332                     |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

The percentage of children entering first grade who eventually reach the last grade of primary school is presented in Table ED.6. Of all children starting infant one in primary school, the majority of them (96.5 percent) will eventually reach the last grade (standard 6). Notice that this number includes children that repeat grades and that eventually move up to reach last grade.

There is no difference between boys and girls if completing primary school (males 96.3 percent, females 96.8 percent). The difference between urban and rural areas is small: the percent who reach standard 6 of those who enter infant1 in urban areas is 98.1 percent and in rural areas it is 95.4 percent. There seems to be a small positive correlation between wealth index and increasing completion to standard 6 (Figure ED.4). The majority children from households with Creole heads (97.8 percent) and Mestizo heads (96.3 percent) reach standard 6.

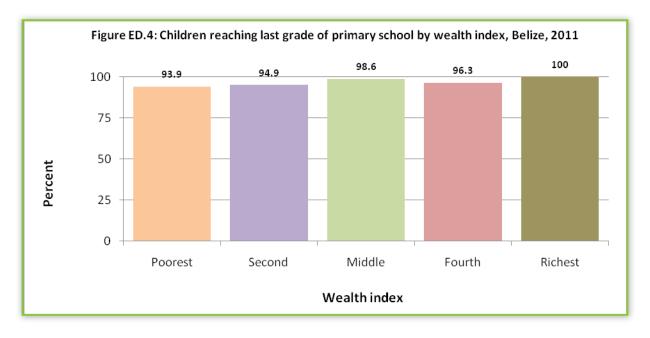


Table ED.6: Children reaching last grade of primary school

Percentage of children entering first grade of primary school who eventually reach the last grade of primary school (Survival rate to last grade of primary school), Belize, 2011

|                      |  | Percent at-<br>tending grade<br>1 last year<br>who are in<br>grade 2 this<br>year | Percent<br>attending<br>grade 2 last<br>year who are<br>attending<br>grade 3 this<br>year | Percent<br>attending<br>grade 3<br>last year<br>who are<br>attending<br>grade 4<br>this year | Percent<br>attending<br>grade 4 last<br>year who are<br>attending<br>grade 5 this<br>year | Percent<br>attending<br>grade 5<br>last year<br>who are<br>attending<br>grade 6<br>this year | Percent<br>who<br>reach<br>grade 6<br>of those<br>who enter<br>grade 1<br>[1] |
|----------------------|--|---|---|--|---|--|---|
| Sex                  | Male   | 100.0   | 100.0   | 100.0  | 98.9  | 97.3   | 96.3  |
|                      | Female                                       | 99.6  | 100.0   | 99.7   | 99.6  | 97.8   | 96.8  |
| Region               | Corozal                                      | 100.0   | 100.0   | 100.0  | 98.6  | 98.4   | 97.1  |
|                      | Orange Walk                                  | 100.0   | 100.0   | 100.0  | 100.0   | 96.6   | 96.6  |
|                      | Belize (Excluding Belize<br>City South Side) | 100.0   | 100.0   | 100.0  | 100.0   | 97.6   | 97.6  |
|                      | Belize City South Side                       | 100.0   | 100.0   | 100.0  | 100.0   | 100.0  | 100.0   |
|                      | Belize District                              | 100.0   | 100.0   | 100.0  | 100.0   | 98.8   | 98.8  |
|                      | Cayo   | 100.0   | 100.0   | 100.0  | 98.5  | 97.0   | 95.6  |
|                      | Stann Creek                                  | 98.5  | 100.0   | 100.0  | 100.0   | 95.2   | 93.8  |
|                      | Toledo                                       | 100.0   | 100.0   | 98.8   | 98.6  | 98.5   | 96.0  |
| Area                 | Urban  | 100.0   | 100.0   | 100.0  | 99.0  | 99.1   | 98.1  |
|                      | Rural  | 99.7  | 100.0   | 99.8   | 99.4  | 96.5   | 95.4  |
| Mother's             | None   | 97.3  | 100.0   | 100.0  | 100.0   | 93.7   | 91.2  |
| education            | Primary                                      | 100.0   | 100.0   | 99.7   | 99.4  | 97.1   | 96.3  |
|                      | Secondary +                                  | 100.0   | 100.0   | 100.0  | 100.0   | 100.0  | 100.0   |
|                      | Missing/DK                                   | 100.0   | 100.0   | 100.0  | 100.0   | 100.0  | 100.0   |
| Wealth               | Poorest                                      | 100.0   | 100.0   | 99.4   | 96.3  | 98.1   | 93.9  |
| index quin-<br>tiles | Second                                       | 99.3  | 100.0   | 100.0  | 100.0   | 95.6   | 94.9  |
|                      | Middle                                       | 100.0   | 100.0   | 100.0  | 100.0   | 98.6   | 98.6  |
|                      | Fourth                                       | 100.0   | 100.0   | 100.0  | 100.0   | 96.3   | 96.3  |
|                      | Richest                                      | 100.0   | 100.0   | 100.0  | 100.0   | 100.0  | 100.0   |
| Ethnicity of         | Creole                                       | 100.0   | 100.0   | 100.0  | 100.0   | 97.8   | 97.8  |
| household<br>head    | Mestizo                                      | 99.7  | 100.0   | 100.0  | 99.6  | 96.4   | 95.7  |
|                      | Garifuna                                     | 100.0   | 100.0   | 100.0  | 93.5  | 100.0  | 93.5  |
|                      | Maya   | 100.0   | 100.0   | 98.7   | 98.9  | 98.8   | 96.4  |
|                      | Other  | 100.0   | 100.0   | 100.0  | 100.0   | 100.0  | 100.0   |
|                      | Missing/DK                                   | 100.0   | 100.0   | 100.0  | 100.0   | 100.0  | 100.0   |
|                      | Total  | 99.8  | 100.0   | 99.9   | 99.2  | 97.6   | 96.5  |

<sup>[1]</sup> MICS indicator 7.6; MDG indicator 2.2

The primary school completion rate and transition rate to secondary education are presented in Table ED.7A. 92.9 percent of the children of primary completion age (12 to 14 years) were attending the last grade of primary education. This value should be distinguished from the gross primary completion ratio which includes children of any age attending the last grade of primary. Females complete at a higher rate than males (males 88.3 percent and females 97.1 percent) and urban children complete at a slightly higher rate than rural children (urban 102.1 percent, rural 87.0 percent).

Increasing household wealth is positively associated with increasing primary completion rates (poorest 77.0 percent to richest 84.2 percent).

Over ninety percent 90.9 percent of the children that completed successfully the last grade of primary school were found at the moment the survey to be attending the first grade of secondary school. There is a small difference between the rates for boys and girls (males 89.2, females 92.7) and a larger one between areas (urban 94.4 percent, rural 87.4 percent). Increasing mother's education correlates with increasing transition rates and also increasing wealth correlates with increasing transition rates.

Table ED.7A: Primary school completion and transition to secondary school Primary school completion rates and transition rate to secondary school, Belize, 2011

|              |   | Primary school<br>completion<br>rate [1] | Number of<br>children of<br>primary school<br>completion<br>age | Transition rate<br>to secondary<br>school [2] | Number of<br>children who were<br>in the last grade of<br>primary school the<br>previous year |
|--------------|---|--|---|---|---|
| Sex          | Male                                      | 88.3                                     | 189   | 89.2  | 183   |
|              | Female                                    | 97.1                                     | 207   | 92.7  | 170   |
| Region       | Corozal                                   | 92.0                                     | 54  | 74.4  | 45  |
|              | Orange Walk                               | 54.9                                     | 54  | (83.3)  | 33  |
|              | Belize (Excluding Belize City South Side) | (144.8)                                  | 40  | (93.8)  | 49  |
|              | Belize City South Side                    | 89.1                                     | 54  | 98.6  | 71  |
|              | Belize District                           | 117.0                                    | 93  | 96.2  | 120   |
|              | Cayo                                      | 102.0                                    | 98  | 93.7  | 79  |
|              | Stann Creek                               | 87.3                                     | 48  | 91.0  | 44  |
|              | Toledo                                    | 85.4                                     | 47  | (92.6)  | 32  |
| Area         | Urban                                     | 102.1                                    | 154   | 94.4  | 175   |
|              | Rural                                     | 87.0                                     | 241   | 87.4  | 177   |
| Mother's     | None                                      | (74.7)                                   | 41  | (89.0)  | 27  |
| education    | Primary                                   | 92.8                                     | 201   | 86.9  | 160   |
|              | Secondary +                               | 96.3                                     | 141   | 98.0  | 129   |
|              | CET/ITVET/VOTEC                           | (*)                                      | 0   | (*)   | 2   |
|              | Mother not in household                   | (*)                                      | 0   | (*)   | 25  |
|              | Missing/DK                                | (*)                                      | 4   | (*)   | 0   |
|              | Other                                     | (*)                                      | 8   | (*)   | 2   |
| Wealth       | Poorest                                   | 77.0                                     | 94  | (85.0)  | 36  |
| index        | Second                                    | 91.8                                     | 78  | 86.4  | 62  |
| quintiles    | Middle                                    | 112.9                                    | 79  | 87.4  | 77  |
|              | Fourth                                    | 99.7                                     | 81  | 95.3  | 87  |
|              | Richest                                   | 84.2                                     | 63  | 94.9  | 90  |
| Ethnicity of | Creole                                    | 92.2                                     | 90  | 90.3  | 101   |
| household    | Mestizo                                   | 87.1                                     | 204   | 88.5  | 178   |
| head         | Garifuna                                  | (*)                                      | 19  | (100.0)                                       | 24  |
|              | Maya                                      | 133.0                                    | 37  | (97.5)  | 22  |
|              | Other                                     | (77.8)                                   | 42  | (94.5)  | 26  |
|              | Missing/DK                                | (*)                                      | 4   | (*)   | 2   |
| Total        |   | 92.9                                     | 395   | 90.9  | 352   |

<sup>[1]</sup> MICS indicator 7.7; [2] MICS indicator 7.8

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

The International Standard Classification of Education (ISCED) comparison is presented below in Table ED.7B.

Table ED.7B: Primary school completion and transition to secondary school (ISCED) Primary school completion rates and transition rate to secondary school, Belize, 2011

|              |   | Primary school<br>completion<br>rate [1] | Number of chil-<br>dren of primary<br>school comple-<br>tion age | Transition rate<br>to secondary<br>school [2] | Number of children<br>who were in the last<br>grade of primary<br>school the previous<br>year |
|--------------|---|--|--|---|---|
| Sex          | Male                                      | 83.8                                     | 199  | 89.2  | 183   |
|              | Female                                    | 94.6                                     | 212  | 92.7  | 170   |
| Region       | Corozal                                   | 85.7                                     | 58   | 74.4  | 45  |
|              | Orange Walk                               | 54.5                                     | 55   | (83.3)  | 33  |
|              | Belize (Excluding Belize City South Side) | (108.8)                                  | 53   | (93.8)  | 49  |
|              | Belize City South Side                    | 90.5                                     | 53   | 98.6  | 71  |
|              | Belize District                           | 99.6                                     | 106  | 96.2  | 120   |
|              | Cayo                                      | 115.0                                    | 87   | 93.7  | 79  |
|              | Stann Creek                               | 72.5                                     | 58   | 91.0  | 44  |
|              | Toledo                                    | 84.5                                     | 48   | (92.6)  | 32  |
| Area         | Urban                                     | 104.5                                    | 150  | 94.4  | 175   |
|              | Rural                                     | 80.6                                     | 261  | 87.4  | 177   |
| Mother's     | None                                      | (95.8)                                   | 32   | (89.0)  | 27  |
| education    | Primary                                   | 79.0                                     | 236  | 86.9  | 160   |
|              | Secondary +                               | 103.2                                    | 131  | 98.0  | 129   |
|              | CET/ITVET/VOTEC                           | (*)                                      | 0  | (*)   | 2   |
|              | Mother not in household                   | (*)                                      | 0  | (*)   | 25  |
|              | Missing/DK                                | (*)                                      | 3  | (*)   | 0   |
|              | Other                                     | (*)                                      | 8  | (*)   | 2   |
| Wealth       | Poorest                                   | 73.8                                     | 98   | (*)   | 36  |
| index quin-  | Second                                    | 82.7                                     | 87   | 86.4  | 62  |
| tiles        | Middle                                    | 100.7                                    | 89   | 87.4  | 77  |
|              | Fourth                                    | 130.8                                    | 62   | 95.3  | 87  |
|              | Richest                                   | 70.0                                     | 76   | 94.9  | 90  |
| Ethnicity of | Creole                                    | 78.1                                     | 106  | 90.3  | 101   |
| household    | Mestizo                                   | 94.4                                     | 188  | 88.5  | 178   |
| head         | Garifuna                                  | (73.8)                                   | 25   | (100.0)                                       | 24  |
|              | Maya                                      | 108.9                                    | 45   | (97.5)  | 22  |
|              | Other                                     | 80.7                                     | 40   | (94.5)  | 26  |
|              | Missing/DK                                | (*)                                      | 6  | (*)   | 2   |
| Total        |   | 89.4                                     | 411  | 90.9  | 352   |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

The ratio of girls to boys attending primary and secondary education is provided in Table ED.8A. These are obtained from net attendance ratios rather than gross attendance ratios. The last ratios provide an erroneous description of the GPI mainly because in most of the cases the majority of over-aged children attending primary education tend to be boys.

The table shows that gender parity for primary school is 1.00 indicating that attendance is same for boys and girls. However, the indicator increases to 1.23 for secondary education indicating that girls outperform boys at the secondary level. The disadvantage of boys is particularly pronounced in urban areas (GPI of 1.28), as well as among children living in the middle wealth households (GPI of 1.55) and Garifuna headed households (GPI of 1.75).

## Table ED.8A: Education gender parity Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, Belize, 2011

|                  |  | Primary school<br>adjusted net<br>attendance ratio<br>(NAR), girls | Primary<br>school adjust-<br>ed net atten-<br>dance ratio<br>(NAR), boys | Gender<br>parity index<br>(GPI) for pri-<br>mary school<br>adjusted<br>NAR [1] | Secondary<br>school ad-<br>justed net<br>attendance<br>ratio (NAR),<br>girls | Secondary<br>school ad-<br>justed net<br>attendance<br>ratio (NAR),<br>boys | Gender<br>parity in-<br>dex (GPI)<br>for sec-<br>ondary<br>school<br>adjusted<br>NAR [2] |
|------------------|--|--|--|--|--|---|--|
| Region           | Corozal                                      | 93.3   | 92.6   | 1.01   | 46.6   | 43.8  | 1.07   |
|                  | Orange Walk                                  | 81.9   | 83.7   | 0.98   | 48.2   | 41.1  | 1.17   |
|                  | Belize (Excluding Belize<br>City South Side) | 97.2   | 97.9   | 0.99   | 73.8   | 64.4  | 1.15   |
|                  | Belize City South Side                       | 98.6   | 97.1   | 1.02   | 83.4   | 63.7  | 1.31   |
|                  | Belize District                              | 97.9   | 97.5   | 1.00   | 78.6   | 64.0  | 1.23   |
|                  | Cayo   | 97.1   | 97.9   | 0.99   | 61.7   | 46.3  | 1.33   |
|                  | Stann Creek                                  | 96.2   | 97.3   | 0.99   | 59.4   | 51.9  | 1.14   |
|                  | Toledo                                       | 95.7   | 93.9   | 1.02   | 48.2   | 41.0  | 1.18   |
| Area             | Urban  | 98.4   | 97.6   | 1.01   | 76.9   | 60.3  | 1.28   |
|                  | Rural  | 92.0   | 92.4   | 1.00   | 49.2   | 42.6  | 1.15   |
| Education of     | None   | 78.6   | 79.4   | 0.99   | 30.3   | 25.4  | 1.20   |
| mother/caretaker | Primary                                      | 96.9   | 97.8   | 0.99   | 53.5   | 40.6  | 1.32   |
|                  | Secondary +                                  | 98.5   | 97.7   | 1.01   | 84.8   | 75.6  | 1.12   |
|                  | CET/ITVET/VOTEC                              | 100.0  | 100.0  | 1.00   | 100.0  | 100.0   | 1.00   |
|                  | Mother not in household                      | (*)  | (*)  | (*)  | 59.6   | 59.0  | 1.01   |
|                  | Other  | 2.6  | 5.2  | 0.50   | 9.8  | (*)   | (*)  |
| Wealth index     | Poorest                                      | 87.4   | 87.9   | 0.99   | 29.4   | 22.9  | 1.28   |
| quintiles        | Second                                       | 92.9   | 94.4   | 0.98   | 44.6   | 37.9  | 1.18   |
|                  | Middle                                       | 97.2   | 96.8   | 1.00   | 63.4   | 40.8  | 1.55   |
|                  | Fourth                                       | 99.2   | 98.3   | 1.01   | 76.4   | 67.3  | 1.13   |
|                  | Richest                                      | 98.2   | 97.1   | 1.01   | 87.7   | 80.4  | 1.09   |
| Ethnicity of     | Creole                                       | 99.4   | 98.0   | 1.01   | 80.9   | 69.1  | 1.17   |
| household head   | Mestizo                                      | 97.2   | 97.6   | 1.00   | 56.4   | 44.4  | 1.27   |
|                  | Garifuna                                     | 96.8   | 94.3   | 1.03   | 80.6   | 45.9  | 1.75   |
|                  | Maya   | 95.3   | 95.9   | 0.99   | 38.8   | 38.0  | 1.02   |
|                  | Other  | 64.6   | 61.1   | 1.06   | 54.3   | 46.4  | 1.17   |
|                  | Missing/DK                                   | 100.0  | 100.0  | 1.00   | 77.9   | 67.2  | 1.16   |
| Total            |  | 94.5   | 94.4   | 1.00   | 61.0   | 49.5  | 1.23   |

<sup>[1]</sup> MICS indicator 7.9; MDG indicator 3.1 [2] MICS indicator 7.10; MDG indicator 3.1 (\*) Figures that are based on less than 25 un-weighted cases

The International Standard Classification of Education (ISCED) comparison is also presented below in Table ED.8B.

Table ED.8B: Education gender parity (ISCED)
Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, Belize, 2011

|                  |   | Primary<br>school<br>adjusted net<br>attendance<br>ratio (NAR),<br>girls | Primary<br>school<br>adjusted net<br>attendance<br>ratio (NAR),<br>boys | Gender<br>parity<br>index<br>(GPI) for<br>primary<br>school<br>adjusted<br>NAR [1] | Secondary<br>school adjusted<br>net attendance<br>ratio (NAR),<br>girls | Secondary<br>school<br>adjusted net<br>attendance<br>ratio (NAR),<br>boys | Gender<br>parity<br>index<br>(GPI) for<br>secondary<br>school<br>adjusted<br>NAR [2] |
|------------------|---|--|---|--|---|---|--|
| Region           | Corozal   | 93.6   | 90.9  | 1.03   | 33.4  | 32.0  | 1.04   |
|                  | Orange Walk                                     | 82.9   | 83.5  | 0.99   | 35.1  | 28.9  | 1.21   |
|                  | Belize (Excluding<br>Belize City South<br>Side) | 96.5   | 98.1  | 0.98   | 54.7  | 46.4  | 1.18   |
|                  | Belize City South<br>Side                       | 99.3   | 97.4  | 1.02   | 58.6  | 41.5  | 1.41   |
|                  | Belize District                                 | 97.9   | 97.8  | 1.00   | 56.7  | 44.0  | 1.30   |
|                  | Cayo  | 96.4   | 97.7  | 0.99   | 41.4  | 32.6  | 1.27   |
|                  | Stann Creek                                     | 94.9   | 97.7  | 0.97   | 41.0  | 39.6  | 1.04   |
|                  | Toledo  | 96.3   | 93.2  | 1.03   | 33.2  | 29.8  | 1.11   |
| Area             | Urban   | 98.4   | 97.3  | 1.01   | 55.3  | 41.9  | 1.32   |
|                  | Rural   | 91.8   | 92.1  | 1.00   | 33.8  | 31.1  | 1.09   |
| Education of     | None  | 76.8   | 75.2  | 1.02   | 20.1  | 17.5  | 1.15   |
| mother/caretaker | Primary   | 96.8   | 97.8  | 0.99   | 35.0  | 28.5  | 1.23   |
|                  | Secondary +                                     | 98.4   | 97.2  | 1.01   | 57.5  | 49.2  | 1.17   |
|                  | Mother not in household                         | (*)  | (*)   | (*)  | 59.6  | 59.0  | 1.01   |
|                  | Other   | 3.6  | 3.1   | 1.17   | 6.6   | (*)   | (*)  |
| Wealth index     | Poorest   | 86.3   | 87.6  | 0.99   | 18.2  | 15.6  | 1.17   |
| quintiles        | Second  | 93.6   | 94.1  | 0.99   | 28.8  | 26.0  | 1.11   |
|                  | Middle  | 97.2   | 96.8  | 1.00   | 48.0  | 28.3  | 1.69   |
|                  | Fourth  | 99.3   | 97.7  | 1.02   | 52.4  | 48.6  | 1.08   |
|                  | Richest   | 98.0   | 97.1  | 1.01   | 68.1  | 63.2  | 1.08   |
| Ethnicity of     | Creole  | 99.5   | 97.8  | 1.02   | 56.5  | 48.3  | 1.17   |
| household head   | Mestizo   | 96.7   | 97.6  | 0.99   | 40.4  | 31.5  | 1.28   |
|                  | Garifuna  | 97.2   | 92.5  | 1.05   | 55.5  | 30.2  | 1.84   |
|                  | Maya  | 96.3   | 95.8  | 1.01   | 25.5  | 27.8  | 0.92   |
|                  | Other   | 61.6   | 56.6  | 1.09   | 36.7  | 35.6  | 1.03   |
|                  | Missing/DK                                      | 100.0  | 100.0   | 1.00   | 63.5  | 59.0  | 1.08   |
| Total            |   | 94.3   | 94.1  | 1.00   | 42.8  | 35.3  | 1.21   |

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases

## XI. CHILD PROTECTION

## **Birth Registration**

he International Convention on the Rights of the Child states that every child has the right to a name and a nationality and the right to protection from being deprived of his or her identity. Birth registration is a fundamental means of securing these rights for children. The World Fit for Children states the goal to develop systems to ensure the registration of every child at or shortly after birth, and fulfil his or her right to acquire a name and a nationality, in accordance with national laws and relevant international instruments. The indicator is the percentage of children under 5 years of age whose birth is registered.

The births of 95.2 percent of children under five years in Belize have been registered (Table CP.1). There are no large variations in birth registration across sex, area, or education categories. Only 87.3 percent of children 0 to 11 months have been registered as compared to older children who have been registered at rates in the mid ninety percentages. Children in the Corozal (93.3 percent), Belize City South Side (94.6 percent) and Cayo (94.8 percent) Districts are somewhat less likely to have their births registered than other children and children from Garifuna households are registered at slightly less rates (91.9 percent) than children from other ethnic backgrounds.



Table CP.1: Birth registration

Percentage of children under age 5 by whether birth is registered and percentage of children not registered whose mothers/caretakers know how to register birth, Belize, 2011

|                        |   |                 |        | e 5 whose bir<br>civil authorit |                           |                            | Children under age<br>is not regi  |  |
|------------------------|---|-----------------|--------|---------------------------------|---------------------------|----------------------------|--|--|
|                        |   | Has birth icate |        | No birth                        | Total reg-<br>istered [1] | Number<br>of chil-<br>dren | Percent of chil-<br>dren whose<br>mother/caretaker<br>knows how to<br>register birth | Number of<br>children with-<br>out birth reg-<br>istration |
| Sex                    | Male                                      | 39.1            | 50.1   | 5.9                             | 95.0                      | 984                        | (95.5)   | 49   |
|                        | Female                                    | 41.6            | 48.9   | 4.9                             | 95.4                      | 962                        | (91.3)   | 44   |
| Region                 | Corozal                                   | 25.0            | 60.6   | 7.7                             | 93.3                      | 263                        | (*)  | 18   |
|                        | Orange Walk                               | 68.5            | 21.5   | 5.3                             | 95.2                      | 302                        | (*)  | 14   |
|                        | Belize (Excluding Belize City South Side) | 53.3            | 36.5   | 6.5                             | 96.2                      | 240                        | (*)  | 9  |
|                        | Belize City<br>South Side                 | 27.0            | 65.9   | 1.6                             | 94.6                      | 252                        | (*)  | 14   |
|                        | Belize District                           | 39.8            | 51.6   | 4.0                             | 95.4                      | 492                        | (*)  | 23   |
|                        | Cayo                                      | 32.7            | 59.5   | 2.6                             | 94.8                      | 450                        | (*)  | 24   |
|                        | Stann Creek                               | 50.4            | 36.5   | 10.8                            | 97.7                      | 212                        | (*)  | 5  |
|                        | Toledo                                    | 27.6            | 61.6   | 6.5                             | 95.8                      | 226                        | (*)  | 9  |
| Area                   | Urban                                     | 37.3            | 53.7   | 3.7                             | 94.6                      | 743                        | (95.4)   | 40   |
|                        | Rural                                     | 42.2            | 46.9   | 6.5                             | 95.6                      | 1203                       | (92.1)   | 53   |
| Age                    | 0-11                                      | 34.8            | 44.0   | 8.5                             | 87.3                      | 357                        | (94.2)   | 45   |
|                        | 12-23                                     | 40.1            | 50.8   | 4.6                             | 95.5                      | 404                        | (*)  | 18   |
|                        | 24-35                                     | 44.9            | 48.4   | 3.4                             | 96.7                      | 393                        | (*)  | 13   |
|                        | 36-47                                     | 40.2            | 52.8   | 5.8                             | 98.7                      | 395                        | (*)  | 5  |
|                        | 48-59                                     | 41.2            | 50.9   | 5.0                             | 97.2                      | 397                        | (*)  | 11   |
| Mother's               | None                                      | 52.7            | 36.6   | 4.9                             | 94.2                      | 100                        | (*)  | 6  |
| education              | Primary                                   | 39.6            | 49.2   | 6.6                             | 95.3                      | 946                        | (91.3)   | 44   |
|                        | Secondary +                               | 38.8            | 52.0   | 4.5                             | 95.3                      | 839                        | (100.0)  | 39   |
|                        | CET/ITVET/VO-<br>TEC                      | (*)             | (*)    | (*)                             | (*)                       | 14                         | (*)  | 4  |
|                        | Other                                     | (64.4)          | (35.6) | (0.0)                           | (100.0)                   | 47                         | (*)  | 0  |
| Wealth                 | Poorest                                   | 39.3            | 49.0   | 6.8                             | 95.1                      | 490                        | (*)  | 24   |
| index<br>quintiles     | Second                                    | 40.3            | 48.3   | 5.9                             | 94.5                      | 450                        | (*)  | 25   |
| quintiles              | Middle                                    | 39.2            | 51.0   | 5.0                             | 95.2                      | 407                        | (*)  | 20   |
|                        | Fourth                                    | 42.0            | 49.9   | 3.5                             | 95.4                      | 330                        | (*)  | 15   |
|                        | Richest                                   | 41.9            | 49.6   | 5.0                             | 96.5                      | 268                        | (*)  | 9  |
| Ethnicity              | Creole                                    | 32.3            | 55.9   | 5.7                             | 93.9                      | 379                        | (*)  | 23   |
| of house-<br>hold head | Mestizo                                   | 44.4            | 45.5   | 5.6                             | 95.4                      | 949                        | (90.7)   | 43   |
| noid nead              | Garifuna                                  | 39.4            | 43.5   | 9.0                             | 91.9                      | 105                        | (*)  | 9  |
|                        | Maya                                      | 37.8            | 53.8   | 5.4                             | 96.9                      | 288                        | (*)  | 9  |
|                        | Other                                     | 40.2            | 53.9   | 1.7                             | 95.8                      | 195                        | (*)  | 8  |
|                        | Missing/DK                                | (42.9)          | (47.1) | (7.4)                           | (97.4)                    | 31                         | (*)  | 1  |
| Total                  |   | 40.4            | 49.5   | 5.4                             | 95.2                      | 1946                       | 93.5   | 93   |

<sup>[1]</sup> MICS indicator 8.1

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

#### **Child Labour**

Article 32 of the Convention on the Rights of the Child states: "States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development..." The World Fit for Children mentions nine strategies to combat child labour and the MDGs call for the protection of children against exploitation. In the MICS questionnaire, a number of questions addressed the issue of child labour, that is, children 5-14 years of age involved in labour activities. A child is considered to be involved in child labour activities at the moment of the survey if during the week preceding the survey:

Ages 5-11: at least one hour of economic work or 28 hours of domestic work per week. Ages 12-14: at least 14 hours of economic work or 28 hours of domestic work per week.

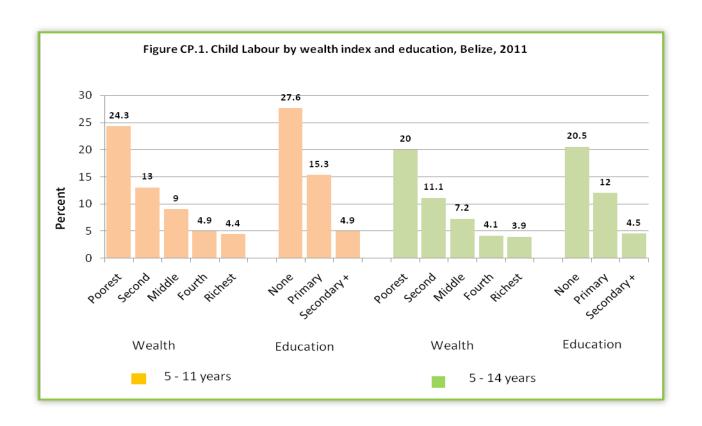
This definition allows differentiation between child labour and child work to identify the type of work that should be eliminated. As such, the estimate provided here is a minimum of the prevalence of child labour since some children may be involved in hazardous labour activities for a number of hours that could be less than the numbers specified in the criteria explained above. Table CP.2 presents the results of child labour by the type of work. Percentages do not add up to the total child labour as children may be involved in more than one type of work.

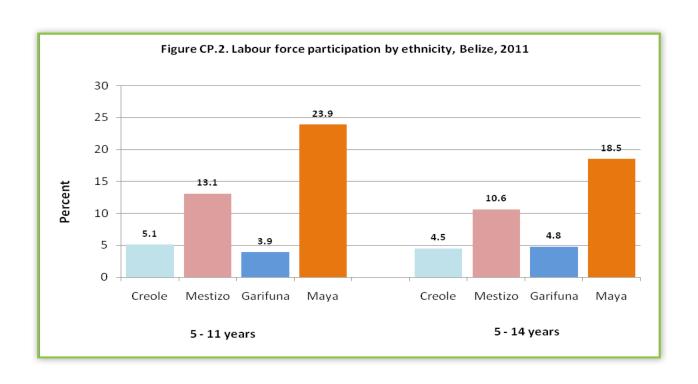
In Belize, 10 percent of children age 5 – 14 are involved in child labour. About twelve (12.1) percent of children 5 to 11 years and 4.8 percent of children 12 to 14 years are engaged in child labour. In both age groups males participate in child labour at higher rates than females. For the 5 to 11 years group the rates are males 14.6 percent and females 9.7 percent while for the 12 to 14 years group 7.0 percent of males and 2.8 percent of females engage in child labour. Most of the child labour occurs in rural areas. Overall, for children age 5 – 14, 4.1 percent work in urban areas while 13.8 percent of them work in rural areas.

It is clear that for all children 5 to 14 years child labour is linked to the wealth of the family and to the education of the mother (Figure CP.1). Children with more educated mothers and from wealthier families are less likely to engage in child labour.

Children from the Corozal and Toledo Districts are more likely to engage in child labour. For children 5-14, child labour rates are 16.6 percent in Corozal District and 15.9 percent in Toledo District. This compares with 4.5 percent in Belize District. Child labour participation rate for children 5 to 14 years is lowest in Belize City South Side at 4.0 percent.

Labour force activity is most pronounced for children from Mestizo and Maya households (Figure CP.2) an in either case is more prevalent for the younger children.





# Table CP.2: Child labour Percentage of children by involvement in economic activity and household chores during the past week, according to age groups, and percentage of children age 5-14 involved in child labour, Belize, 2011

|                   |  |              |                    | Percentage                  | of children ag                       | ge 5-11 involve                 | ed in                             |                 |                              |
|-------------------|--|--------------|--------------------|-----------------------------|--------------------------------------|---------------------------------|-----------------------------------|-----------------|------------------------------|
|                   |  | Ec           | onomic ac          |                             |                                      |                                 |                                   |                 |                              |
|                   |  |              | g outside<br>ehold |                             | Economic                             | Household                       | Household                         |                 | Number                       |
|                   |  | Paid<br>work | Unpaid<br>work     | Working for family business | activity for<br>at least one<br>hour | chores less<br>than 28<br>hours | chores for<br>28 hours or<br>more | Child<br>labour | of chil-<br>dren age<br>5-11 |
| Sex               | Male   | 2.6          | 1.4                | 12.1                        | 14.3                                 | 52.1                            | 0.4                               | 14.6            | 1448                         |
|                   | Female                                       | 1.8          | 1.2                | 7.6                         | 9.6                                  | 59.5                            | 0.1                               | 9.7             | 1439                         |
| Region            | Corozal                                      | 6.4          | 2.4                | 15.5                        | 21.2                                 | 60.5                            | 0.2                               | 21.5            | 362                          |
|                   | Orange Walk                                  | 1.3          | 0.6                | 4.3                         | 5.5                                  | 58.7                            | 0.4                               | 6.0             | 423                          |
|                   | Belize (Excluding Belize<br>City South Side) | 0.8          | 1.1                | 3.4                         | 4.8                                  | 42.3                            | 0.0                               | 4.8             | 403                          |
|                   | Belize City South Side                       | 3.1          | 0.0                | 2.8                         | 5.3                                  | 54.4                            | 0.0                               | 5.3             | 348                          |
|                   | Belize District                              | 1.9          | 0.6                | 3.1                         | 5.1                                  | 47.9                            | 0.0                               | 5.1             | 751                          |
|                   | Cayo   | 2.1          | 2.2                | 11.3                        | 13.3                                 | 61.2                            | 0.0                               | 13.3            | 657                          |
|                   | Stann Creek                                  | 1.2          | 0.7                | 12.9                        | 13.9                                 | 61.9                            | 0.9                               | 14.6            | 334                          |
|                   | Toledo                                       | 1.2          | 1.3                | 19.4                        | 20.2                                 | 48.4                            | 0.3                               | 20.4            | 359                          |
| Area              | Urban  | 1.4          | 0.9                | 2.3                         | 4.3                                  | 55.2                            | 0.1                               | 4.4             | 1122                         |
|                   | Rural  | 2.8          | 1.5                | 14.7                        | 16.8                                 | 56.2                            | 0.3                               | 17.0            | 1765                         |
| School partici-   | Yes  | 2.3          | 1.3                | 9.8                         | 11.9                                 | 56.8                            | 0.3                               | 12.1            | 2702                         |
| pation            | No   | 1.4          | 0.8                | 11.4                        | 13.3                                 | 41.1                            | 0.0                               | 13.3            | 184                          |
| Mother's edu-     | None   | 3.6          | 1.2                | 25.2                        | 27.2                                 | 59.0                            | 0.7                               | 27.6            | 219                          |
| cation            | Primary                                      | 3.2          | 1.2                | 12.9                        | 15.1                                 | 56.7                            | 0.2                               | 15.3            | 1547                         |
|                   | Secondary +                                  | 0.7          | 1.6                | 2.7                         | 4.9                                  | 54.1                            | 0.0                               | 4.9             | 1052                         |
|                   | Other  | (0.0)        | (0.0)              | (0.0)                       | (0.0)                                | (42.6)                          | (3.6)                             | (3.6)           | 52                           |
| Wealth index      | Poorest                                      | 2.6          | 1.1                | 22.2                        | 23.9                                 | 52.4                            | 0.6                               | 24.3            | 710                          |
| quintiles         | Second                                       | 4.5          | 0.6                | 10.6                        | 12.7                                 | 55.7                            | 0.3                               | 13.0            | 633                          |
|                   | Middle                                       | 1.4          | 2.3                | 6.0                         | 8.8                                  | 57.7                            | 0.2                               | 9.0             | 565                          |
|                   | Fourth                                       | 0.8          | 1.6                | 3.1                         | 4.9                                  | 62.1                            | 0.0                               | 4.9             | 514                          |
|                   | Richest                                      | 1.1          | 0.9                | 2.3                         | 4.4                                  | 51.5                            | 0.0                               | 4.4             | 465                          |
| Ethnicity of      | Creole                                       | 1.0          | 0.9                | 3.3                         | 5.1                                  | 56.6                            | 0.0                               | 5.1             | 647                          |
| household<br>head | Mestizo                                      | 2.6          | 1.8                | 10.4                        | 12.9                                 | 55.5                            | 0.3                               | 13.1            | 1407                         |
|                   | Garifuna                                     | 1.0          | 0.0                | 2.9                         | 3.9                                  | 59.2                            | 0.0                               | 3.9             | 159                          |
|                   | Maya   | 2.7          | 1.1                | 23.0                        | 23.7                                 | 52.5                            | 0.3                               | 23.9            | 395                          |
|                   | Other  | 2.3          | 0.7                | 7.1                         | 10.1                                 | 61.7                            | 0.8                               | 10.8            | 243                          |
|                   | Missing/DK                                   | (10.0)       | (0.0)              | (12.8)                      | (18.0)                               | (31.7)                          | (0.0)                             | (18.0)          | 36                           |
| Total             |  | 2.2          | 1.3                | 9.9                         | 11.9                                 | 55.8                            | 0.2                               | 12.1            | 2887                         |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Table CR2: Child labour [continued]

Percentage of children by involvement in economic activity and household chores during the past week, according to age groups, and percentage of children age 5-14 involved in child labour, Belize, 2011

|              |   |              | Perce                           | ntage of                    | children                             | age 12-1                               | 4 involv                                    | ed in                                       |                 |                                    |                                 |   |
|--------------|---|--------------|---------------------------------|-----------------------------|--------------------------------------|--|---|---|-----------------|------------------------------------|---------------------------------|---|
|              |   | Working      | onomic ac<br>g outside<br>ehold | Working for family business | Economic activity less than 14 hours | Economic activity for 14 hours or more | House-<br>hold<br>chores<br>less<br>than 28 | House-<br>hold<br>chores<br>for 28<br>hours | Child<br>labour | Number<br>of children<br>age 12-14 | Total<br>child<br>labour<br>[1] | Num-<br>ber of<br>children<br>age 5-14<br>years |
|              |   | Paid<br>work | Unpaid<br>work                  | business                    |                                      | more                                   | hours                                       | or more                                     |                 |                                    |                                 |   |
| Sex          | Male  | 9.0          | 1.9                             | 29.1                        | 29.2                                 | 5.6                                    | 71.7  | 1.5   | 7.0             | 570                                | 12.4                            | 2018  |
|              | Female  | 3.5          | 1.6                             | 13.6                        | 15.0                                 | 1.5                                    | 81.1  | 1.4   | 2.8             | 615                                | 7.6                             | 2054  |
| Region       | Corozal   | 12.5         | 3.5                             | 31.1                        | 34.5                                 | 4.4                                    | 78.4  | 1.9   | 5.8             | 163                                | 16.6                            | 52  |
|              | Orange Walk                                     | 4.0          | 0.0                             | 16.7                        | 15.0                                 | 3.4                                    | 72.6  | 7.8   | 11.2            | 158                                | 7.4                             | 58  |
|              | Belize (Excluding<br>Belize City<br>South Side) | 4.2          | 1.7                             | 5.0                         | 5.1                                  | 5.0                                    | 60.3  | 0.0   | 5.0             | 167                                | 4.9                             | 570   |
|              | Belize City<br>South Side                       | 5.8          | 1.4                             | 2.7                         | 7.9                                  | 0.7                                    | 83.2  | 0.0   | 0.7             | 140                                | 4.0                             | 488   |
|              | Belize<br>District                              | 4.9          | 1.6                             | 4.0                         | 6.4                                  | 3.0                                    | 70.7  | 0.0   | 3.0             | 306                                | 4.5                             | 1058  |
|              | Cayo  | 5.8          | 2.1                             | 26.9                        | 30.1                                 | 0.5                                    | 80.7  | 0.0   | 0.5             | 294                                | 9.4                             | 95  |
|              | Stann Creek                                     | 8.2          | 0.6                             | 29.4                        | 22.9                                 | 10.2                                   | 83.4  | 0.6   | 10.8            | 133                                | 13.5                            | 46  |
|              | Toledo  | 2.2          | 2.3                             | 32.2                        | 30.4                                 | 3.1                                    | 77.1  | 0.9   | 3.5             | 130                                | 15.9                            | 48  |
| Area         | Urban   | 4.8          | 1.7                             | 8.1                         | 10.2                                 | 3.0                                    | 77.2  | 0.3   | 3.3             | 460                                | 4.1                             | 158   |
|              | Rural   | 7.0          | 1.7                             | 29.3                        | 29.2                                 | 3.7                                    | 76.3  | 2.2   | 5.8             | 725                                | 13.8                            | 248   |
| School par-  | Yes   | 6.1          | 1.9                             | 20.5                        | 21.5                                 | 3.3                                    | 77.1  | 0.7   | 3.9             | 1100                               | 9.7                             | 380   |
| ticipation   | No  | 6.8          | 0.0                             | 27.9                        | 26.3                                 | 5.3                                    | 70.3  | 11.9  | 17.2            | 86                                 | 14.5                            | 27  |
| Mother's     | None  | 15.1         | 0.5                             | 42.1                        | 41.8                                 | 7.3                                    | 81.0  | 0.6   | 7.9             | 123                                | 20.5                            | 34  |
| education    | Primary   | 5.5          | 2.4                             | 25.9                        | 26.7                                 | 3.0                                    | 76.7  | 1.2   | 4.0             | 626                                | 12.0                            | 217   |
|              | Secondary +                                     | 4.5          | 1.3                             | 7.1                         | 8.4                                  | 2.8                                    | 76.6  | 0.6   | 3.5             | 399                                | 4.5                             | 145   |
|              | CET/ITVET/<br>VOTEC                             | (*)          | (*)                             | (*)                         | (*)                                  | (*)                                    | (*)   | (*)   | (*)             | 5                                  | (*)                             | 1   |
|              | Missing/DK                                      | (*)          | (*)                             | (*)                         | (*)                                  | (*)                                    | (*)   | (*)   | (*)             | 7                                  | (*)                             | 1:  |
|              | Other   | 6.7          | 0.0                             | 20.0                        | 16.6                                 | 6.7                                    | 50.6  | 26.5  | 33.2            | 25                                 | 13.3                            | 7   |
| Wealth       | Poorest   | 8.7          | 2.1                             | 45.9                        | 42.1                                 | 6.0                                    | 72.3  | 3.3   | 8.7             | 273                                | 20.0                            | 98  |
| index quin-  | Second  | 6.0          | 1.6                             | 24.5                        | 25.3                                 | 4.1                                    | 75.6  | 2.0   | 6.2             | 248                                | 11.1                            | 88  |
| tiles        | Middle  | 7.7          | 0.7                             | 13.2                        | 16.1                                 | 2.3                                    | 79.1  | 0.4   | 2.7             | 221                                | 7.2                             | 78  |
|              | Fourth  | 4.0          | 2.9                             | 8.3                         | 12.3                                 | 1.6                                    | 81.6  | 1.0   | 2.6             | 249                                | 4.1                             | 76  |
|              | Richest   | 3.8          | 1.1                             | 7.0                         | 7.4                                  | 2.7                                    | 74.8  | 0.0   | 2.7             | 193                                | 3.9                             | 65  |
| Ethnicity of | Creole  | 6.6          | 1.5                             | 9.6                         | 12.1                                 | 2.3                                    | 77.3  | 1.0   | 3.0             | 265                                | 4.5                             | 91  |
| household    | Mestizo   | 6.5          | 1.6                             | 23.2                        | 23.3                                 | 3.6                                    | 77.1  | 1.2   | 4.7             | 590                                | 10.6                            | 199   |
| head         | Garifuna  | 4.9          | 1.4                             | 12.3                        | 10.2                                 | 7.1                                    | 73.3  | 0.0   | 7.1             | 58                                 | 4.8                             | 21  |
|              | Maya  | 3.3          | 1.7                             | 41.0                        | 39.5                                 | 3.5                                    | 79.8  | 0.4   | 3.5             | 142                                | 18.5                            | 53  |
|              | Other   | 7.9          | 2.6                             | 16.6                        | 21.0                                 | 3.8                                    | 70.0  | 6.0   | 9.8             | 122                                | 10.5                            | 36  |
|              | Missing/DK                                      | (*)          | (*)                             | (*)                         | (*)                                  | (*)                                    | (*)   | (*)   | (*)             | 8                                  | (14.6)                          | 4   |
| Total        |   | 6.1          | 1.7                             | 21.1                        | 21.8                                 | 3.5                                    | 76.6  | 1.5   | 4.8             | 1185                               | 10.0                            | 407   |

<sup>[1]</sup> MICS indicator 8.2

Table CP.3 presents the percentage of children age 5-14 years involved in child labour who are attending school and percentage of children age 5-14 years attending school who are involved in child labour. Of the 93.4 percent of the children 5-14 years of age attending school, 9.7 percent are also involved in child labour

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

activities. On the other hand, out of the 10.0 percent of the children who are involved in child labour, the majority of them are also attending school (90.4 percent).

The percentage of children attending school who are involved in child labour is higher for males (12.2 percent) than for females (7.2 percent). Profiles for child labourers and school attendance correspond to those for the child labourers discussed in previous sections. Hence, the children attending school who are involved in child labour are predominantly male, from rural areas, younger (5 to 11 years), have mothers that are less educated and from poorer families. Mestizo and Maya stand out as having the highest levels of child labour.

Table CP.3: Child labour and school attendance
Percentage of children age 5-14 years involved in child labour who are attending school, and percentage of children age 5-14 years
attending school who are involved in child labour, Belize, 2011

|              |   | Percentage<br>of children<br>involved in<br>child labour | Percentage of<br>children at-<br>tending school | Number<br>of children<br>age 5-14<br>years | Percentage of<br>child labourers<br>who are attend-<br>ing school [1] | Number of<br>children age<br>5-14 years<br>involved in<br>child labour | Percentage of<br>children attending<br>school who are<br>involved in child<br>labour [2] | Number of<br>children age<br>5-14 years<br>attending<br>school |
|--------------|---|--|---|--|---|--|--|--|
| Sex          | Male  | 12.4   | 93.7  | 2018                                       | 92.2  | 251  | 12.2   | 1891   |
|              | Female  | 7.6  | 93.0  | 2054                                       | 87.5  | 157  | 7.2  | 1911   |
| Region       | Corozal   | 16.6   | 90.8  | 525  | 87.3  | 87   | 16.0   | 477  |
|              | Orange Walk                                     | 7.4  | 85.1  | 581  | 67.6  | 43   | 5.9  | 495  |
|              | Belize (Excluding<br>Belize City South<br>Side) | 4.9  | 97.3  | 570  | 88.8  | 28   | 4.4  | 555  |
|              | Belize City South<br>Side                       | 4.0  | 97.7  | 488  | 100.0   | 20   | 4.1  | 476  |
|              | Belize District                                 | 4.5  | 97.5  | 1058                                       | 93.4  | 47   | 4.3  | 1031   |
|              | Cayo  | 9.4  | 95.2  | 952  | 96.7  | 89   | 9.5  | 906  |
|              | Stann Creek                                     | 13.5   | 95.7  | 467  | 93.7  | 63   | 13.2   | 447  |
|              | Toledo  | 15.9   | 91.4  | 489  | 94.7  | 78   | 16.5   | 447  |
| Area         | Urban   | 4.1  | 97.0  | 1582                                       | 96.5  | 65   | 4.1  | 1534   |
|              | Rural   | 13.8   | 91.1  | 2489                                       | 89.2  | 342  | 13.5   | 2268   |
| Age          | 5-11 years                                      | 12.1   | 93.6  | 2887                                       | 93.0  | 351  | 12.1   | 2702   |
|              | 12-14 years                                     | 4.8  | 92.8  | 1185                                       | 74.3  | 57   | 3.9  | 1100   |
| Mother's     | None  | 20.5   | 77.5  | 342  | 72.9  | 70   | 19.2   | 265  |
| education    | Primary   | 12.0   | 94.1  | 2173                                       | 96.1  | 261  | 12.3   | 2045   |
|              | Secondary +                                     | 4.5  | 97.9  | 1450                                       | 97.4  | 65   | 4.4  | 1420   |
|              | CET/ITVET/VOTEC                                 | (*)  | (*)   | 18   | (*)   | 1  | (*)  | 18   |
|              | Missing/DK                                      | (*)  | (*)   | 12   | (*)   | 0  | (*)  | 12   |
|              | Other   | (13.3)   | (54.5)  | 77   | (18.2)  | 10   | (4.4)  | 42   |
| Wealth       | Poorest   | 20.0   | 85.9  | 983  | 86.3  | 196  | 20.1   | 845  |
| index quin-  | Second  | 11.1   | 92.8  | 882  | 90.8  | 97   | 10.8   | 818  |
| tiles        | Middle  | 7.2  | 95.6  | 786  | 100.0   | 57   | 7.6  | 751  |
|              | Fourth  | 4.1  | 97.8  | 763  | 97.2  | 31   | 4.1  | 746  |
|              | Richest   | 3.9  | 97.5  | 658  | 90.2  | 26   | 3.6  | 642  |
| Ethnicity of | Creole  | 4.5  | 97.9  | 913  | 97.9  | 41   | 4.5  | 894  |
| household    | Mestizo   | 10.6   | 94.6  | 1997                                       | 94.8  | 212  | 10.7   | 1889   |
| head         | Garifuna  | 4.8  | 96.2  | 217  | 100.0   | 10   | 4.9  | 209  |
|              | Maya  | 18.5   | 93.1  | 537  | 94.2  | 99   | 18.7   | 500  |
|              | Other   | 10.5   | 73.6  | 364  | 43.7  | 38   | 6.2  | 268  |
|              | Missing/DK                                      | (14.6)   | (94.3)  | 44   | (100.0)   | 6  | (15.5)   | 42   |
| Total        |   | 10.0   | 93.4  | 4072                                       | 90.4  | 408  | 9.7  | 3802   |

[1] MICS indicator 8.3 [2] MICS indicator 8.4

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

#### **Child Discipline**

As stated in A World Fit for Children, "children must be protected against any acts of violence ..." and the Millennium Declaration calls for the protection of children against abuse, exploitation and violence. In the Belize MICS survey, mothers/caretakers of children age 2-14 years were asked a series of questions on the ways parents tend to use to discipline their children when they misbehave. Note that for the child discipline module, one child aged 2-14 per household was selected randomly during fieldwork. Out of these questions, the two indicators used to describe aspects of child discipline are: 1) the number of children 2-14 years that experience psychological aggression as punishment or minor physical punishment or severe physical punishment; and 2) the number of parents/caretakers of children 2-14 years of age that believe that in order to raise their children properly, they need to physically punish them.

Table CP.4: Child discipline
Percentage of children age 2-14 years according to method of disciplining the child, Belize, 2011

|                        |   | Percen       | tage of children |              |            | cperienced:      |              | Respondent be-        | Respon-     |
|------------------------|---|--------------|------------------|--------------|------------|------------------|--------------|-----------------------|-------------|
|                        |   | Only         |                  | Physical     | •          | Any violent      | Number of    | lieves that the child | dents to    |
|                        |   | non-violent  | Psychological    | me           |            | discipline meth- | children age | needs to be physi-    | the child   |
|                        |   | discipline   | aggression       | Any          | Severe     | od [1]           | 2-14 years   | cally punished        | discipline  |
| Sex                    | Male  | 22.5         | 53.5             | 58.4         | 5.2        | 71.3             | 2596         | 26.7                  | 1211        |
|                        | Female  | 24.5         | 54.2             | 55.4         | 5.2        | 69.7             | 2635         | 25.6                  | 1224        |
| Region                 | Corozal   | 26.5         | 42.8             | 56.0         | 4.2        | 66.1             | 675          | 10.6                  | 314         |
|                        | Orange Walk                                     | 34.6         | 42.1             | 48.1         | 5.3        | 59.7             | 755          | 36.5                  | 352         |
|                        | Belize (Excluding<br>Belize City South<br>Side) | 19.8         | 66.6             | 53.8         | 4.4        | 75.7             | 723          | 39.0                  | 377         |
|                        | Belize City South<br>Side                       | 17.7         | 62.8             | 65.4         | 3.9        | 76.0             | 646          | 24.3                  | 332         |
|                        | <b>Belize District</b>                          | 18.8         | 64.8             | 59.3         | 4.2        | 75.9             | 1369         | 32.1                  | 709         |
|                        | Cayo  | 24.8         | 46.9             | 53.5         | 3.6        | 65.8             | 1201         | 27.0                  | 559         |
|                        | Stann Creek                                     | 21.6         | 51.5             | 65.0         | 10.3       | 74.8             | 599          | 19.3                  | 255         |
|                        | Toledo  | 16.6         | 71.5             | 62.2         | 6.8        | 81.4             | 631          | 19.3                  | 246         |
| Area                   | Urban   | 23.2         | 55.0             | 56.6         | 5.4        | 70.2             | 2022         | 26.0                  | 1068        |
|                        | Rural   | 23.7         | 53.1             | 57.1         | 5.1        | 70.7             | 3209         | 26.3                  | 1368        |
| Age                    | 2-4 years                                       | 21.0         | 48.3             | 61.4         | 3.3        | 70.6             | 1018         | 22.0                  | 547         |
|                        | 5-9 years                                       | 23.2         | 53.7             | 61.9         | 5.6        | 72.1             | 2129         | 28.0                  | 917         |
|                        | 10-14 years                                     | 25.0         | 56.7             | 49.7         | 5.8        | 68.8             | 2084         | 26.7                  | 971         |
| Education of           | None  | 27.5         | 48.4             | 51.7         | 5.6        | 60.9             | 415          | na                    | na          |
| household              | Primary   | 22.4         | 54.8             | 58.2         | 5.3        | 72.0             | 2692         | na                    | na          |
| head                   | Secondary +                                     | 22.2         | 56.0             | 58.0         | 4.7        | 72.2             | 1878         | na                    | na          |
|                        | CET/ITVET/VOTEC                                 | (40.4)       | (37.8)           | (41.5)       | (8.9)      | (59.6)           | 55           | na                    | na          |
|                        | Missing/DK                                      | 34.6         | 46.7             | 51.8         | 13.2       | 62.3             | 82           | na                    | na          |
|                        | Other   | 42.4         | 27.8             | 37.1         | 4.3        | 52.8             | 109          | na                    | na          |
| Respondent's           | None  | na           | na               | na           | na         | na               | na           | 24.2                  | 511         |
| education              | Primary   | na           | na               | na           | na         | na               | na           | 26.8                  | 1168        |
|                        | Secondary +                                     | na           | na               | na           | na         | na               | na           | 26.7                  | 716         |
|                        | Missing/DK                                      | na           | na               | na           | na         | na               | na           | (23.1)                | 41          |
| Wealth index           | Poorest   | 21.1         | 55.9             | 63.4         | 5.7        | 74.3             | 1275         | 28.7                  | 436         |
| quintiles              | Second  | 22.9         | 52.5             | 57.7         | 6.3        | 70.6             | 1151         | 29.6                  | 499         |
|                        | Middle  | 21.3         | 59.6             | 57.7         | 5.2        | 72.0             | 1032         | 24.4                  | 497         |
|                        | Fourth  | 23.3         | 52.2             | 55.0         | 4.9        | 70.0             | 954          | 23.1                  | 509         |
|                        | Richest   | 31.2         | 47.3             | 47.0         | 3.4        | 63.0             | 819          | 25.3                  | 494         |
| Estantate and          |   |              |                  |              |            |                  |              |                       |             |
| Ethnicity of household | Creole<br>Mestizo                               | 16.2<br>28.2 | 67.4<br>47.3     | 64.7<br>52.2 | 5.2<br>4.0 | 80.0<br>64.7     | 1161<br>2537 | 27.8<br>24.6          | 577<br>1216 |
| head                   | Garifuna  | 19.5         | 47.3<br>58.4     | 65.4         | 13.6       | 77.8             | 2537         | 24.6                  | 130         |
|                        | Maya  | 15.4         | 61.5             | 66.3         | 8.8        | 77.8             | 715          | 24.1<br>25.3          | 272         |
|                        | Other   | 29.3         | 44.1             | 44.3         | 1.9        | 63.2             | 478          | 33.4                  | 203         |
|                        | Missing/DK                                      | 34.0         | 37.4             | 54.5         | 1.3        | 61.7             | 64           | (25.5)                | 37          |
| Total                  | ioonig/Dit                                      | 23.5         | 53.9             | 56.9         | 5.2        | 70.5             | 5231         | 26.2                  | 2436        |

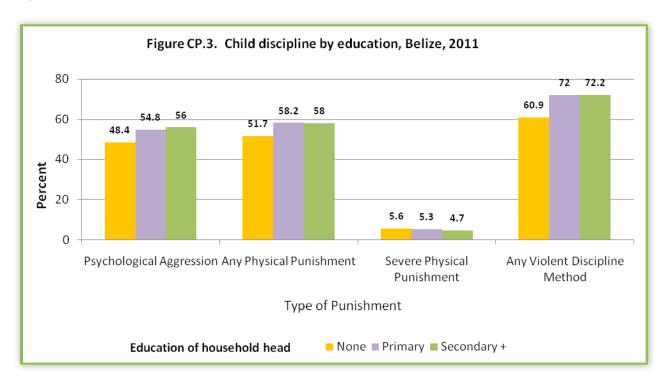
<sup>[1]</sup> MICS indicator 8.5

<sup>( )</sup> Figures that are based on 25-49 un-weighted cases;

na refers to variables that are not applicable

In Belize, 70.5 percent of children age 2-14 years were subjected to at least one form of psychological or physical punishment by their mothers/caretakers or other household members (Table CP.4). More importantly, 5.2 percent of children were subjected to severe physical punishment. On the other hand, 26.2 percent of mothers/caretakers believed that children should be physically punished. This is an interesting contrast with the actual prevalence of physical discipline (56.9 percent).

Male and female children were equally likely to be subjected to both minor and severe physical discipline (males 58.4 and 5.2 percent and female 55.4 and 5.2 percent. It is interesting to note that increased respondent's education correlates positively with both psychological and physical forms of discipline (Figure CP.3). Also rates for psychological discipline increase with increasing age of the child (48.3 percent for children aged 2 to 4 years up to 56.7 percent for children aged 10 to 14 years). Differentials with respect to many of the background variables were relatively small.



#### **Early Marriage and Polygyny**

Marriage before the age of 18 is a reality for many young girls. According to UNICEF's worldwide estimates, over 64 million women age 20-24 were married/in union before the age of 18. Factors that influence child marriage rates include: the state of the country's civil registration system, which provides proof of age for children; the existence of an adequate legislative framework with an accompanying enforcement mechanism to address cases of child marriage; and the existence of customary or religious laws that condone the practice.

In many parts of the world parents encourage the marriage of their daughters while they are still children in hopes that the marriage will benefit them both financially and socially, while also relieving financial burdens on the family. In actual fact, child marriage is a violation of human rights, compromising the development of girls and often resulting in early pregnancy and social isolation, with little education and poor vocational training reinforcing the gendered nature of poverty. The right to 'free and full' consent to a marriage is

recognized in the Universal Declaration of Human Rights - with the recognition that consent cannot be 'free and full' when one of the parties involved is not sufficiently mature to make an informed decision about a life partner.

The Convention on the Elimination of all Forms of Discrimination against Women mentions the right to protection from child marriage in article 16, which states: "The betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage..." While marriage is not considered directly in the Convention on the Rights of the Child, child marriage is linked to other rights - such as the right to express their views freely, the right to protection from all forms of abuse, and the right to be protected from harmful traditional practices - and is frequently addressed by the Committee on the Rights of the Child. Other international agreements related to child marriage are the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages and the African Charter on the Rights and Welfare of the Child and the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa. Child marriage was also identified by the Pan-African Forum against the Sexual Exploitation of Children as a type of commercial sexual exploitation of children.

Young married girls are a unique, though often invisible, group. Required to perform heavy amounts of domestic work, under pressure to demonstrate fertility, and responsible for raising children while still children themselves, married girls and child mothers face constrained decision-making and reduced life choices. Boys are also affected by child marriage but the issue impacts girls in far larger numbers and with more intensity. Cohabitation - when a couple lives together as if married - raises the same human rights concerns as marriage. Where a girl lives with a man and takes on the role of caregiver for him, the assumption is often that she has become an adult woman, even if she has not yet reached the age of 18. Additional concerns due to the informality of the relationship - for example, inheritance, citizenship and social recognition - might make girls in informal unions vulnerable in different ways than those who are in formally recognized marriages.

Research suggests that many factors interact to place a child at risk of marriage. Poverty, protection of girls, family honour and the provision of stability during unstable social periods are considered as significant factors in determining a girl's risk of becoming married while still a child. Women who married at younger ages were more likely to believe that it is sometimes acceptable for a husband to beat his wife and were more likely to experience domestic violence themselves. The age gap between partners is thought to contribute to these abusive power dynamics and to increase the risk of untimely widowhood.

Closely related to the issue of child marriage is the age at which girls become sexually active. Women who are married before the age of 18 tend to have more children than those who marry later in life. Pregnancy related deaths are known to be a leading cause of mortality for both married and unmarried girls between the ages of 15 and 19, particularly among the youngest of this cohort. There is evidence to suggest that girls who marry at young ages are more likely to marry older men which puts them at increased risk of HIV infection. Parents seek to marry off their girls to protect their honour, and men often seek younger women as wives as a means to avoid choosing a wife who might already be infected. The demand for this young wife to reproduce and the power imbalance resulting from the age differential lead to very low condom use among such couples.

Two of the indicators are to estimate the percentage of women married before 15 years of age and percentage married before 18 years of age. The percentage of women married at various ages is provided in Table CP.5.

About one in seven young women age 15-19 years is currently married or in a union (15.2 percent). This proportion also varies between urban (10.8 percent) and rural (18.9 percent). Increasing level of education and wealth both correlate negatively with children married before age 15 years. The percentage of women age 15-19 currently married is highest in poorest families (21.9 percent) and declines with household wealth to 4.8 percent in the richest families.

Table CP.5: Early marriage and polygyny

Percentage of women age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of women age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of women age 15-19 years currently married or in union, and the percentage of women currently married or in union who are in a polygynous marriage or union, Belize, 2011

|              |   | Percentage<br>married<br>before age<br>15 [1] | Number<br>of women<br>age 15-49<br>years | Percentage<br>married<br>before age<br>15 | Percentage<br>married<br>before age<br>18 [2] | Number<br>of women<br>age 20-49<br>years | Percentage of<br>women 15-19<br>years current-<br>ly married/in<br>union [3] | Number<br>of women<br>age 15-19<br>years | Percentage<br>of women<br>age 15-49<br>years in<br>polygynous<br>marriage/<br>union [4] | Number of<br>women age<br>15-49 years<br>currently<br>married/in<br>union |
|--------------|---|---|--|---|---|--|--|--|---|---|
| Region       | Corozal   | 5.5   | 534                                      | 6.7                                       | 35.2  | 427                                      | 17.0   | 107                                      | 7.7   | 346   |
|              | Orange Walk                                     | 4.4   | 618                                      | 5.1                                       | 31.0  | 481                                      | 17.2   | 137                                      | 0.7   | 373   |
|              | Belize (Excluding<br>Belize City South<br>Side) | 5.1   | 687                                      | 6.2                                       | 26.5  | 548                                      | 11.7   | 139                                      | 2.0   | 369   |
|              | Belize City South<br>Side                       | 3.4   | 573                                      | 4.1                                       | 21.6  | 467                                      | 7.1  | 106                                      | 3.7   | 257   |
|              | Belize District                                 | 4.3   | 1260                                     | 5.2                                       | 24.2  | 1014                                     | 9.7  | 245                                      | 2.7   | 625   |
|              | Cayo  | 2.5   | 933                                      | 2.7                                       | 27.0  | 737                                      | 17.3   | 196                                      | 5.2   | 601   |
|              | Stann Creek                                     | 7.7   | 404                                      | 8.2                                       | 28.0  | 327                                      | 17.3   | 77                                       | 0.7   | 225   |
|              | Toledo  | 9.1   | 347                                      | 11.1                                      | 45.5  | 265                                      | 19.0   | 82                                       | 1.8   | 217   |
| Area         | Urban   | 3.4   | 1926                                     | 4.1                                       | 24.3  | 1542                                     | 10.8   | 383                                      | 4.1   | 991   |
|              | Rural   | 6.1   | 2170                                     | 7.0                                       | 34.0  | 1710                                     | 18.9   | 461                                      | 3.0   | 1395  |
| Age          | 15-19   | 1.7   | 844                                      | na  | na  | na                                       | 15.2   | 844                                      | 3.3   | 128   |
|              | 20-24   | 3.4   | 720                                      | 3.4                                       | 25.9  | 720                                      | na   | na                                       | 4.1   | 369   |
|              | 25-29   | 5.8   | 651                                      | 5.8                                       | 31.6  | 651                                      | na   | na                                       | 1.9   | 488   |
|              | 30-34   | 7.2   | 544                                      | 7.2                                       | 32.1  | 544                                      | na   | na                                       | 2.9   | 407   |
|              | 35-39   | 5.9   | 537                                      | 5.9                                       | 29.0  | 537                                      | na   | na                                       | 4.6   | 417   |
|              | 40-44   | 5.8   | 442                                      | 5.8                                       | 27.9  | 442                                      | na   | na                                       | 4.8   | 323   |
|              | 45-49   | 6.8   | 359                                      | 6.8                                       | 30.7  | 359                                      | na   | na                                       | 2.9   | 254   |
| Education    | None  | 8.9   | 148                                      | 9.4                                       | 46.1  | 139                                      | (*)  | 9  | 0.7   | 119   |
|              | Primary   | 9.3   | 1608                                     | 10.1                                      | 43.5  | 1388                                     | 32.9   | 220                                      | 4.0   | 1165  |
|              | Secondary +                                     | 1.5   | 2259                                     | 1.8                                       | 17.0  | 1661                                     | 9.1  | 598                                      | 3.2   | 1056  |
|              | CET/ITVET/VOTEC                                 | (*)   | 26                                       | (*)                                       | (*)   | 22                                       | (*)  | 4  | (*)   | 13  |
|              | Other   | 1.3   | 55                                       | 1.7                                       | 5.7   | 41                                       | (*)  | 14                                       | (0.0)   | 34  |
| Wealth       | Poorest   | 8.9   | 644                                      | 11.0                                      | 44.8  | 485                                      | 21.9   | 160                                      | 2.4   | 409   |
| index quin-  | Second  | 7.5   | 815                                      | 8.5                                       | 39.8  | 648                                      | 28.5   | 167                                      | 4.0   | 498   |
| tiles        | Middle  | 4.0   | 877                                      | 4.9                                       | 28.1  | 684                                      | 13.6   | 192                                      | 4.5   | 484   |
|              | Fourth  | 3.5   | 862                                      | 4.3                                       | 26.3  | 704                                      | 7.1  | 159                                      | 2.0   | 494   |
|              | Richest   | 1.5   | 898                                      | 1.4                                       | 14.2  | 731                                      | 4.8  | 167                                      | 4.2   | 501   |
| Ethnicity of | Creole  | 2.6   | 985                                      | 3.0                                       | 23.4  | 794                                      | 8.2  | 190                                      | 3.4   | 493   |
| household    | Mestizo   | 6.0   | 2046                                     | 7.0                                       | 33.6  | 1615                                     | 19.4   | 431                                      | 3.1   | 1262  |
| head         | Garifuna  | 3.3   | 253                                      | 4.0                                       | 19.5  | 209                                      | 4.3  | 44                                       | 7.7   | 120   |
|              | Maya  | 7.7   | 407                                      | 9.4                                       | 42.4  | 309                                      | 20.8   | 98                                       | 4.0   | 272   |
|              | Other (=  | 2.5   | 335                                      | 3.2                                       | 17.9  | 266                                      | 8.2  | 69                                       | 1.7   | 198   |
|              | Missing/DK                                      | 1.2   | 70                                       | 1.4                                       | 14.0  | 58                                       | 6.6  | 11                                       | (8.1)   | 41  |
| Total        |   | 4.8   | 4096                                     | 5.6                                       | 29.4  | 3252                                     | 15.2   | 844                                      | 3.4   | 2386  |

<sup>[1]</sup> MICS indicator 8.6

<sup>[2]</sup> MICS indicator 8.7

<sup>[3]</sup> MICS indicator 8.8

<sup>[4]</sup> MICS indicator 8.9

<sup>( )</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases; na refers to variables that are not applicable

The percentage of women in a polygynous union is also provided in Table CP.5. About 3.4 percent of women between the ages of 15 and 49 years are in a polygynous marriage or union.

Table CP.6 presents the proportion of women who were first married or entered into a marital union before age 15 and 18 by area and age groups. Examining the percentages married before age 15 and 18 by different age groups allow us to see the trends in early marriage over time (Figure CP.4).

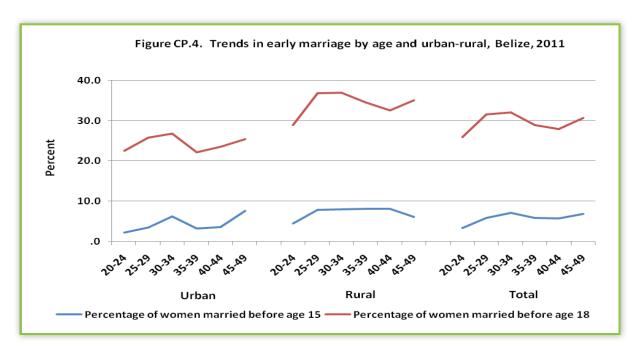


Table CP.6: Trends in early marriage
Percentage of women who were first married or entered into a marital union before age 15 and 18, by area and age groups,
Belize, 2011

|       | 201120/2011                               |                                      |  |                                      |  |                                      |   |                                      |  |                                      |  |                                      |
|-------|---|--------------------------------------|--|--------------------------------------|--|--------------------------------------|---|--------------------------------------|--|--------------------------------------|--|--------------------------------------|
|       |   | Ur                                   | ban  |                                      |  | Rur                                  | al  |                                      | All  |                                      |  |                                      |
| Age   | Percentage of women married before age 15 | Number<br>of wom-<br>en age<br>15-49 | Percent-<br>age of<br>women<br>married<br>before age<br>18 | Number<br>of wom-<br>en age<br>20-49 | Percent-<br>age of<br>women<br>married<br>before age<br>15 | Number<br>of wom-<br>en age<br>15-49 | Percentage of women married before age 18 | Number<br>of wom-<br>en age<br>20-49 | Percent-<br>age of<br>women<br>married<br>before age<br>15 | Number<br>of wom-<br>en age<br>15-49 | Percent-<br>age of<br>women<br>married<br>before age<br>18 | Number<br>of wom-<br>en age<br>20-49 |
| 15-19 | 0.4                                       | 383                                  | na   | na                                   | 2.8  | 461                                  | na  | na                                   | 1.7  | 844                                  | na   | na                                   |
| 20-24 | 2.2                                       | 343                                  | 22.6   | 343                                  | 4.5  | 377                                  | 29.0                                      | 377                                  | 3.4  | 720                                  | 25.9   | 720                                  |
| 25-29 | 3.5                                       | 307                                  | 25.8   | 307                                  | 7.9  | 344                                  | 36.8                                      | 344                                  | 5.8  | 651                                  | 31.6   | 651                                  |
| 30-34 | 6.2                                       | 257                                  | 26.8   | 257                                  | 8.0  | 287                                  | 36.9                                      | 287                                  | 7.2  | 544                                  | 32.1   | 544                                  |
| 35-39 | 3.2                                       | 242                                  | 22.1   | 242                                  | 8.1  | 295                                  | 34.6                                      | 295                                  | 5.9  | 537                                  | 29.0   | 537                                  |
| 40-44 | 3.6                                       | 230                                  | 23.6   | 230                                  | 8.1  | 212                                  | 32.6                                      | 212                                  | 5.8  | 442                                  | 27.9   | 442                                  |
| 45-49 | 7.6                                       | 165                                  | 25.5   | 165                                  | 6.1  | 194                                  | 35.1                                      | 194                                  | 6.8  | 359                                  | 30.7   | 359                                  |
| Total | 3.4                                       | 1926                                 | 24.3   | 1542                                 | 6.1  | 2170                                 | 34.0                                      | 1710                                 | 4.8  | 4096                                 | 29.4   | 3252                                 |

na refers to variables that are not applicable

Another component is the spousal age difference with an indicator being the percentage of married/in union women with a difference of 10 or more years younger than their current spouse. Table CP.7 presents the results of the age difference between husbands and wives. The results show that there are some important spousal age differences in Belize. About one in six women age 20-24 is currently married to a man who is older by ten years or more (15.4 percent), and about one in six women age 15-19 are currently married to men who are older by ten years or more (17.0 percent).

# Table CP.7: Spousal age difference Percent distribution of women currently married/in union age 15-19 according to the age difference with their husband or partner, Belize, 2011

|                    |   | Percentage | e of currently     |                    | union women a          | age 15-19 years whose            | husband | North or of common   |
|--------------------|---|------------|--------------------|--------------------|------------------------|----------------------------------|---------|--|
|                    |   | Younger    | 0-4 years<br>older | 5-9 years<br>older | 10+ years<br>older [1] | Husband/partner's<br>age unknown | Total   | Number of women<br>age 15-19 years<br>currently married/<br>in union |
| Region             | Corozal   | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 18   |
|                    | Orange Walk                                     | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 23   |
|                    | Belize (Excluding<br>Belize City South<br>Side) | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 16   |
|                    | Belize City South<br>Side                       | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 8  |
|                    | Belize District                                 | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 24   |
|                    | Cayo  | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 34   |
|                    | Stann Creek                                     | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 13   |
|                    | Toledo  | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 16   |
| Area               | Urban   | (2.0)      | (42.6)             | (31.3)             | (24.2)                 | (0.0)                            | 100.0   | 41   |
|                    | Rural   | 6.1        | 44.3               | 32.1               | 13.6                   | 4.0                              | 100.0   | 87   |
| Age                | 15-19   | 4.8        | 43.8               | 31.8               | 17.0                   | 2.7                              | 100.0   | 128  |
| Education          | None  | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 2  |
|                    | Primary   | 5.9        | 40.2               | 36.0               | 15.5                   | 2.5                              | 100.0   | 72   |
|                    | Secondary +                                     | (3.4)      | (49.9)             | (27.2)             | (18.1)                 | (1.4)                            | 100.0   | 54   |
| Wealth             | Poorest   | (7.3)      | (44.4)             | (32.1)             | (10.1)                 | (6.1)                            | 100.0   | 35   |
| index<br>quintiles | Second  | (5.7)      | (39.3)             | (28.9)             | (25.0)                 | (1.2)                            | 100.0   | 48   |
|                    | Middle  | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 26   |
|                    | Fourth  | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 11   |
|                    | Richest   | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 8  |
| Ethnicity of       | Creole  | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 16   |
| household<br>head  | Mestizo   | 4.1        | 47.7               | 32.5               | 13.9                   | 1.8                              | 100.0   | 84   |
|                    | Garifuna  | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 2  |
|                    | Maya  | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 20   |
|                    | Other   | (*)        | (*)                | (*)                | (*)                    | (*)                              | 100.0   | 6  |
| Total              |   | 4.8        | 43.8               | 31.8               | 17.0                   | 2.7                              | 100.0   | 128  |

<sup>[1]</sup> MICS indicator 8.10a

153

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Table CP.7: Spousal age difference [continued]

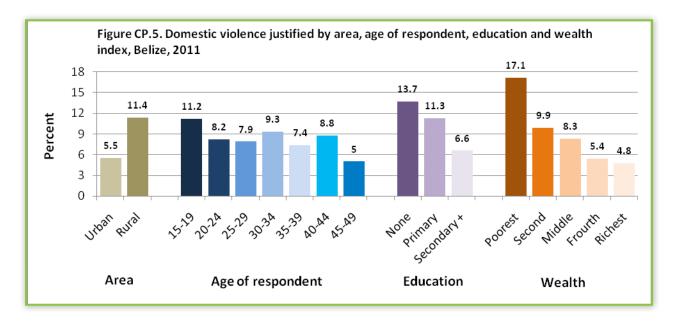
Percent distribution of women currently married/in union age 20-24 years according to the age difference with their husband or partner, Belize, 2011

|                   |   | I          | partition          | er, belize, zui               | '                            |                                      |         | I   |
|-------------------|---|------------|--------------------|-------------------------------|------------------------------|--------------------------------------|---------|---|
|                   |   | Percentage | of currently r     | married/in unio<br>band or pa | n women age 20<br>artner is: | 0-24 years who                       | se hus- |   |
|                   |   | Younger    | 0-4 years<br>older | 5-9 years<br>older            | 10+ years<br>older [2]       | Husband/<br>partner's age<br>unknown | Total   | Number of wom-<br>en age 20-24<br>years currently<br>married/in union |
| Region            | Corozal   | (8.7)      | (51.5)             | (25.3)                        | (13.2)                       | (1.3)                                | 100.0   | 50  |
|                   | Orange Walk                                     | 13.3       | 51.8               | 20.8                          | 11.7                         | 2.4                                  | 100.0   | 73  |
|                   | Belize (Excluding<br>Belize City South<br>Side) | (14.9)     | (42.9)             | (32.8)                        | (9.3)                        | (0.0)                                | 100.0   | 50  |
|                   | Belize City South<br>Side                       | (18.8)     | (44.5)             | (13.6)                        | (23.2)                       | (0.0)                                | 100.0   | 41  |
|                   | Belize District                                 | 16.6       | 43.6               | 24.2                          | 15.6                         | 0.0                                  | 100.0   | 91  |
|                   | Cayo  | 13.2       | 54.6               | 17.2                          | 15.0                         | 0.0                                  | 100.0   | 83  |
|                   | Stann Creek                                     | (2.9)      | (51.3)             | (18.5)                        | (27.3)                       | (0.0)                                | 100.0   | 33  |
|                   | Toledo  | (6.9)      | (53.2)             | (20.3)                        | (14.9)                       | (4.7)                                | 100.0   | 38  |
| Area              | Urban   | 17.1       | 50.2               | 17.5                          | 14.8                         | 0.4                                  | 100.0   | 152   |
|                   | Rural   | 8.3        | 50.6               | 23.7                          | 15.8                         | 1.6                                  | 100.0   | 217   |
| Age               | 15-19   | na         | na                 | na                            | na                           | na                                   | na      | na  |
|                   | 20-24   | 11.9       | 50.5               | 21.2                          | 15.4                         | 1.1                                  | 100.0   | 369   |
| Education         | None  | (*)        | (*)                | (*)                           | (*)                          | (*)                                  | 100.0   | 10  |
|                   | Primary   | 8.3        | 41.8               | 28.7                          | 19.8                         | 1.3                                  | 100.0   | 156   |
|                   | Secondary +                                     | 13.4       | 56.1               | 16.8                          | 12.6                         | 1.1                                  | 100.0   | 192   |
|                   | CET/ITVET/VOTEC                                 | 45.0       | 26.1               | 28.9                          | 0.0                          | 0.0                                  | 100.0   | 3   |
|                   | Other   | (*)        | (*)                | (*)                           | (*)                          | (*)                                  | 100.0   | 7   |
| Wealth index      | Poorest   | 12.7       | 55.5               | 17.8                          | 12.3                         | 1.7                                  | 100.0   | 72  |
| quintiles         | Second  | 8.4        | 48.2               | 29.7                          | 12.8                         | 0.8                                  | 100.0   | 104   |
|                   | Middle  | 18.6       | 36.3               | 22.1                          | 22.0                         | 1.0                                  | 100.0   | 88  |
|                   | Fourth  | 13.1       | 64.4               | 11.9                          | 10.7                         | 0.0                                  | 100.0   | 68  |
|                   | Richest   | (1.5)      | (55.2)             | (18.6)                        | (21.4)                       | (3.3)                                | 100.0   | 37  |
| Ethnicity of      | Creole  | 14.9       | 46.9               | 16.1                          | 22.1                         | 0.0                                  | 100.0   | 72  |
| household<br>head | Mestizo   | 10.7       | 49.5               | 22.7                          | 15.4                         | 1.6                                  | 100.0   | 188   |
|                   | Garifuna  | (*)        | (*)                | (*)                           | (*)                          | (*)                                  | 100.0   | 20  |
|                   | Maya  | (8.9)      | (56.9)             | (24.5)                        | (8.7)                        | (1.0)                                | 100.0   | 53  |
|                   | Other   | (18.7)     | (53.0)             | (19.7)                        | (6.8)                        | (1.8)                                | 100.0   | 32  |
|                   | Missing/DK                                      | (*)        | (*)                | (*)                           | (*)                          | (*)                                  | 100.0   | 3   |
| Total             |   | 11.9       | 50.5               | 21.2                          | 15.4                         | 1.1                                  | 100.0   | 369   |
| / \ E:            |   |            | /*\ Г:             |                               |                              |                                      |         |   |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases na refers to variables that are not applicable[2] MICS indicator 8.10b

#### **Attitudes towards Domestic Violence**

A number of questions were asked of women age 15-49 years to assess their attitudes towards whether husbands are justified to hit or beat their wives/partners for a variety of scenarios. These questions were asked to have an indication of cultural beliefs that tend to be associated with the prevalence of violence against women by their husbands/partners. The main assumption here is that women that agree with the statements indicating that husbands/partners are justified to beat their wives/partners under the situations described in reality tend to be abused by their own husbands/partners. The responses to these questions can be found in Table CP.8. Overall, 8.6 percent of women in Belize feel that their husband/partner has a right to hit or beat them for at least one of a variety of reasons. In the calculation of this indicator, the reasons having sex with another man and wastes money is not included in the indicator to accommodate the standard MICS indicator and global comparisons. Women who approve their partner's violence, in most cases agree and justify violence in instances when they neglect the children (6.8 percent), or if they demonstrate their autonomy, e.g. go out without telling their husbands or argue with them (1.6 percent). Around 1.1 percent of women believe that their partner has a right to hit or beat them if they refuse to have sex with him or if they burn the food (1.2 percent). Acceptance is more present among rural dwellers (5.5 percent to 11.4 percent), those living in poorest households (17.1 percent), less educated (13.8 percent), and Mayan households (18.1 percent) (see Figure CP.5).



## Table CP8: Attitudes toward domestic violence Percentage of women age 15-49 years who believe a husband is justified in beating his wife/partner in various circumstances, Belize, 2011

|                   |  | Percentag                                   | ge of wome                            | n age 15-4                      |                                      | ho believe<br>e/partner:    | a husband                                | is justified in               | n beating                |                                       |
|-------------------|--|---|---------------------------------------|---------------------------------|--------------------------------------|-----------------------------|--|-------------------------------|--------------------------|---------------------------------------|
|                   |  | If goes<br>out<br>without<br>telling<br>him | If she<br>neglects<br>the<br>children | If she<br>argues<br>with<br>him | If she<br>refuses<br>sex with<br>him | If she<br>burns<br>the food | If she has<br>sex with<br>another<br>man | If she<br>wastes the<br>money | For any of these reasons | Number of<br>women age<br>15-49 years |
| Region            | Corozal                                      | 2.1   | 7.9                                   | 2.8                             | 0.5                                  | 1.5                         | 18.3                                     |                               | 10.0                     | 534                                   |
|                   | Orange Walk                                  | 0.7   | 4.4                                   | 1.5                             | 0.7                                  | 0.5                         | 10.1                                     | 2.3                           | 5.8                      | 618                                   |
|                   | Belize (Excluding<br>Belize City South Side) | 0.2   | 4.8                                   | 0.2                             | 0.2                                  | 0.4                         | 9.5                                      | 2.6                           | 5.0                      | 687                                   |
|                   | Belize City South Side                       | 0.3   | 4.8                                   | 0.5                             | 0.3                                  | 0.3                         | 8.7                                      | 1.3                           | 5.4                      | 573                                   |
|                   | Belize District                              | 0.3   | 4.8                                   | 0.4                             | 0.3                                  | 0.4                         | 9.1                                      | 2.0                           | 5.2                      | 1260                                  |
|                   | Cayo   | 2.1   | 7.3                                   | 1.4                             | 0.5                                  | 0.7                         | 16.0                                     | 3.5                           | 9.3                      | 933                                   |
|                   | Stann Creek                                  | 3.1   | 13.3                                  | 2.8                             | 1.1                                  | 1.6                         | 24.2                                     | 6.4                           | 14.5                     | 404                                   |
|                   | Toledo                                       | 3.9   | 8.3                                   | 7.3                             | 7.5                                  | 5.4                         | 21.3                                     | 9.0                           | 15.3                     | 347                                   |
| Area              | Urban  | 0.7   | 4.7                                   | 0.6                             | 0.2                                  | 0.3                         | 9.4                                      | 1.9                           | 5.5                      | 1926                                  |
|                   | Rural  | 2.4   | 8.7                                   | 3.1                             | 1.9                                  | 1.9                         | 19.2                                     | 5.1                           | 11.4                     | 2170                                  |
| Age               | 15-19  | 1.7   | 9.4                                   | 2.9                             | 1.0                                  | 2.0                         | 18.7                                     | 4.1                           | 11.2                     | 844                                   |
| J                 | 20-24  | 1.1   | 5.9                                   | 1.5                             | 1.7                                  | 1.5                         | 14.6                                     | 2.1                           | 8.2                      | 720                                   |
|                   | 25-29  | 1.9   | 6.2                                   | 0.9                             | 1.5                                  | 0.4                         | 13.5                                     | 4.1                           | 7.9                      | 651                                   |
|                   | 30-34  | 2.1   | 8.0                                   | 1.9                             | 1.2                                  | 1.2                         | 14.8                                     | 4.3                           | 9.3                      | 544                                   |
|                   | 35-39  | 1.7   | 5.9                                   | 1.5                             | 0.2                                  | 1.4                         | 13.2                                     | 2.5                           | 7.4                      | 537                                   |
|                   | 40-44  | 1.6   | 6.5                                   | 2.1                             | 1.1                                  | 0.5                         | 11.6                                     | 5.1                           | 8.8                      | 442                                   |
|                   | 45-49  | 8.0   | 4.0                                   | 2.4                             | 0.7                                  | 0.5                         | 12.0                                     | 2.9                           | 5.0                      | 359                                   |
| Marital/<br>Union | Currently married/in union                   | 1.7   | 6.3                                   | 1.9                             | 1.2                                  | 1.1                         | 15.3                                     | 3.6                           | 8.3                      | 2386                                  |
| status            | Formerly married/in union                    | 0.7   | 6.7                                   | 1.1                             | 1.0                                  | 0.8                         | 12.8                                     | 3.8                           | 8.0                      | 489                                   |
|                   | Never married/in union                       | 1.8   | 7.9                                   | 2.2                             | 0.9                                  | 1.5                         | 13.8                                     | 3.5                           | 9.5                      | 1219                                  |
| Education         | None   | 6.2   | 11.4                                  | 4.9                             | 3.0                                  | 3.5                         | 21.9                                     | 6.5                           | 13.7                     | 148                                   |
|                   | Primary                                      | 2.4   | 8.2                                   | 3.0                             | 1.8                                  | 1.8                         | 20.2                                     | 5.0                           | 11.3                     | 1608                                  |
|                   | Secondary +                                  | 0.8   | 5.7                                   | 1.0                             | 0.5                                  | 0.6                         | 10.3                                     | 2.3                           | 6.6                      | 2259                                  |
|                   | CET/ITVET/VOTEC                              | (*)   | (*)                                   | (*)                             | (*)                                  | (*)                         | (*)                                      | (*)                           | (*)                      | 26                                    |
|                   | Other  | (0.0)                                       | (3.2)                                 | (0.0)                           | (0.0)                                | (0.0)                       | (4.3)                                    | (4.4)                         | (3.2)                    | 55                                    |
| Wealth            | Poorest                                      | 4.1   | 11.7                                  | 6.2                             | 4.6                                  | 4.0                         | 26.3                                     | 7.7                           | 17.1                     | 644                                   |
| index             | Second                                       | 2.0   | 7.9                                   | 2.3                             | 0.8                                  | 1.1                         | 16.9                                     | 4.6                           | 9.9                      | 815                                   |
| quintiles         | Middle                                       | 1.4   | 7.3                                   | 1.1                             | 0.3                                  | 0.7                         | 15.5                                     | 3.2                           | 8.3                      | 877                                   |
|                   | Fourth                                       | 0.6   | 4.9                                   | 0.8                             | 0.4                                  | 0.6                         | 10.4                                     |                               | 5.4                      | 862                                   |
|                   | Richest                                      | 0.6   | 3.8                                   | 0.3                             | 0.4                                  | 0.3                         | 7.1                                      | 1.8                           | 4.8                      | 898                                   |
| Ethnicity of      | Creole                                       | 0.4   | 6.8                                   | 0.4                             | 0.6                                  | 0.7                         | 10.4                                     | 3.0                           | 7.5                      | 985                                   |
| household         | Mestizo                                      | 1.5   | 6.0                                   | 1.9                             | 0.5                                  | 0.9                         | 14.7                                     | 2.6                           | 7.6                      | 2046                                  |
| head              | Garifuna                                     | 1.3   | 8.0                                   | 0.5                             | 0.3                                  | 0.7                         | 14.2                                     | 3.7                           | 9.5                      | 253                                   |
|                   | Maya   | 4.9   | 12.4                                  | 6.8                             | 6.7                                  | 4.4                         | 27.6                                     | 9.8                           | 18.1                     | 407                                   |
|                   | Other  | 1.2   | 4.1                                   | 1.1                             | 0.4                                  | 1.0                         | 9.9                                      | 3.4                           | 6.0                      | 335                                   |
|                   | Missing/DK                                   | 4.4   | 9.1                                   | 2.3                             | 0.0                                  | 0.0                         | 15.0                                     | 5.9                           | 9.1                      | 70                                    |
| Total             |  | 1.6   | 6.8                                   | 1.9                             | 1.1                                  | 1.2                         | 14.6                                     | 3.6                           | 8.6                      | 4096                                  |

<sup>[1]</sup> MICS indicator 8.14

Note: The reasons sex with another man and wastes the money are not included in the calculation of the indicator

<sup>( )</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases 1 un-weighted case in "Missing" on the Marital Status variable is excluded from the table

### KII. HIV/AIDS, SEXUAL BEHAVIOUR, AND DRPHANHOOD

#### **Knowledge about HIV Transmission and Misconceptions** about HIV/AIDS

ne of the most important prerequisites for reducing the rate of HIV infection is accurate knowledge of how HIV is transmitted and strategies for preventing transmission. Correct information is the first step toward raising awareness and giving young people the tools to protect themselves from infection. owhMedia Misconceptions about HIV are common and can confuse young people and hinder prevention efforts. Different regions are likely to have variations in misconceptions although some appear to be universal (for example that sharing food can transmit HIV or mosquito bites can transmit HIV). The UN General Assembly Special Session on HIV/AIDS (UNGASS) called on governments to improve the knowledge and skills of young people to protect themselves from HIV. The indicators to measure this goal as well as the MDG of reducing HIV infections by half include improving the level of knowledge of HIV and its prevention, and changing behaviours to prevent further spread of the disease. The HIV module was administered to women 15-49 years of age.

One indicator which is both an MDG and UNGASS indicator is the percent of young women who have comprehensive and correct knowledge of HIV prevention and transmission. Women who have comprehensive knowledge about HIV prevention include women who know of the two ways of HIV prevention (having only one faithful uninfected partner and using a condom every time, who know that a healthy looking person can have the AIDS virus, and who reject the two most common misconceptions. Tables HA.1 and HA.2 present the percentage of women with comprehensive knowledge.

In Belize all women age 15 to 49 years who had heard of AIDS were asked whether they knew of the three main ways of HIV transmission - having only one faithful uninfected partner, using a condom every time, and abstaining from sex. The results are presented in Table HA.1 and Table HA.1.

Almost all of the interviewed women (94.7 percent) had heard of AIDS. About eighty percent (77.9 percent) of women know of having one faithful uninfected sex partner, 72.9 percent know of using a condom every time, and 64.4 percent know both main ways of preventing HIV transmission.

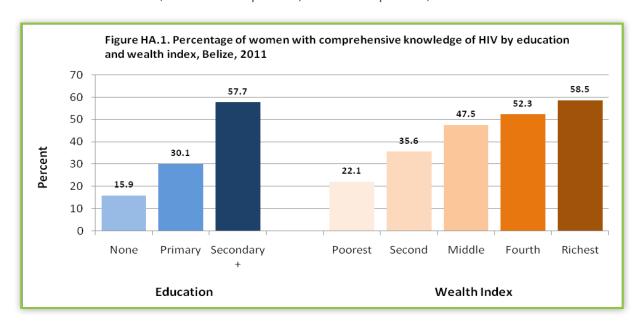
Comprehensive knowledge about HIV among women age 15 to 49 years is low at only 44.5 percent and differs by area. Urban women have a higher rate of knowledge (56.4 percent) than rural women (34.0 Percent). Women with more education and women from families with high wealth index are much more knowledgeable of HIV than less educated and poorer women (Figure HA.1).

Among the districts, women of the Belize District have higher rates of HIV knowledge than women of the other districts. The percentages are Belize District 66.0 percent (Belize excluding Belize City South Side at 69.6 percent and Belize City South Side at 61.5 percent) followed by Stann Creek at 51.5 percent and with the Toledo District having the lowest rate at 31.3 percent. Table HA.1 also indicates women who come from a

Belize

**Pelize** 

household with a Garifuna or Creole head of household are almost twice as knowledgeable about HIV than women of other ethnicities (Garifuna 64.0 percent, Creole 61.2 percent).



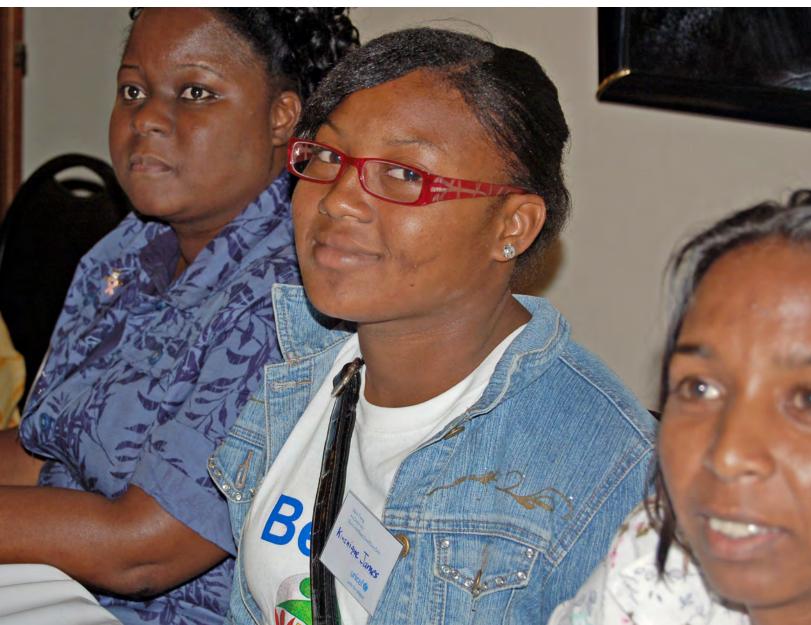


Table HA.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission. Percentage of women age 15-49 years who know the main ways of preventing HIV transmission and percentage who know that a healthy looking person can have the AIDS virus, Belize, 2011

|                    |  | Percentage<br>who have | transmission ca  | e who know<br>an be prevented<br>y: | Percentage of women who | Percentage<br>who know<br>that a healthy        | Number of |
|--------------------|--|------------------------|--|-------------------------------------|-------------------------|---|-----------|
|                    |  | heard of<br>AIDS       | Having only<br>one faithful<br>uninfected sex<br>partner | Using a condom every time           | know both<br>ways       | looking<br>person can<br>have the<br>AIDS virus | women     |
| Region             | Corozal                                      | 95.6                   | 74.3   | 68.7                                | 56.4                    | 82.3  | 534       |
|                    | Orange Walk                                  | 93.9                   | 75.5   | 63.9                                | 56.3                    | 82.1  | 618       |
|                    | Belize (Excluding Belize City<br>South Side) | 98.4                   | 92.4   | 89.1                                | 85.2                    | 96.1  | 687       |
|                    | Belize City South Side                       | 99.7                   | 86.2   | 89.4                                | 80.2                    | 96.6  | 573       |
|                    | Belize District                              | 99.0                   | 89.6   | 89.2                                | 82.9                    | 96.3  | 1260      |
|                    | Cayo   | 96.2                   | 73.0   | 65.0                                | 54.9                    | 84.1  | 933       |
|                    | Stann Creek                                  | 98.6                   | 81.7   | 77.4                                | 69.5                    | 90.4  | 404       |
|                    | Toledo                                       | 70.5                   | 54.8   | 52.1                                | 43.7                    | 57.8  | 347       |
| Area               | Urban  | 97.9                   | 86.4   | 82.1                                | 75.5                    | 92.9  | 1926      |
|                    | Rural  | 91.8                   | 70.5   | 64.7                                | 54.6                    | 79.4  | 2170      |
| Age                | 15-24  | 94.0                   | 76.7   | 70.4                                | 61.4                    | 86.2  | 1564      |
|                    | 25-29  | 95.4                   | 79.1   | 74.6                                | 67.1                    | 86.7  | 651       |
|                    | 30-39  | 95.0                   | 78.9   | 75.4                                | 67.1                    | 85.3  | 1081      |
|                    | 40-49  | 95.2                   | 78.1   | 73.0                                | 64.6                    | 84.7  | 801       |
| Marital            | Ever married/in union                        | 94.5                   | 77.5   | 73.2                                | 64.5                    | 84.5  | 2875      |
| status             | Never married/in union                       | 95.2                   | 79.0   | 72.1                                | 64.1                    | 88.7  | 1219      |
| Education          | None   | 72.4                   | 47.7   | 43.3                                | 35.4                    | 51.8  | 148       |
|                    | Primary                                      | 92.4                   | 70.2   | 64.4                                | 53.6                    | 79.2  | 1608      |
|                    | Secondary +                                  | 99.1                   | 87.1   | 82.3                                | 75.5                    | 94.4  | 2259      |
|                    | CET/ITVET/VOTEC                              | (*)                    | (*)  | (*)                                 | (*)                     | (*)   | 26        |
|                    | Other  | (40.7)                 | (4.9)  | (8.9)                               | (4.9)                   | (6.1)   | 55        |
| Wealth             | Poorest                                      | 78.2                   | 54.8   | 49.3                                | 39.3                    | 60.0  | 644       |
| index<br>quintiles | Second                                       | 95.4                   | 75.6   | 70.8                                | 60.9                    | 84.4  | 815       |
| quintilos          | Middle                                       | 98.4                   | 80.2   | 76.2                                | 66.3                    | 89.6  | 877       |
|                    | Fourth                                       | 99.3                   | 86.3   | 79.8                                | 72.4                    | 93.7  | 862       |
|                    | Richest                                      | 97.9                   | 86.5   | 82.0                                | 76.2                    | 93.9  | 898       |
| Ethnicity of       | Creole                                       | 99.0                   | 85.9   | 85.9                                | 77.2                    | 95.9  | 985       |
| household<br>head  | Mestizo                                      | 97.7                   | 79.9   | 71.7                                | 62.7                    | 87.4  | 2046      |
|                    | Garifuna                                     | 100.0                  | 87.0   | 85.8                                | 77.0                    | 98.3  | 253       |
|                    | Maya   | 77.4                   | 55.3   | 50.1                                | 41.7                    | 61.2  | 407       |
|                    | Other  | 79.9                   | 63.3   | 58.3                                | 54.3                    | 63.5  | 335       |
|                    | Missing/DK                                   | 98.8                   | 79.7   | 79.9                                | 70.5                    | 95.8  | 70        |
| Total              |  | 94.7                   | 77.9   | 72.9                                | 64.4                    | 85.7  | 4096      |

<sup>( )</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases 1 un-weighted missing case for Martial Status is excluded from the table

Table HA.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission (continued)

Percentage of women age 15-49 years who reject common misconceptions about HIV transmission, and percentage who have comprehensive knowledge about HIV transmission Belize, 2011

|                   |   | Percentage        | who know that F<br>transmitted by: |  | Percentage who reject the two most   |   |                         |
|-------------------|---|-------------------|------------------------------------|--|--|---|-------------------------|
|                   |   | Mosquito<br>bites | Supernatural<br>means              | Sharing food<br>with some-<br>one with<br>AIDS | common misconcep-<br>tions and know that<br>a healthy looking<br>person can have the<br>AIDS virus | Percentage with comprehensive knowledge [1] | Number<br>of wom-<br>en |
| Region            | Corozal   | 60.5              | 81.2                               | 75.4   | 48.3   | 31.5  | 534                     |
|                   | Orange Walk Belize (Excluding Belize City South Side) | 65.2<br>83.4      | 85.9<br>93.9                       | 71.1<br>90.7                                   | 51.8<br>77.8   | 32.5<br>69.6                                | 618<br>687              |
|                   | Belize City South Side                                | 80.9              | 94.1                               | 91.5   | 74.0   | 61.5  | 573                     |
|                   | Belize District                                       | 82.3              | 94.0                               | 91.1   | 76.1   | 66.0  | 1260                    |
|                   | Cayo  | 61.6              | 84.6                               | 80.9   | 52.1   | 33.0  | 933                     |
|                   | Stann Creek   | 76.4              | 92.2                               | 88.9   | 68.8   | 51.5  | 404                     |
|                   | Toledo  | 55.7              | 62.4                               | 56.3   | 41.3   | 31.3  | 347                     |
| Area              | Urban   | 76.8              | 92.4                               | 88.0   | 69.1   | 56.4  | 1926                    |
|                   | Rural   | 62.7              | 80.6                               | 73.9   | 51.3   | 34.0  | 2170                    |
| Age               | 15-24   | 68.5              | 85.7                               | 79.7   | 58.7   | 42.9  | 1564                    |
| , igo             | 25-29   | 70.8              | 86.5                               | 81.8   | 60.6   | 45.7  | 651                     |
|                   | 30-39   | 69.3              | 86.1                               | 82.0   | 61.0   | 46.5  | 1081                    |
|                   | 40-49   | 69.8              | 86.8                               | 79.3   | 59.0   | 44.2  | 801                     |
| Marital<br>status | Ever married/in union                                 | 68.6              | 85.5                               | 79.5   | 58.5   | 44.4  | 2875                    |
| otatao            | Never married/in union                                | 71.0              | 87.5                               | 83.0   | 62.3   | 44.7  | 1219                    |
| Education         | None  | 34.2              | 52.2                               | 44.7   | 23.5   | 15.9  | 148                     |
|                   | Primary   | 58.5              | 80.6                               | 72.5   | 46.0   | 30.1  | 1608                    |
|                   | Secondary +   | 80.7              | 94.1                               | 90.2   | 72.9   | 57.7  | 2259                    |
|                   | CET/ITVET/VOTEC                                       | (*)               | (*)                                | (*)  | (*)  | (*)   | 26                      |
|                   | Other   | (7.1)             | (7.4)                              | (8.9)  | (4.2)  | (1.5)                                       | 55                      |
| Wealth            | Poorest   | 47.8              | 62.8                               | 57.9   | 34.2   | 22.1  | 644                     |
| index quin-       | Second  | 61.1              | 84.3                               | 77.6   | 50.3   | 35.6  | 815                     |
| tiles             | Middle  | 74.1              | 89.4                               | 84.5   | 64.7   | 47.5  | 877                     |
|                   | Fourth  | 77.5              | 94.0                               | 87.6   | 68.9   | 52.3  | 862                     |
|                   | Richest   | 79.6              | 93.8                               | 88.8   | 72.6   | 58.5  | 898                     |
| Ethnicity of      | Creole  | 81.9              | 93.5                               | 90.0   | 74.5   | 61.2  | 985                     |
| household         | Mestizo   | 67.3              | 89.2                               | 81.0   | 56.3   | 39.1  | 2046                    |
| head              | Garifuna  | 85.7              | 95.1                               | 95.1   | 81.4   | 64.0  | 253                     |
|                   | Maya  | 48.5              | 64.1                               | 62.1   | 35.9   | 23.5  | 407                     |
|                   | Other   | 57.2              | 66.6                               | 61.7   | 48.4   | 39.0  | 335                     |
|                   | Missing/DK  | 70.9              | 82.6                               | 78.7   | 61.9   | 47.6  | 70                      |
| Total             |   | 69.3              | 86.1                               | 80.5   | 59.7   | 44.5  | 4096                    |

<sup>[1]</sup> MICS indicator 9.1

The results for women age 15-24 are separately presented in Table HA.2. Only 42.9 percent of women aged 15 to 24 years have comprehensive knowledge of HIV. This compares with 45.7 percent for women 25 to 29 years, 46.5 percent for ages 30 to 39 years and 44.2 percent for women aged 40 to 49 years. It is clear that younger women are less knowledgeable about HIV than older ones. For 15 to 19 year old women the rate is 39.1 percent and for women 20 to 24 years the rate is 47.3 percent. In general comprehensive knowledge of HIV follows the same patterns for women 15 to 24 years as was observed in women 15 to 49 years.

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

<sup>1</sup> un-weighted missing case for Martial Status is excluded from the table

Table HA.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young women

Percentage of young women age 15-24 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can have the AIDS virus, Belize, 2011

|                    |  |   | transmiss  | e who know<br>sion can be<br>nted by: |   | Percentage   |                                 |
|--------------------|--|---|--|---------------------------------------|---|--|---------------------------------|
|                    |  | Percentage<br>who have<br>heard of AIDS | Having only<br>one faithful<br>uninfected<br>sex partner | Using a condom every time             | Percentage of<br>women who<br>know both<br>ways | who know<br>that a healthy<br>looking person<br>can have the<br>AIDS virus | Number of<br>women age<br>15-24 |
| Region             | Corozal                                      | 92.5                                    | 69.8   | 61.4                                  | 48.9  | 82.7   | 194                             |
|                    | Orange Walk                                  | 91.8                                    | 76.9   | 64.3                                  | 55.6  | 84.4   | 258                             |
|                    | Belize (Excluding Belize City<br>South Side) | 98.8                                    | 94.5   | 86.5                                  | 84.7  | 96.5   | 255                             |
|                    | Belize City South Side                       | 100.0                                   | 87.4   | 88.7                                  | 79.5  | 97.4   | 216                             |
|                    | Belize District                              | 99.4                                    | 91.2   | 87.5                                  | 82.3  | 96.9   | 471                             |
|                    | Cayo   | 96.1                                    | 67.6   | 60.1                                  | 48.7  | 84.4   | 347                             |
|                    | Stann Creek                                  | 97.7                                    | 79.6   | 75.7                                  | 66.3  | 87.9   | 147                             |
|                    | Toledo                                       | 73.8                                    | 57.7   | 56.4                                  | 46.2  | 61.7   | 147                             |
| Area               | Urban  | 97.9                                    | 85.0   | 79.5                                  | 71.7  | 93.4   | 726                             |
|                    | Rural  | 90.5                                    | 69.5   | 62.5                                  | 52.5  | 79.8   | 838                             |
| Age                | 15-19  | 93.5                                    | 74.5   | 66.9                                  | 57.5  | 85.2   | 844                             |
|                    | 20-24  | 94.5                                    | 79.3   | 74.5                                  | 66.0  | 87.2   | 720                             |
| Marital            | Ever married/in union                        | 92.4                                    | 74.6   | 70.3                                  | 60.3  | 82.4   | 583                             |
| status             | Never married/in union                       | 94.9                                    | 78.0   | 70.4                                  | 62.1  | 88.3   | 981                             |
| Education          | None   | (*)                                     | (*)  | (*)                                   | (*)   | (*)  | 22                              |
|                    | Primary                                      | 88.3                                    | 63.0   | 57.3                                  | 45.4  | 74.7   | 443                             |
|                    | Secondary +                                  | 99.0                                    | 85.2   | 78.3                                  | 70.5  | 94.0   | 1064                            |
|                    | CET/ITVET/VOTEC                              | (*)                                     | (*)  | (*)                                   | (*)   | (*)  | 10                              |
|                    | Other  | (26.2)                                  | (7.5)  | (7.5)                                 | (7.5)   | (4.1)  | 25                              |
| Wealth             | Poorest                                      | 76.1                                    | 51.3   | 46.7                                  | 34.8  | 60.1   | 271                             |
| index<br>quintiles | Second                                       | 94.4                                    | 75.3   | 70.0                                  | 59.9  | 87.0   | 330                             |
| quiitiics          | Middle                                       | 98.4                                    | 80.0   | 74.7                                  | 65.3  | 91.1   | 356                             |
|                    | Fourth                                       | 99.4                                    | 88.5   | 78.4                                  | 72.1  | 92.8   | 308                             |
|                    | Richest                                      | 98.8                                    | 85.3   | 78.7                                  | 71.5  | 96.2   | 299                             |
| Ethnicity of       | Creole                                       | 99.8                                    | 85.5   | 85.0                                  | 76.1  | 96.7   | 376                             |
| household<br>head  | Mestizo                                      | 97.2                                    | 79.2   | 69.1                                  | 59.2  | 87.7   | 784                             |
|                    | Garifuna                                     | 100.0                                   | 87.5   | 84.3                                  | 75.7  | 99.0   | 93                              |
|                    | Maya   | 79.1                                    | 57.1   | 53.5                                  | 44.0  | 64.5   | 179                             |
|                    | Other  | 69.7                                    | 52.9   | 45.9                                  | 43.4  | 62.1   | 113                             |
|                    | Missing/DK                                   | (*)                                     | (*)  | (*)                                   | (*)   | (*)  | 19                              |
| Total              |  | 94.0                                    | 76.7   | 70.4                                  | 61.4  | 86.2   | 1564                            |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Table HA.2: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission among young women (continued)

Percentage of young women age 15-24 years who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Belize, 2011

|                   |   | Percentage        | who know that H<br>transmitted by: | IV cannot be         | Percentage who reject the two                            |                                |                    |
|-------------------|---|-------------------|------------------------------------|----------------------|--|--------------------------------|--------------------|
|                   |   |                   |                                    | Sharing<br>food with | most common<br>misconceptions and<br>know that a healthy | Percentage with                | Number             |
|                   |   | Mosquito<br>bites | Supernatural means                 | someone<br>with AIDS | looking person can have the AIDS virus                   | comprehensive<br>knowledge [1] | of women age 15-24 |
| Region            | Corozal                                   | 54.8              | 77.6                               | 73.4                 | 45.8   | 26.6                           |                    |
|                   | Orange Walk                               | 65.3              | 85.8                               | 72.4                 | 52.2   | 33.9                           | 258                |
|                   | Belize (Excluding Belize City South Side) | 84.5              | 94.7                               | 89.7                 | 77.3   | 69.7                           | 255                |
|                   | Belize City South Side                    | 82.1              | 95.7                               | 93.2                 | 76.0   | 62.9                           | 216                |
|                   | Belize District                           | 83.4              | 95.2                               | 91.3                 | 76.7   | 66.6                           | 471                |
|                   | Cayo                                      | 58.5              | 82.8                               | 76.7                 | 48.3   | 27.2                           | 347                |
|                   | Stann Creek                               | 75.5              | 90.7                               | 88.9                 | 67.4   | 48.9                           | 147                |
|                   | Toledo                                    | 60.7              | 67.4                               | 61.3                 | 45.6   | 35.0                           | 147                |
| Area              | Urban                                     | 76.8              | 92.7                               | 88.4                 | 68.8   | 54.7                           | 726                |
|                   | Rural                                     | 61.2              | 79.5                               | 72.1                 | 49.9   | 32.7                           | 838                |
| Age               | 15-19                                     | 66.9              | 84.3                               | 79.2                 | 57.2   | 39.1                           | 844                |
|                   | 20-24                                     | 70.3              | 87.3                               | 80.2                 | 60.4   | 47.3                           | 720                |
| Marital           | Ever married/in union                     | 64.7              | 83.7                               | 75.2                 | 53.0   | 41.6                           | 583                |
| status            | Never married/in union                    | 70.7              | 86.8                               | 82.3                 | 62.1   | 43.7                           | 981                |
| Education         | None                                      | (*)               | (*)                                | (*)                  | (*)  | (*)                            | 22                 |
|                   | Primary                                   | 50.8              | 73.5                               | 63.0                 | 37.4   | 22.4                           | 443                |
|                   | Secondary +                               | 78.5              | 94.0                               | 89.4                 | 69.9   | 53.3                           | 1064               |
|                   | CET/ITVET/VOTEC                           | (*)               | (*)                                | (*)                  | (*)  | (*)                            | 10                 |
|                   | Other                                     | (3.4)             | (7.5)                              | (7.5)                | (0.0)  | (0.0)                          | 25                 |
| Wealth index      |   | 47.1              | 61.4                               | 53.7                 | 33.5   | 19.7                           | 271                |
| quintiles         | Second                                    | 61.0              | 86.3                               | 78.3                 | 52.7   | 37.2                           | 330                |
|                   | Middle                                    | 74.7              | 90.3                               | 85.3                 | 63.8   | 47.2                           | 356                |
|                   | Fourth                                    | 79.5              | 94.4                               | 87.3                 | 70.3   | 54.6                           | 308                |
|                   | Richest                                   | 77.4              | 92.4                               | 90.1                 | 70.2   | 52.9                           | 299                |
| Ethnicity of      | Creole                                    | 84.2              | 92.4                               | 91.3                 | 76.3   | 61.5                           | 376                |
| household<br>head | Mestizo                                   | 65.7              | 89.2                               | 79.9                 | 54.3   | 36.8                           | 784                |
| neau              | Garifuna                                  | 85.0              | 97.2                               | 93.5                 | 80.1   | 64.9                           | 93                 |
|                   | Maya                                      | 51.9              | 66.5                               | 61.8                 | 40.2   | 27.8                           | 179                |
|                   | Other                                     | 47.6              | 58.5                               | 53.4                 | 40.8   | 29.1                           | 113                |
|                   | Missing/DK                                | (*)               | (*)                                | (*)                  | (*)  | (*)                            | 19                 |
| Total             |   | 68.5              | 85.7                               | 79.7                 | 58.7   | 42.9                           | 1564               |

<sup>[1]</sup> MICS indicator 9.2; MDG indicator 6.3

Table HA.2 also presents the percent of women who can correctly identify misconceptions concerning HIV. The indicator is based on the three most common and relevant misconceptions in Belize, that HIV can be transmitted by supernatural means and mosquito bites. The tables also provide information on whether women know that HIV cannot be transmitted by sharing food with someone with AIDS. Of the interviewed women age 15-49, 59.7 percent reject the two most common misconceptions and know that a healthy-looking person can be infected. 69.3 percent of women know that mosquito bites, and 86.1 percent of women know that supernatural means can not transmit HIV, while 85.7 percent of women know that a healthy-looking person can be infected.

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

Knowledge of mother-to-child transmission of HIV is also an important first step for women to seek HIV testing when they are pregnant to avoid infection in the baby. Women should know that HIV can be transmitted during pregnancy, delivery, and through breastfeeding. The level of knowledge among women age 15-49 years concerning mother-to-child transmission is presented in Table HA.3.

Overall, 90.2 percent of women know that HIV can be transmitted from mother to child. The percentage of women who know all three ways of mother-to-child transmission is 55.7 percent, while 4.5 percent of women did not know of any specific way. Knowledge of all three ways that HIV can be transmitted to babies seem to be related to education of the woman (no education 43.2 percent, secondary or more 58.2 percent). There is also a small difference in rates for urban (58.6 percent, rural 53.1 percent). Garifuna women seem to know more about HIV transmission to babies (Garifuna 64.4 percent) than women from other ethnicities.

Table HA.3: Knowledge of mother-to-child HIV transmission

Percentage of women age 15-49 years who correctly identify means of HIV transmission from mother to child,

Belize, 2011

|                |  |   | Percent             | who know l         | HIV can be transr   | nitted:             |   |                 |
|----------------|--|---|---------------------|--------------------|---------------------|---------------------|---|-----------------|
|                |  | Percentage who<br>know HIV can<br>be transmitted<br>from mother to<br>child | During<br>pregnancy | During<br>delivery | By<br>breastfeeding | All three means [1] | Does not<br>know any<br>of the<br>specific<br>means | Number of women |
| Region         | Corozal                                      | 90.1  | 83.3                | 60.7               | 71.7                | 48.7                | 5.5   | 534             |
|                | Orange Walk                                  | 84.5  | 77.3                | 71.2               | 73.3                | 59.6                | 9.3   | 618             |
|                | Belize (Excluding Belize<br>City South Side) | 98.0  | 88.2                | 70.5               | 85.2                | 58.2                | 0.5   | 687             |
|                | Belize City South Side                       | 97.0  | 88.6                | 71.0               | 82.1                | 58.2                | 2.7   | 573             |
|                | Belize District                              | 97.5  | 88.4                | 70.7               | 83.8                | 58.2                | 1.5   | 1260            |
|                | Cayo   | 90.8  | 84.8                | 66.4               | 75.3                | 57.0                | 5.4   | 933             |
|                | Stann Creek                                  | 95.1  | 82.4                | 61.7               | 88.8                | 53.8                | 3.5   | 404             |
|                | Toledo                                       | 66.8  | 62.7                | 52.5               | 62.4                | 49.2                | 3.6   | 347             |
| Area           | Urban  | 94.8  | 86.8                | 69.3               | 81.8                | 58.6                | 3.2   | 1926            |
|                | Rural  | 86.2  | 78.7                | 63.2               | 73.5                | 53.1                | 5.6   | 2170            |
| Age group      | 15-24  | 90.3  | 83.1                | 64.6               | 79.1                | 55.3                | 3.6   | 1564            |
|                | 25+  | 90.2  | 82.1                | 67.0               | 76.3                | 56.0                | 5.0   | 2532            |
| Age group      | 15-19  | 89.9  | 82.8                | 63.9               | 79.0                | 55.5                | 3.7   | 844             |
|                | 20-24  | 90.9  | 83.4                | 65.4               | 79.2                | 55.0                | 3.6   | 720             |
|                | 25-29  | 90.1  | 82.7                | 69.3               | 77.5                | 59.2                | 5.3   | 651             |
|                | 30-39  | 90.7  | 81.6                | 67.6               | 77.7                | 56.0                | 4.3   | 1081            |
|                | 40-49  | 89.5  | 82.3                | 64.2               | 73.4                | 53.3                | 5.7   | 801             |
| Marital status | Ever married/in union                        | 89.8  | 82.2                | 66.2               | 76.9                | 55.8                | 4.7   | 2875            |
|                | Never married/in union                       | 91.2  | 83.2                | 65.7               | 78.4                | 55.6                | 4.0   | 1219            |
| Education      | None   | 62.0  | 55.7                | 48.6               | 53.2                | 43.2                | 10.4  | 148             |
|                | Primary                                      | 86.3  | 79.6                | 62.9               | 74.1                | 55.0                | 6.1   | 1608            |
|                | Secondary +                                  | 96.9  | 88.0                | 70.9               | 83.0                | 58.2                | 2.2   | 2259            |
|                | CET/ITVET/VOTEC                              | (*)   | (*)                 | (*)                | (*)                 | (*)                 | (*)   | 26              |
|                | Other  | 7.4   | 7.4                 | 7.4                | 7.4                 | 7.4                 | 33.4  | 55              |
| Wealth         | Poorest                                      | 70.6  | 65.5                | 50.8               | 62.2                | 45.0                | 7.6   | 644             |
| index          | Second                                       | 89.9  | 83.1                | 65.8               | 80.0                | 58.8                | 5.5   | 815             |
| quintiles      | Middle                                       | 95.6  | 86.7                | 71.6               | 82.1                | 59.0                | 2.8   | 877             |
|                | Fourth                                       | 94.3  | 86.6                | 67.7               | 81.6                | 57.9                | 5.0   | 862             |
|                | Richest                                      | 95.5  | 86.0                | 70.3               | 77.2                | 55.4                | 2.4   | 898             |
| Ethnicity of   | Creole                                       | 97.1  | 88.2                | 70.5               | 84.6                | 59.2                | 1.9   | 985             |
| household      | Mestizo                                      | 92.6  | 85.1                | 68.1               | 78.3                | 57.1                | 5.1   | 2046            |
| head           | Garifuna                                     | 99.4  | 86.6                | 71.3               | 96.2                | 64.4                | 0.6   | 253             |
|                | Maya   | 72.3  | 67.4                | 56.7               | 63.8                | 50.0                | 5.1   | 407             |
|                | Other  | 69.5  | 63.5                | 47.9               | 52.9                | 37.3                | 10.4  | 335             |
|                | Missing/DK                                   | 93.9  | 87.4                | 66.3               | 76.2                | 54.4                | 5.0   | 70              |
| Total          |  | 90.2  | 82.5                | 66.1               | 77.4                | 55.7                | 4.5   | 4096            |

[1] MICS indicator 9.3

<sup>( )</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases 1 un-weighted missing case for Martial Status is excluded from the table

### **Accepting Attitudes toward People Living with HIV/AIDS**

The indicators on attitudes toward people living with HIV measure stigma and discrimination in the community. Stigma and discrimination are low if respondents report an accepting attitude on the following four questions: 1) would care for family member sick with AIDS; 2) would buy fresh vegetables from a vendor who was HIV positive; 3) thinks that a female teacher who is HIV positive should be allowed to teach in school; and 4) would **not** want to keep HIV status of a family member a secret. Table HA.4 presents the attitudes of women towards people living with HIV/AIDS.

In Belize 96.5 percent of women who have heard of AIDS agree with at least one accepting statement. The most common accepting attitude is willingness to care for a family member with the AIDS virus in their own home (85.0 percent). For all four indicators the more educated women have more accepting attitudes than the ones with lower education (Figure HA.2). A similar pattern exists for the wealth index where more wealthy women also show a higher acceptance for people with AIDS than less wealthy women.

Women in rural areas tend to be less accepting of people with the AIDS virus. In urban areas, 23.4 percent express accepting attitudes on all four indicators while the rate is 15.4 percent in rural areas. Younger women tend to be less accepting than older women of persons with the AIDS virus (15 to 24 years at 13.3 percent and 25 + years at 23.0 percent). Women from households with Garifuna heads are more accepting (35.4 percent) with respect to all four indicators than women from other ethnic backgrounds. The least accepting are women from households with Maya heads (8.5 percent).

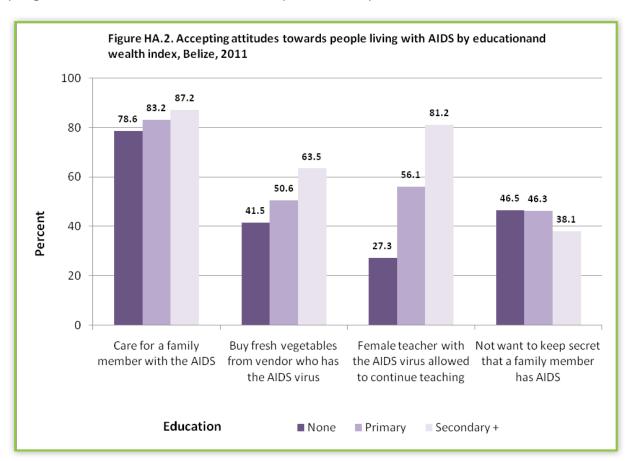


Table HA.4: Accepting attitudes toward people living with HIV/AIDS

Percentage of women age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, Belize, 2011

| Percent of women who: |   |   |  |   |   |   |  |  |  |  |
|-----------------------|---|---|--|---|---|---|--|--|--|--|
|                       |   | Are willing to<br>care for a family<br>member with<br>the AIDS virus<br>in own home | Would<br>buy fresh<br>vegetables<br>from a<br>shopkeeper or<br>vendor who<br>has the AIDS<br>virus | Believe that a<br>female teacher with<br>the AIDS virus and<br>is not sick should be<br>allowed to continue<br>teaching | Would not<br>want to keep<br>secret that<br>a family<br>member got<br>infected with<br>the AIDS virus | Agree with<br>at least one<br>accepting<br>attitude | Express<br>accepting<br>attitudes on all<br>four indicators<br>[1] | Number<br>of women<br>who have<br>heard of<br>AIDS |  |  |
| Region                | Corozal   | 89.9  | 51.3   | 59.6  | 47.7  | 97.8  | 19.2   | 510  |  |  |
| · ·                   | Orange Walk                                     | 80.6  | 54.6   | 63.8  | 36.8  | 93.7  | 13.7   | 580  |  |  |
|                       | Belize (Excluding<br>Belize City South<br>Side) | 89.5  | 65.4   | 86.5  | 35.1  | 98.5  | 21.8   | 676  |  |  |
|                       | Belize City South<br>Side                       | 85.2  | 64.5   | 81.7  | 37.9  | 98.4  | 20.5   | 571  |  |  |
|                       | Belize District                                 | 87.5  | 65.0   | 84.3  | 36.4  | 98.4  | 21.2   | 1247   |  |  |
|                       | Cayo  | 84.5  | 51.2   | 62.2  | 43.1  | 96.5  | 18.2   | 898  |  |  |
|                       | Stann Creek                                     | 87.6  | 65.4   | 73.6  | 51.1  | 98.2  | 28.3   | 399  |  |  |
|                       | Toledo  | 70.3  | 51.6   | 52.0  | 42.3  | 87.8  | 12.1   | 245  |  |  |
| Area                  | Urban   | 87.5  | 63.3   | 79.8  | 40.7  | 97.9  | 23.4   | 1886   |  |  |
|                       | Rural   | 82.7  | 52.3   | 60.2  | 42.0  | 95.1  | 15.4   | 1993   |  |  |
| Age group             | 15-24   | 85.1  | 54.2   | 68.8  | 34.2  | 96.2  | 13.3   | 1470   |  |  |
|                       | 25+   | 84.9  | 59.8   | 70.3  | 45.7  | 96.7  | 23.0   | 2409   |  |  |
| Age group             | 15-19   | 86.8  | 52.2   | 66.5  | 33.2  | 96.3  | 12.0   | 789  |  |  |
|                       | 20-24   | 83.2  | 56.5   | 71.5  | 35.4  | 96.1  | 14.8   | 680  |  |  |
|                       | 25-29   | 82.5  | 57.9   | 70.0  | 43.0  | 96.5  | 19.1   | 621  |  |  |
|                       | 30-39   | 84.3  | 61.1   | 71.5  | 46.4  | 96.4  | 24.5   | 1026   |  |  |
|                       | 40-49   | 87.9  | 59.5   | 68.9  | 47.1  | 97.1  | 24.0   | 762  |  |  |
| Marital status        | Ever married/in union                           | 84.2  | 58.6   | 68.1  | 44.0  | 96.2  | 21.1   | 2717   |  |  |
|                       | Never married/in union                          | 87.0  | 55.4   | 73.5  | 35.3  | 97.1  | 15.1   | 1160   |  |  |
| Education             | None  | 78.6  | 41.5   | 27.3  | 46.5  | 89.9  | 13.1   | 107  |  |  |
|                       | Primary   | 83.2  | 50.6   | 56.1  | 46.3  | 95.8  | 17.0   | 1485   |  |  |
|                       | Secondary +                                     | 87.2  | 63.5   | 81.2  | 38.1  | 97.9  | 21.2   | 2238   |  |  |
|                       | CET/ITVET/VOTEC                                 | (*)   | (*)  | (*)   | (*)   | (*)   | (*)  | 26   |  |  |
|                       | Other   | (*)   | (*)  | (*)   | (*)   | (*)   | (*)  | 22   |  |  |
| Wealth                | Poorest   | 71.7  | 39.9   | 42.5  | 46.2  | 90.2  | 11.5   | 504  |  |  |
| index                 | Second  | 85.4  | 54.8   | 63.7  | 40.6  | 96.4  | 16.8   | 778  |  |  |
| quintiles             | Middle  | 85.1  | 57.6   | 71.3  | 39.5  | 97.2  | 18.2   | 862  |  |  |
|                       | Fourth  | 89.6  | 65.8   | 76.8  | 39.4  | 97.7  | 22.0   | 856  |  |  |
|                       | Richest   | 87.8  | 62.4   | 82.2  | 43.1  | 98.3  | 24.3   | 879  |  |  |
| Ethnicity of          | Creole  | 86.8  | 65.2   | 81.8  | 40.1  | 99.0  | 22.2   | 975  |  |  |
| household             | Mestizo   | 86.3  | 55.2   | 66.8  | 40.4  | 97.0  | 17.4   | 1999   |  |  |
| head                  | Garifuna  | 87.8  | 72.2   | 87.5  | 50.8  | 97.6  | 35.4   | 253  |  |  |
|                       | Maya  | 75.1  | 42.3   | 43.4  | 44.9  | 90.7  | 8.5  | 315  |  |  |
|                       | Other   | 77.6  | 54.1   | 62.0  | 41.2  | 88.6  | 20.9   | 267  |  |  |
| <b>.</b>              | Missing/DK                                      | 85.0  | 52.3   | 69.3  | 38.3  | 97.6  | 16.4   | 69   |  |  |
| Total [1] MICS inc    |   | 85.0  | 57.6   | 69.7  | 41.4  | 96.5  | 19.3   | 3879   |  |  |

<sup>[1]</sup> MICS indicator 9.4

#### Knowledge of a Place for HIV Testing, Counselling and Testing during Antenatal Care

Another important indicator is the knowledge of where to be tested for HIV and use of such services. In order to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of one's status is also a critical factor in the decision to seek treatment. Questions related to knowledge among women of a facility for HIV testing and whether they have ever been tested is presented in Table HA.5.

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

<sup>1</sup> un-weighted missing case for Martial Status is excluded from the table

Of women 15 to 49 years 86.6 percent knew where to be tested, while 62.9 percent had actually been tested ever, and only 29.9 percent had been tested in the last year. Of those women who were tested in the last year, 28.4 percent had been told the result. Urban women and better educated women know the locations of HIV testing facilities at higher rates than rural or less educated women. The rates are 92.3 percent for urban women and rural 81.5 percent while for richest women the rate is 93.2 percent and for the poorest it is 63.6 percent. Rates for knowledge of HIV testing facilities are highest for Garifuna (96.5 percent) households and lowest in the Maya household (62.8 percent).

Table HA.5: Knowledge of a place for HIV testing
Percentage of women age 15-49 years who know where to get an HIV test, percentage of women who have
ever been tested, percentage of women who have been tested in the last 12 months, and percentage of women
who have been tested and have been told the result, Belize, 2011

|                |   |                                      | Perc                        | entage of women                              | who:   |                 |
|----------------|---|--------------------------------------|-----------------------------|--|--|-----------------|
|                |   | Know a place<br>to get tested<br>[1] | Have<br>ever been<br>tested | Have been<br>tested in the<br>last 12 months | Have been tested in the last<br>12 months and have been<br>told result [2] | Number of women |
| Region         | Corozal   | 81.7                                 | 59.7                        | 21.3   | 19.6   | 534             |
|                | Orange Walk                                     | 86.5                                 | 60.8                        | 27.3   | 26.0   | 618             |
|                | Belize (Excluding<br>Belize City South<br>Side) | 93.8                                 | 67.3                        | 31.7   | 30.8   | 687             |
|                | Belize City South Side                          | 94.4                                 | 74.5                        | 42.3   | 41.3   | 573             |
|                | Belize District                                 | 94.1                                 | 70.6                        | 36.5   | 35.6   | 1260            |
|                | Cayo  | 86.4                                 | 63.3                        | 32.8   | 30.8   | 933             |
|                | Stann Creek                                     | 92.3                                 | 69.9                        | 30.8   | 28.5   | 404             |
|                | Toledo  | 60.5                                 | 35.1                        | 15.2   | 13.3   | 347             |
| Area           | Urban   | 92.3                                 | 68.2                        | 34.6   | 33.8   | 1926            |
|                | Rural   | 81.5                                 | 58.3                        | 25.8   | 23.6   | 2170            |
| Age            | 15-24   | 80.2                                 | 43.2                        | 26.5   | 25.1   | 1564            |
|                | 15-19   | 74.1                                 | 24.1                        | 15.0   | 13.7   | 844             |
|                | 20-24   | 87.4                                 | 65.7                        | 40.0   | 38.5   | 720             |
|                | 25-29   | 90.8                                 | 80.9                        | 37.8   | 35.0   | 651             |
|                | 30-39   | 90.8                                 | 78.5                        | 34.0   | 32.6   | 1081            |
|                | 40-49   | 89.9                                 | 65.9                        | 24.7   | 23.7   | 801             |
| Marital status | Ever married/in union                           | 89.9                                 | 76.4                        | 35.2   | 33.2   | 2875            |
|                | Never married/in union                          | 78.7                                 | 31.1                        | 17.4   | 16.9   | 1219            |
| Education      | None  | 61.8                                 | 52.7                        | 20.2   | 18.5   | 148             |
|                | Primary   | 82.5                                 | 64.0                        | 28.1   | 25.7   | 1608            |
|                | Secondary +                                     | 92.3                                 | 63.9                        | 32.2   | 31.3   | 2259            |
|                | CET/ITVET/VOTEC                                 | (*)                                  | (*)                         | (*)  | (*)  | 26              |
|                | Other   | 30.0                                 | 23.2                        | 12.3   | 12.3   | 55              |
| Wealth index   | Poorest   | 63.6                                 | 45.7                        | 19.9   | 17.2   | 644             |
| quintiles      | Second  | 86.3                                 | 67.2                        | 31.8   | 30.3   | 815             |
|                | Middle  | 90.6                                 | 61.7                        | 28.7   | 26.8   | 877             |
|                | Fourth  | 93.0                                 | 68.5                        | 34.1   | 33.4   | 862             |
|                | Richest   | 93.2                                 | 67.2                        | 32.5   | 31.4   | 898             |
| Ethnicity of   | Creole  | 95.8                                 | 72.8                        | 39.5   | 38.5   | 985             |
| household      | Mestizo   | 88.0                                 | 63.5                        | 26.9   | 25.1   | 2046            |
| head           | Garifuna  | 96.5                                 | 75.8                        | 45.6   | 44.6   | 253             |
|                | Maya  | 62.8                                 | 37.8                        | 16.7   | 14.5   | 407             |
|                | Other   | 70.7                                 | 48.7                        | 20.6   | 19.2   | 335             |
|                | Missing/DK                                      | 91.9                                 | 75.9                        | 47.0   | 47.0   | 70              |
| Total          |   | 86.6                                 | 62.9                        | 29.9   | 28.4   | 4096            |

<sup>[1]</sup> MICS indicator 9.5 [2] MICS indicator 9.6

Table HA.6 presents the same results for sexually active young women young aged 15 to 24 years. The proportion of young women who have been tested and have been told the result provides a measure of

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

 $<sup>{\</sup>bf 1}$  un-weighted missing case for Martial Status is excluded from the table

the effectiveness of interventions that promote HIV counselling and testing among young people. This is important to know, because young people may feel that there are barriers to accessing services related to sensitive issues, such as sexual health.

Rural and younger women (age 15 to 19 years) are less likely to know the results of the HIV test. Of those tested 44.3 percent urban and 37.4 percent rural women were told the results of the test. For women 15 to 19 years who were tested only 33.3 percent were told the results of the test. In women 20 to 24 years 44.3 percent were told the results of the test. Education and wealth did not seen to be factors in women being informed of the results of HIV tests. Over a half (56.8 percent) of women from Garifuna households were informed of the HIV test results while the rate for Maya households was 23.5 percent.

Table HA.6: Knowledge of a place for HIV testing among sexually active young women
Percentage of women age 15-24 years who have had sex in the last 12 months, and among women who have had sex in
the last 12 months, the percentage who know where to get an HIV test, percentage of women who have ever been tested,
percentage of women who have been tested in the last 12 months, and percentage of women who have been tested and
have been told the result, Belize, 2011

|                   |   |   |                                       |                                     | Perce                          | ntage of women                         | who:  | Number of   |  |
|-------------------|---|---|---------------------------------------|-------------------------------------|--------------------------------|--|---|---|--|
|                   |   | Percentage<br>who have<br>had sex in<br>the last 12<br>months | Number of<br>women age<br>15-24 years | Know<br>a place<br>to get<br>tested | Have<br>ever<br>been<br>tested | Have been tested in the last 12 months | Have been tested<br>in the last 12<br>months and have<br>been told result [1] | Number of<br>women age<br>15-24 years who<br>have had sex<br>in the last 12<br>months |  |
| Region            | Corozal   | 46.2  | 194                                   | 82.5                                | 70.0                           | 32.0                                   | 31.0  | 89  |  |
|                   | Orange Walk                                     | 51.8  | 258                                   | 93.7                                | 75.8                           | 44.2                                   | 40.3  | 134   |  |
|                   | Belize (Excluding<br>Belize City South<br>Side) | 57.3  | 255                                   | 98.0                                | 62.9                           | 38.2                                   | 38.2  | 146   |  |
|                   | Belize City South<br>Side                       | 60.8  | 216                                   | 95.7                                | 80.5                           | 50.6                                   | 48.5  | 131   |  |
|                   | Belize District                                 | 58.9  | 471                                   | 96.9                                | 71.2                           | 44.1                                   | 43.1  | 278   |  |
|                   | Cayo  | 49.1  | 347                                   | 84.7                                | 69.7                           | 51.1                                   | 46.6  | 170   |  |
|                   | Stann Creek                                     | 59.0  | 147                                   | 92.0                                | 74.8                           | 50.2                                   | 48.3  | 87  |  |
|                   | Toledo  | 42.4  | 147                                   | 64.2                                | 40.8                           | 22.9                                   | 19.4  | 62  |  |
| Area              | Urban   | 55.7  | 726                                   | 93.3                                | 71.4                           | 45.3                                   | 44.3  | 404   |  |
|                   | Rural   | 49.6  | 838                                   | 85.3                                | 67.8                           | 41.3                                   | 37.4  | 416   |  |
| Age               | 15-19   | 30.8  | 844                                   | 86.7                                | 57.3                           | 36.9                                   | 33.3  | 260   |  |
|                   | 20-24   | 77.8  | 720                                   | 90.5                                | 75.3                           | 46.2                                   | 44.3  | 560   |  |
| Marital<br>status | Ever married/in union                           | 95.9  | 583                                   | 87.2                                | 76.5                           | 47.0                                   | 43.9  | 559   |  |
|                   | Never married/in union                          | 26.6  | 981                                   | 93.8                                | 54.9                           | 35.2                                   | 34.1  | 261   |  |
| Education         | None  | (*)   | 23                                    | (*)                                 | (*)                            | (*)                                    | (*)   | 10  |  |
|                   | Primary   | 62.9  | 443                                   | 83.0                                | 72.0                           | 45.3                                   | 40.5  | 279   |  |
|                   | Secondary +                                     | 48.5  | 1064                                  | 94.0                                | 69.2                           | 42.5                                   | 41.2  | 516   |  |
|                   | CET/ITVET/VOTEC                                 | (*)   | 10                                    | (*)                                 | (*)                            | (*)                                    | (*)   | 7   |  |
|                   | Other   | (*)   | 25                                    | (*)                                 | (*)                            | (*)                                    | (*)   | 8   |  |
| Wealth            | Poorest   | 49.0  | 271                                   | 69.3                                | 56.2                           | 33.0                                   | 28.3  | 133   |  |
| index             | Second  | 59.5  | 330                                   | 90.1                                | 80.8                           | 45.9                                   | 43.3  | 196   |  |
| quintiles         | Middle  | 55.0  | 356                                   | 93.8                                | 69.1                           | 45.6                                   | 43.4  | 196   |  |
|                   | Fourth  | 55.2  | 308                                   | 96.9                                | 67.5                           | 44.7                                   | 43.4  | 170   |  |
|                   | Richest   | 41.8  | 299                                   | 91.7                                | 69.8                           | 44.5                                   | 42.5  | 125   |  |
| Ethnicity of      | Creole  | 60.4  | 376                                   | 97.2                                | 75.7                           | 50.5                                   | 49.7  | 227   |  |
| household         | Mestizo   | 50.0  | 784                                   | 89.1                                | 69.5                           | 42.0                                   | 39.0  | 392   |  |
| head              | Garifuna  | 69.3  | 93                                    | 97.9                                | 79.7                           | 59.3                                   | 56.8  | 65  |  |
|                   | Maya  | 46.7  | 179                                   | 68.9                                | 52.8                           | 27.2                                   | 23.5  | 83  |  |
|                   | Other   | 38.6  | 113                                   | (75.2)                              | (51.3)                         | (27.7)                                 | (24.0)  | 44  |  |
| Total             | :t0.7   | 52.4  | 1564                                  | 89.3                                | 69.6                           | 43.3                                   | 40.8  | 820   |  |

<sup>[1]</sup> MICS indicator 9.7

Among women who had given birth within the two years preceding the survey, the percent who received counselling and HIV testing during antenatal care is presented in Table HA.7. Antenatal care from a health

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

<sup>9</sup> un-weighted cases in "Missing" on the Ethnicity of the Head of Household variable are excluded from the table

care professional was received by 96.2 percent of women during their last pregnancy. 59.4 percent received counselling during antenatal care. There were notable differences in the receipt of HIV counselling during antenatal care; in urban areas 66.6 percent received these services compared with 54.9 percent in rural areas. Differences in rates of antenatal care are small for the education and wealth indicators.

Table HA.7: HIV counselling and testing during antenatal care

Among women age 15-49 who gave birth in the last 2 years, percentage of women who received antenatal care from a health professional during the last pregnancy, percentage who received HIV counselling, percentage who were offered and accepted an HIV test and received the results, Belize, 2011

|                |   |  | Po  | ercent of womer   | n who:   |   |   |
|----------------|---|--|---|---|--|---|---|
|                |   | Received<br>antenatal<br>care from a<br>health care<br>professional<br>for last<br>pregnancy | Received<br>HIV<br>counselling<br>during<br>antenatal<br>care [1] | Were offered<br>an HIV test<br>and were<br>tested for<br>HIV during<br>antenatal care | Were offered<br>an HIV test and<br>were tested<br>for HIV during<br>antenatal care,<br>and received<br>the results [2] | Received HIV counselling, were offered an HIV test, accepted and received the results | Number of<br>women who<br>gave birth in<br>the 2 years<br>preceding the<br>survey |
| Region         | Corozal   | 99.1   | 60.5  | 81.7  | 74.0   | 51.7  | 95  |
|                | Orange Walk                                     | 100.0  | 58.9  | 72.1  | 67.9   | 48.8  | 108   |
|                | Belize (Excluding<br>Belize City South<br>Side) | (86.9)   | (59.8)  | (81.8)  | (81.8)   | (55.9)  | 74  |
|                | Belize City South<br>Side                       | 96.4   | 58.7  | 88.1  | 85.8   | 56.4  | 77  |
|                | <b>Belize District</b>                          | 91.7   | 59.3  | 85.0  | 83.8   | 56.2  | 151   |
|                | Cayo  | 97.5   | 61.5  | 76.2  | 71.1   | 55.4  | 189   |
|                | Stann Creek                                     | 97.6   | 66.5  | 86.8  | 80.9   | 56.9  | 69  |
|                | Toledo  | 91.5   | 46.6  | 44.9  | 42.8   | 42.0  | 73  |
| Area           | Urban   | 97.3   | 66.6  | 87.2  | 86.2   | 64.7  | 262   |
| 71100          | Rural   | 95.5   | 54.9  | 69.1  | 62.9   | 45.4  | 424   |
| Young<br>women | 15-24   | 97.8   | 62.4  | 78.6  | 73.4   | 55.9  | 294   |
| Age            | 15-19   | 96.3   | 67.0  | 75.8  | 70.6   | 59.0  | 81  |
| Ü              | 20-24   | 98.4   | 60.7  | 79.7  | 74.4   | 54.7  | 214   |
|                | 25-29   | 97.1   | 55.2  | 78.2  | 74.5   | 50.7  | 181   |
|                | 30-34   | 93.9   | 61.0  | 74.5  | 71.5   | 53.8  | 118   |
|                | 35-49   | 92.2   | 55.6  | 65.4  | 61.8   | 45.3  | 92  |
| Marital status | Ever married/in union                           | 96.0   | 58.7  | 75.1  | 71.1   | 52.4  | 641   |
|                | Never married/in union                          | (100.0)  | (69.8)  | (89.3)  | (82.1)   | (57.5)  | 45  |
| Education      | None  | (89.3)   | (28.2)  | (49.1)  | (46.9)   | (28.2)  | 41  |
|                | Primary   | 96.4   | 58.4  | 71.5  | 66.0   | 49.7  | 311   |
|                | Secondary +                                     | 96.7   | 66.8  | 87.1  | 83.6   | 61.0  | 315   |
|                | Other   | (*)  | (*)   | (*)   | (*)  | (*)   | 15  |
| Wealth         | Poorest   | 94.1   | 40.0  | 48.9  | 43.5   | 32.1  | 173   |
| index          | Second  | 99.4   | 68.2  | 82.2  | 77.6   | 61.3  | 156   |
| quintiles      | Middle  | 94.7   | 63.7  | 82.3  | 79.0   | 57.1  | 134   |
|                | Fourth  | 94.8   | 66.3  | 92.2  | 89.8   | 62.6  | 132   |
|                | Richest   | 99.0   | 64.8  | 84.5  | 79.2   | 56.7  | 91  |
| Ethnicity of   | Creole  | 93.2   | 67.7  | 88.4  | 84.7   | 63.9  | 113   |
| household      | Mestizo   | 98.7   | 65.1  | 81.3  | 76.2   | 56.2  | 355   |
| head           | Garifuna  | (94.4)   | (72.1)  | (96.7)  | (95.0)   | (68.4)  | 43  |
|                | Maya  | 93.2   | 44.5  | 49.3  | 45.6   | 38.6  | 96  |
|                | Other   | 93.5   | 29.1  | 52.8  | 49.3   | 25.6  | 71  |
|                | Missing/DK                                      | (*)  | (*)   | (*)   | (*)  | (*)   | 8   |
| Total          |   | 96.2   | 59.4  | 76.0  | 71.8   | 52.7  | 685   |

<sup>[1]</sup> MICS indicator 9.8 [2] MICS indicator 9.9

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

<sup>3</sup> un-weighted cases in "CET/ITVET/VOTEC" on the Education are excluded from the table

#### Sexual Behaviour Related to HIV Transmission

Promoting safer sexual behaviour is critical for reducing HIV prevalence. The use of condoms during sex, especially with non-regular partners, is especially important for reducing the spread of HIV. In most countries over half of new HIV infections are among young people 15-24 years thus a change in behaviour among this age group will be especially important to reduce new infections. A module of questions was administered to women 15-24 years of age to assess their risk of HIV infection. Risk factors for HIV include sex at an early age, sex with older men, sex with a non-marital non-cohabitating partner, and failure to use a condom.

Table HA.8: Sexual Behaviour that increases the risk of HIV infection

Percentage of never-married young women age 15-24 years who have never had sex, percentage of young women age 15-24 years who have had sex before age 15, and percentage of young women age 15-24 years who had sex with a man 10 or more years older during the last 12 months, Belize, 2011

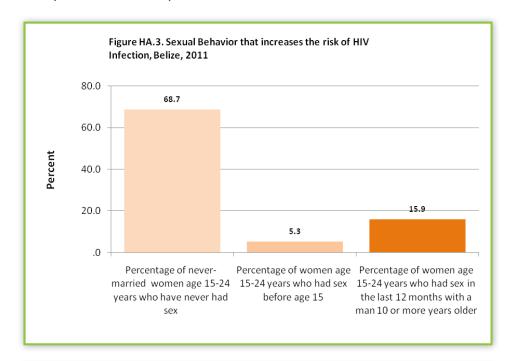
|                |                        |                           |                          |                      |                    | Percentage of                     | Number of            |
|----------------|------------------------|---------------------------|--------------------------|----------------------|--------------------|-----------------------------------|----------------------|
|                |                        | Percentage of             |                          | Percentage of        |                    | women age 15-24                   | women age            |
|                |                        | never-married             | Number                   | women age            |                    | years who had                     | 15-24 years          |
|                |                        | women age                 | of never-                | 15-24 years          | Number             | sex in the last 12                | who had sex in       |
|                |                        | 15-24 years who           | married                  | who had sex          | of women           | months with a                     | the 12 months        |
|                |                        | have never had<br>sex [1] | women age<br>15-24 years | before age<br>15 [2] | age 15-24<br>years | man 10 or more<br>years older [3] | preceding the survey |
| Region         | Corozal                | 78.7                      | 116                      | 4.7                  | 194                | 14.0                              | 89                   |
| ricgion        | Orange Walk            | 77.8                      | 152                      | 5.1                  | 258                | 12.1                              | 134                  |
|                | Belize (Excluding      | 58.2                      | 174                      | 6.0                  | 255                | 13.6                              | 146                  |
|                | Belize City South      |                           |                          |                      |                    |                                   |                      |
|                | Belize City South      | 47.6                      | 149                      | 6.0                  | 216                | 19.6                              | 131                  |
|                | Side                   |                           |                          |                      |                    |                                   |                      |
|                | Belize District        | 53.3                      | 323                      | 6.0                  | 471                | 16.5                              | 278                  |
|                | Cayo                   | 75.9                      | 211                      | 3.1                  | 347                | 16.8                              | 170                  |
|                | Stann Creek            | 60.3                      | 92                       | 9.7                  | 147                | 22.8                              | 87                   |
|                | Toledo                 | 88.7                      | 87                       | 4.6                  | 147                | 12.8                              | 62                   |
| Area           | Urban                  | 59.0                      | 492                      | 5.0                  | 726                | 15.6                              | 404                  |
|                | Rural                  | 78.5                      | 489                      | 5.5                  | 838                | 16.3                              | 416                  |
| Λ              | 1F 10                  | 00.0                      | coc                      | 4.1                  | 844                | 10.4                              | 200                  |
| Age            | 15-19<br>20-24         | 80.3<br>40.5              | 696                      | 4.1<br>6.7           | 720                | 13.4                              | 260<br>560           |
|                | 20-24                  | 40.5                      | 285                      | 6.7                  | 720                | 17.1                              | 560                  |
| Marital status | Ever married/in union  | na                        | na                       | 11.1                 | 583                | 17.7                              | 559                  |
|                | Never married/in union | 68.7                      | 981                      | 1.8                  | 981                | 12.1                              | 261                  |
| Education      | None                   | (*)                       | 10                       | (0.0)                | 23                 | (*)                               | 10                   |
|                | Primary                | 74.9                      | 188                      | 11.4                 | 443                | 21.8                              | 279                  |
|                | Secondary +            | 66.6                      | 760                      | 3.0                  | 1064               | 12.8                              | 516                  |
|                | CET/ITVET/VOTEC        | (*)                       | 5                        | (*)                  | 10                 | (*)                               | 7                    |
|                | Other                  | (*)                       | 18                       | (*)                  | 25                 | (*)                               | 8                    |
| Wealth         | Poorest                | 84.7                      | 146                      | 6.5                  | 271                | 15.3                              | 133                  |
| index          | Second                 | 74.6                      | 158                      | 9.1                  | 330                | 20.6                              | 196                  |
| quintiles      | Middle                 | 70.1                      | 223                      | 5.4                  | 356                | 15.5                              | 196                  |
|                | Fourth                 | 59.4                      | 209                      | 2.0                  | 308                | 13.3                              | 170                  |
|                | Richest                | 62.2                      | 245                      | 3.2                  | 299                | 13.6                              | 125                  |
| Ethnicity of   | Creole                 | 50.4                      | 257                      | 5.2                  | 376                | 19.2                              | 227                  |
| household      | Mestizo                | 75.9                      | 475                      | 5.0                  | 784                | 15.6                              | 392                  |
| head           | Garifuna               | 39.4                      | 64                       | 9.0                  | 93                 | 16.7                              | 65                   |
|                | Maya                   | 87.7                      | 97                       | 4.1                  | 179                | 11.3                              | 83                   |
|                | Other                  | (86.4)                    | 73                       | (6.6)                | 113                | (10.6)                            | 44                   |
|                | Missing/DK             | (*)                       | 15                       | (*)                  | 20                 | (*)                               | 9                    |
| Total          |                        | 68.7                      | 981                      | 5.3                  | 1564               | 15.9                              | 820                  |

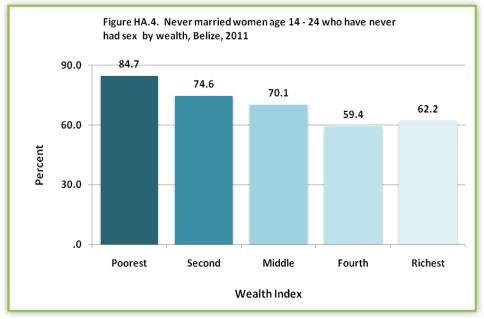
[1] MICS indicator 9.10 [2] MICS indicator 9.11 [3] MICS indicator 9.12

The frequency of sexual behaviours that increase the risk of HIV infection among women is presented in Table HA.8 and Figure HA.3. Evidently, 68.7 percent of women 15 to 24 years had never had sex while 5.3 percent had sex before age 15. 15.9 percent had sex with a man 10 years or older in the last 12 months. An

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases na = not applicable

urban-rural difference can be seen in the percentage of never-married women age 15-24 years who have never had sex (urban 59.0 percent, rural 78.5 percent). Women 15 to 24 years from richer families seem to have sex less recently than those from poorer families.





Sexual behaviour and condom use during sex with more than one partner were assessed in all women and for women age 15-24 years of age who had sex with such a partner in the previous year (Table HA.9 and Table HA.10). 2.1 percent of women 15-49 years of age report having sex with more than one partner. Of those women, only 28.6 percent report using a condom the last time they had sex (in the last 12 months).

Table HA.9: Sex with multiple partners
Percentage of women age 15-49 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with more than one partner in the last 12 months and among those who had sex with multiple partners, the percentage who used a condom at last sex, Belize, 2011

|                   |   | Perce              | ntage of w                             | omen who:  |   |  |   |
|-------------------|---|--------------------|--|--|---|--|---|
|                   |   | Ever<br>had<br>sex | Had sex<br>in the<br>last 12<br>months | Had sex with<br>more than<br>one partner<br>in last 12<br>months [1] | Number<br>of<br>women<br>age 15-49<br>years | Percent of women age<br>15-49 years who had more<br>than one sexual partner<br>in the last 12 months,<br>who also reported that a<br>condom was used the last<br>time they had sex [2] | Number of women<br>age 15-49 years<br>who had more<br>than one sexual<br>partner in the last<br>12 months |
| Region            | Corozal   | 80.9               | 70.1                                   | 1.6  | 534   | (*)  | 8   |
|                   | Orange Walk Belize (Excluding Belize City South Side) | 77.1<br>84.6       | 69.0<br>75.2                           | 1.2<br>3.4   | 618<br>687                                  | (*)  | 7 23  |
|                   | Belize City South<br>Side                             | 87.3               | 75.1                                   | 3.8  | 573   | (*)  | 22  |
|                   | Belize District                                       | 85.8               | 75.2                                   | 3.6  | 1260  | (34.9)   | 45  |
|                   | Cayo  | 80.8               | 71.2                                   | 1.6  | 933   | (*)  | 15  |
|                   | Stann Creek   | 84.6               | 76.8                                   | 1.4  | 404   | (*)  | 6   |
|                   | Toledo  | 74.8               | 68.5                                   | 0.8  | 347   | (*)  | 3   |
| Area              | Urban   | 83.8               | 72.8                                   | 2.9  | 1926  | (30.7)   | 55  |
|                   | Rural   | 79.8               | 71.8                                   | 1.3  | 2170  | (24.7)   | 29  |
| Age               | 15-24   | 56.8               | 52.4                                   | 3.1  | 1564  | (25.5)   | 48  |
| _                 | 25-29   | 94.9               | 87.9                                   | 1.9  | 651   | (*)  | 12  |
|                   | 30-39   | 97.4               | 85.9                                   | 1.9  | 1081  | (*)  | 21  |
|                   | 40-49   | 98.3               | 79.9                                   | 0.4  | 801   | (*)  | 4   |
| Marital<br>status | Ever married/in union                                 | 99.9               | 90.3                                   | 2.0  | 2875  | (19.2)   | 56  |
|                   | Never married/in union                                | 38.7               | 29.7                                   | 2.3  | 1219  | (47.6)   | 28  |
| Education         | None  | 91.8               | 73.2                                   | 0.0  | 148   | (*)  | 0   |
|                   | Primary   | 88.8               | 79.0                                   | 1.3  | 1608  | (*)  | 21  |
|                   | Secondary +   | 76.2               | 67.5                                   | 2.7  | 2259  | 28.8   | 62  |
|                   | CET/ITVET/VOTEC                                       | (*)                | (*)                                    | (*)  | 26  | (*)  | 0   |
|                   | Other   | 67.7               | 66.2                                   | 1.9  | 55  | (*)  | 1   |
| Wealth index      | Poorest   | 78.5               | 70.0                                   | 1.3  | 644   | (*)  | 8   |
| quintiles         | Second  | 83.6               | 73.5                                   | 2.8  | 815   | (*)  | 23  |
|                   | Middle  | 80.5               | 72.9                                   | 1.7  | 877   | (*)  | 15  |
|                   | Fourth  | 83.6               | 75.5                                   | 2.9  | 862   | (*)  | 25  |
|                   | Richest   | 81.5               | 69.1                                   | 1.4  | 898   | (*)  | 13  |
| Ethnicity of      | Creole  | 86.3               | 76.3                                   | 3.7  | 985   | (28.4)   | 37  |
| household<br>head | Mestizo   | 80.1               | 70.9                                   | 1.4  | 2046  | (22.9)   | 28  |
| noau              | Garifuna  | 89.0               | 79.8                                   | 2.9  | 253   | (*)  | 7   |
|                   | Maya  | 76.5               | 68.1                                   | 0.5  | 407   | (*)  | 2   |
|                   | Other   | 78.3               | 68.0                                   | 1.9  | 335   | (*)  | 6   |
|                   | Missing/DK  | 85.1               | 74.0                                   | 5.3  | 70  | (*)  | 4   |
| Total             |   | 81.7               | 72.3                                   | 2.1  | 4096  | 28.6   | 84  |

<sup>[1]</sup> MICS indicator 9.13 [2] MICS indicator 9.14
() Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases 1 un-weighted cases in the "Missing" on the Marital Status variable is excluded from the table

Table HA.10: Sex with multiple partners among young women

Percentage of women age 15-24 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with more than one partner in the last 12 months and among those who had sex with multiple partners, the percentage who used a condom at last sex, Belize, 2011

|                   |   | Perce        |  | omen who:  | x, 201120, 20                            | Percent of women age<br>15-24 years who had   |   |
|-------------------|---|--------------|--|--|--|---|---|
|                   |   | Ever had sex | Had sex<br>in the<br>last 12<br>months | Had sex with<br>more than<br>one partner<br>in last 12<br>months | Number<br>of women<br>age 15-24<br>years | more than one sexual partner in the last 12 months, who also reported that a condom was used the last time they had sex | Number of women<br>age 15-24 years<br>who had more<br>than one sexual<br>partner in the last<br>12 months |
| Region            | Corozal   | 53.0         | 46.2                                   | 2.2  | 194                                      | (*)   | 4   |
|                   | Orange Walk                                     | 54.3         | 51.8                                   | 1.5  | 258                                      | (*)   | 4   |
|                   | Belize (Excluding<br>Belize City South<br>Side) | 60.3         | 57.3                                   | 5.4  | 255                                      | (*)   | 14  |
|                   | Belize City South<br>Side                       | 67.2         | 60.8                                   | 5.3  | 216                                      | (*)   | 12  |
|                   | Belize District                                 | 63.5         | 58.9                                   | 5.4  | 471                                      | (*)   | 25  |
|                   | Cayo  | 53.8         | 49.1                                   | 3.1  | 347                                      | (*)   | 11  |
|                   | Stann Creek                                     | 62.3         | 59.0                                   | 1.7  | 147                                      | (*)   | 2   |
|                   | Toledo  | 47.0         | 42.4                                   | 1.1  | 147                                      | (*)   | 2   |
| Area              | Urban   | 60.0         | 55.7                                   | 3.7  | 726                                      | (31.7)  | 26  |
|                   | Rural   | 54.1         | 49.6                                   | 2.6  | 838                                      | (*)   | 21  |
| Age               | 15-19   | 33.7         | 30.8                                   | 1.4  | 844                                      | (*)   | 12  |
|                   | 20-24   | 84.0         | 77.8                                   | 5.0  | 720                                      | (26.2)  | 36  |
| Marital<br>status | Ever married/in union                           | 99.9         | 95.9                                   | 4.5  | 583                                      | (12.0)  | 26  |
|                   | Never married/in union                          | 31.3         | 26.6                                   | 2.2  | 981                                      | (*)   | 22  |
| Education         | None  | (62.9)       | (46.4)                                 | (0.0)  | 22                                       | (*)   | 0   |
|                   | Primary   | 68.1         | 62.9                                   | 1.9  | 443                                      | 10.7  | 9   |
|                   | Secondary +                                     | 52.5         | 48.5                                   | 3.6  | 1064                                     | (26.8)  | 38  |
|                   | CET/ITVET/VOTEC                                 | (*)          | (*)                                    | (*)  | 10                                       | (*)   | 0   |
|                   | Other   | (33.0)       | (33.0)                                 | (4.1)  | 25                                       | (*)   | 1   |
| Wealth index      | Poorest   | 54.1         | 49.0                                   | 1.7  | 271                                      | (*)   | 5   |
| quintiles         | Second  | 64.2         | 59.5                                   | 4.2  | 330                                      | (*)   | 14  |
|                   | Middle  | 56.2         | 55.0                                   | 2.4  | 356                                      | (*)   | 8   |
|                   | Fourth  | 59.7         | 55.2                                   | 5.1  | 308                                      | (*)   | 16  |
|                   | Richest   | 48.9         | 41.8                                   | 1.7  | 299                                      | (*)   | 5   |
| Ethnicity of      | Creole  | 65.5         | 60.4                                   | 4.8  | 376                                      | (*)   | 18  |
| household         | Mestizo   | 54.0         | 50.0                                   | 2.8  | 784                                      | (*)   | 22  |
| head              | Garifuna  | 72.8         | 69.3                                   | 3.9  | 93                                       | (*)   | 4   |
|                   | Maya  | 52.1         | 46.7                                   | 0.6  | 179                                      | (*)   | 1   |
|                   | Other   | 44.0         | 38.6                                   | 2.2  | 113                                      | (*)   | 3   |
|                   | Missing/DK                                      | (*)          | (*)                                    | (*)  | 19                                       | (*)   | 1   |
| Total             |   | 56.8         | 52.4                                   | 3.1  | 1564                                     | (25.5)  | 48  |

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

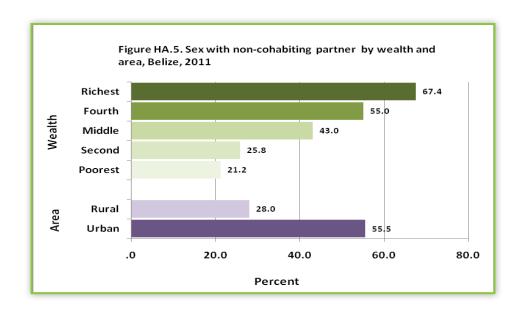
Tables HA.11 presents the percentage of women age 15-24 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with a non-marital, non-cohabiting partner in the last 12 months and among those who had sex with a non-marital, non-cohabiting partner, the percentage who used a condom the last time they had sex with such a partner. The percentage of women 15 to 24 years who had sex with a non-marital, non-cohabiting partner in the 12 months before MICS differ by area (urban 55.5 percent, rural 28.0 percent) and wealth quintiles (see Figure HA.5). Evidently, wealthier women tend to have sex with non-cohabiting partners than poorer women. Women from Garifuna households had sex with no-cohabiting partners at a rate of 68.3 percent: this compares to the rate for Maya households of 14.2 percent.

#### Table HA.11: Sex with non-regular partners

Percentage of women age 15-24 years who ever had sex, percentage who had sex in the last 12 months, percentage who have had sex with a non-marital, non-cohabiting partner in the last 12 months and among those who had sex with a non-marital, non-cohabiting partner, the percentage who used a condom the last time they had sex with such a partner, Belize, 2011

|                        |   |                 | ntage of<br>15-24 who:                 |  |  |   | Percentage of women age   |   |
|------------------------|---|-----------------|--|--|--|---|---|---|
|                        |   | Ever<br>had sex | Had sex<br>in the<br>last 12<br>months | Number<br>of women<br>age 15-24<br>years | Percentage<br>who had sex<br>with a non-<br>marital, non-<br>cohabiting<br>partner in<br>the last 12<br>months [1] | Number<br>of women<br>age 15-24<br>years who<br>had sex in<br>the last 12<br>months | 15-24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months, who also reported that a condom was used the last time they had sex with such a partner [2] | Number of women<br>age 15-49 years<br>who had more<br>than one sexual<br>partner in the last<br>12 months |
| Region                 | Corozal   | 53.0            | 46.2                                   | 194                                      | 26.8   | 89  | (61.8)  | 24  |
| . rogion               | Orange Walk                                     | 54.3            | 51.8                                   | 258                                      | 26.5   | 134   | (55.3)  | 35  |
|                        | Belize (Excluding<br>Belize City South<br>Side) | 60.3            | 57.3                                   | 255                                      | 56.4   | 146   | 72.0  | 82  |
|                        | Belize City South<br>Side                       | 67.2            | 60.8                                   | 216                                      | 69.0   | 131   | 70.3  | 91  |
|                        | Belize District                                 | 63.5            | 58.9                                   | 471                                      | 62.4   | 278   | 71.1  | 173   |
|                        | Cayo  | 53.8            | 49.1                                   | 347                                      | 34.9   | 170   | (53.2)  | 59  |
|                        | Stann Creek                                     | 62.3            | 59.0                                   | 147                                      | 45.0   | 87  | (66.9)  | 39  |
|                        | Toledo  | 47.0            | 42.4                                   | 147                                      | 15.7   | 62  | (*)   | 10  |
| Area                   | Urban   | 60.0            | 55.7                                   | 726                                      | 55.5   | 404   | 70.0  | 224   |
|                        | Rural   | 54.1            | 49.6                                   | 838                                      | 28.0   | 416   | 54.1  | 116   |
| Age                    | 15-19   | 33.7            | 30.8                                   | 844                                      | 50.3   | 260   | 68.9  | 131   |
|                        | 20-24   | 84.0            | 77.8                                   | 720                                      | 37.5   | 560   | 61.9  | 210   |
| Marital<br>status      | Ever married/in union                           | 99.9            | 95.9                                   | 583                                      | 14.7   | 559   | 46.2  | 82  |
|                        | Never married/in union                          | 31.3            | 26.6                                   | 981                                      | 99.1   | 261   | 70.4  | 259   |
| Education              | None  | (62.9)          | (46.4)                                 | 22                                       | (*)  | 10  | (*)   | 0   |
|                        | Primary   | 68.1            | 62.9                                   | 443                                      | 19.8   | 279   | 43.5  | 55  |
|                        | Secondary +                                     | 52.5            | 48.5                                   | 1064                                     | 54.5   | 516   | 68.2  | 281   |
|                        | CET/ITVET/VOTEC                                 | (*)             | (*)                                    | 10                                       | (*)  | 7   | (*)   | 3   |
|                        | Other   | (33.0)          | (33.0)                                 | 25                                       | (*)  | 8   | (*)   | 1   |
| Wealth index quintiles |   | 54.1            | 49.0                                   | 271                                      | 21.2   | 133   | (55.3)  | 28  |
| quintiloo              | Second  | 64.2            | 59.5                                   | 330                                      | 25.8   | 196   | 56.1  | 51  |
|                        | Middle  | 56.2            | 55.0<br>EE 3                           | 356                                      | 43.0   | 196   | 62.8  | 84  |
|                        | Fourth<br>Richest                               | 59.7<br>48.9    | 55.2<br>41.8                           | 308<br>299                               | 55.0<br>67.4   | 170<br>125  | 71.3<br>67.3  | 93  |
| Ethnicity of           | Creole  | 65.5            | 60.4                                   | 376                                      | 62.8   | 227   | 71.9  | 143   |
| household              | Mestizo   | 54.0            | 50.0                                   | 784                                      | 32.4   | 392   | 61.7  | 127   |
| head                   | Garifuna  | 72.8            | 69.3                                   | 93                                       | 68.3   | 65  | (62.7)  | 44  |
|                        | Maya  | 52.1            | 46.7                                   | 179                                      | 14.2   | 83  | (*)   | 12  |
|                        | Other   | 44.0            | 38.6                                   | 113                                      | (23.3)   | 44  | (*)   | 10  |
|                        | Missing/DK                                      | (*)             | (*)                                    | 19                                       | (*)  | 9   | (*)   | 5   |
| Total                  |   | 56.8            | 52.4                                   | 1564                                     | 41.6   | 820   | 64.6  | 341   |

<sup>[1]</sup> MICS indicator 9.15 [2] MICS indicator 9.16; MDG indicator 6.2 ( ) Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases



#### **Orphanhood**

As the HIV epidemic progresses, more and more children are becoming orphaned and vulnerable because of AIDS. Children who are orphaned or in vulnerable households may be at increased risk of neglect or exploitation if the parents are not available to assist them. Monitoring the variations in different outcomes for orphans and vulnerable children and comparing them to their peers gives us a measure of how well communities and governments are responding to their needs.

The frequency of children living with neither parent, mother only, and father only is presented in Table HA.12. This table indicates that 65.4 percent of children aged 0-17 years in Belize live with both the parents. About one in fifteen children (6.9 percent) is living with neither parent. Stann Creek District and Belize City South Side stand out as the regions where children 0 to 17 years are not living with a biological parent (Stann Creek 8.2 percent, Belize City South Side 9.6 percent). There does not appear to be any male – female difference among children not living with a parent (male 6.8 percent, female 7.0 percent). Children from Creole households are not living with biological parents at a rate of 9.3 percent (Figure HA.6).

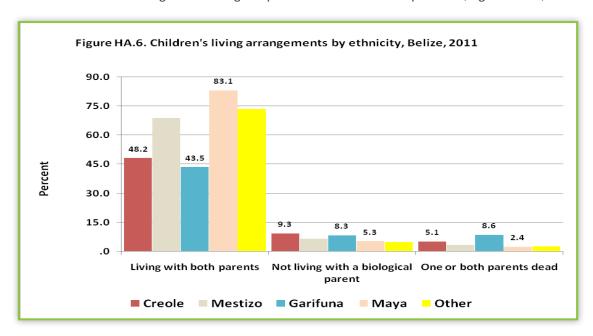


Table HA.12: Children's living arrangements and orphanhood
Percent distribution of children age 0-17 years according to living arrangements, percentage of children age 0-17 years in households not living with a biological parent and percentage of children who have one or both parents dead, Belize, 2011

| 4 d age c c d age c d age c d age c d age c d age c d age c d age c d age c |              |   |                          | Ë   | Living with neither parent | er parent |               | Living with mother only | n mother<br>y | Living with father only | father only |                         |       |   | One or            | Num-                          |
|---|--------------|---|--------------------------|-----|----------------------------|-----------|---------------|-------------------------|---------------|-------------------------|-------------|-------------------------|-------|---|-------------------|-------------------------------|
| Maile         684         0.5         0.2         2.15         1.7         2.6         0.3         0.1         0.0         0.2         0.2         0.1         0.2         0.2         0.1         0.2<   |              |   | Living with both parents |     | Only mother alive          | Both are  | Both are dead | Father                  | Father        | Mother                  | Mother      | Impossible to determine | Total | Not living with<br>a biological<br>parent [1] | both parents dead | children<br>age 0-17<br>years |
| Female         647         0.2         5.6         0.5         22.1         2.7         1.9         0.3         1.0         0.0         4.4         0.1         2.8         2.1         1.0         0.3         1.0         0.0   | Sex          | Male                                      | 0.99                     |     | 0.2                        | 5.6       | 0.5           | 21.5                    | 1.7           |                         | 0.3         | 1.1                     | 100.0 | 6.8   |                   | 3532                          |
| Corroral South Side City         758         0.6         0.0         5.3         0.4         13.2         1.7         1.4         1.5         0.5         0.0         6.0         4.0         9.0 <td></td> <td>Female</td> <td>64.7</td> <td></td> <td>0.2</td> <td>9.6</td> <td>0.5</td> <td>22.1</td> <td>2.7</td> <td>1.9</td> <td>0.3</td> <td>1.2</td> <td>100.0</td> <td>7.0</td> <td>4.4</td> <td>3561</td>   |              | Female                                    | 64.7                     |     | 0.2                        | 9.6       | 0.5           | 22.1                    | 2.7           | 1.9                     | 0.3         | 1.2                     | 100.0 | 7.0   | 4.4               | 3561                          |
| December Methods   Control M  | Region       | Corozal                                   | 75.8                     |     | 0.3                        | 5.3       | 0.4           | 13.2                    | 1.7           | 1.5                     | 0.3         | 9.0                     | 100.0 | 6.9   | 3.6               | 928                           |
| Balice Electrical   |              | <b>Orange Walk</b>                        | 72.3                     |     | 0.2                        | 4.8       | 0.7           | 17.7                    | 1.4           | 1.3                     | 0.5         | 1.0                     | 100.0 | 5.8   | 3.1               | 1039                          |
| Boiltee City         418         0.8         0.3         422         2.6         2.9         0.3         1.1         100         9.6         4.6           South Solity Solity         60.3         1.1         0.2         6.0         0.3         35.0         2.3         0.3         1.0         0.0         4.0  |              | Belize (Excluding Belize City South Side) | 59.0                     |     | 0.2                        | 4.4       | 0.1           | 28.5                    | 2.0           | 3.4                     | 0.4         | 9.0                     | 100.0 | 0.9   | 4.0               | 926                           |
| Cayo         66.3         6.0         6.0         7.3         2.9         0.4         0.0         1.0         2.0         6.0         4.3         2.0         2.0         1.0         6.0         4.3         4.0         4.0         1.0         4.0 </td <td></td> <td>Belize City<br/>South Side</td> <td>41.8</td> <td></td> <td>0.3</td> <td>7.9</td> <td>9.0</td> <td>42.2</td> <td>2.6</td> <td>2.3</td> <td>0.3</td> <td>1.2</td> <td>100.0</td> <td>9.6</td> <td>4.6</td> <td>866</td>   |              | Belize City<br>South Side                 | 41.8                     |     | 0.3                        | 7.9       | 9.0           | 42.2                    | 2.6           | 2.3                     | 0.3         | 1.2                     | 100.0 | 9.6   | 4.6               | 866                           |
| Cayo         683         0.1         0.2         2.8         2.5         2.6         0.0         174         2.5         2.6         0.2         0.0         6.0         0.0         174         2.5         2.6         0.0         0.0         6.5         9.4         0.0         6.6         9.0           Toledo         79.3         0.0<   |              | Belize District                           | 50.9                     |     | 0.2                        | 0.9       | 0.3           | 35.0                    | 2.3           | 2.9                     | 0.4         | 0.0                     | 100.0 | 7.7   | 4.3               | 1822                          |
| Stann Creek   |              | Сауо                                      | 69.3                     |     | 0.2                        | 0.9       | 0.0           | 17.4                    | 2.5           | 2.6                     | 0.2         | 1.5                     | 100.0 | 6.5   | 3.2               | 1676                          |
| Foledo  |              | Stann Creek                               | 54.9                     |     | 0.4                        | 5.9       | 1.2           | 28.1                    | 3.7           | 2.6                     | 0.4         | 2.0                     | 100.0 | 8.2   | 6.4               | 804                           |
| Hundle   H  |              | Toledo                                    | 79.3                     |     | 0.1                        | 2.0       | 0.8           | 10.4                    | 1.5           | 1.5                     | 0.4         | 1.0                     | 100.0 | 5.9   |                   |                               |
| Hurell 744 678 678 679 679 679 679 679 679 679 679 679 679  | Area         | Urban                                     | 51.4                     |     | 0.1                        | 6.3       | 0.5           | 33.3                    | 3.0           | 2.8                     | 0.1         | 1.7                     | 100.0 | 7.7   | 4.5               | 2780                          |
| Caracteristic   Caracteristi  |              | Rural                                     | 74.4                     |     | 0.3                        | 5.1       | 0.5           | 14.4                    | 1.7           | 1.8                     | 0.5         | 0.8                     | 100.0 | 6.3   | 3.4               | 4314                          |
| Feyears 675 4 Feyers 675 10 0 0 4.6 6.1 21.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1  | Age          | 0-4 years                                 | 74.6                     |     | 0.0                        | 3.2       | 0.2           | 19.4                    | 1.3           | 6.0                     | 0.0         | 0.5                     | 100.0 | 3.4   | 1.6               | 1902                          |
| Hill Forcest 618 618 618 619 62 64 65 64 23.2 3.0 2.6 6.7 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8 6.8   |              | 5-9 years                                 | 67.5                     |     | 0.2                        | 4.6       | 0.1           | 21.1                    | 1.9           | 2.4                     | 0.2         | 1.0                     | 100.0 | 5.8   | 3.2               | 2004                          |
| 15-17 years   52.4   12.   12.   12.   13.   14.   1  |              | 10-14 years                               | 61.8                     |     | 0.4                        | 6.5       | 0.4           | 23.2                    | 3.0           | 2.6                     | 0.7         | 0.8                     | 100.0 | 7.9   | 5.1               | 2068                          |
| hin- Foorest 774  |              | 15-17 years                               | 52.4                     |     | 0.4                        | 6.6       | 1.8           | 24.7                    | 2.7           | 3.4                     | 0.5         | 3.3                     | 100.0 | 13.0  | 6.4               | 1120                          |
| $ \begin{tabular}{ l l l l l l l l l l l l l l l l l l l$   | Wealth in-   |   | 77.4                     |     | 0.3                        | 4.4       | 6.0           | 11.7                    | 2.5           | 1.1                     | 9.0         | 6.0                     | 100.0 | 5.8   | 4.4               | 1685                          |
| Middle         62.2         14 bit of the continuous of the c   | dex quintile |   | 0.09                     |     | 0.3                        | 0.9       | 0.3           | 26.1                    | 1.7           | 2.8                     | 0.1         | 2.1                     | 100.0 | 7.1   | 3.0               | 1537                          |
| Fourth         60.1         60.2         60.3         60.4         60.5         60.5         60.4         60.5         <   |              | Middle                                    | 62.2                     |     | 0.2                        | 5.4       | 0.4           | 26.2                    | 1.9           | 1.9                     | 0.3         | 0.4                     | 100.0 | 7.1   | 3.9               | 1406                          |
| Hichest         64.7         0.2         0.1         5.8         0.6         21.9         2.9         2.6         0.2         1.1         100.0         6.7         4.0           sity of Creole         48.2         0.0         35.2         2.6         3.1         0.8         0.9         100.0         9.3         5.1           shold Mestizo         68.8         0.0         0.2         7.5         0.2         2.6         1.9         0.2         1.0         0.0         9.3         5.1           A stituna         43.5         0.0         4.8         1.9         3.6         4.6         0.2         1.2         1.0         0.0         8.3         8.6           A stituna         83.1         4.8         1.9         3.6         4.6         0.2         2.7         1.0         8.3         8.6           A stituna         83.1         4.8         0.0         7.1         1.4         1.0         8.3         8.6         8.6           A stituna         83.1         4.8         0.0         7.1         1.4         1.0         9.3         8.2         9.4           A stituna         83.1         83.2         83.2         83.2   |              | Fourth                                    | 60.1                     | 1.6 | 0.3                        | 6.7       | 0.2           | 25.0                    | 2.1           | 2.9                     | 0.5         | 1.3                     | 100.0 | 8.0   | 3.9               | 1317                          |
| ity of Creole 48.2 0.0 0.0 0.2 7.5 0.2 35.2 2.6 3.1 0.8 0.9 100.0 9.3 7.0 5.1 1.2 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0   |              | Richest                                   | 64.7                     | 0.2 | 0.1                        | 5.8       | 9.0           | 21.9                    | 2.9           | 2.6                     | 0.2         | 1.1                     | 100.0 | 6.7   | 4.0               | 1148                          |
| Hold Mestizo 688 0.9 0.3 6.4 0.4 19.3 2.0 1.9 0.3 0.3 6.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0.8 0   | Ethnicity of |   | 48.2                     |     | 0.2                        | 7.5       | 0.2           | 35.2                    | 2.6           | 3.1                     | 0.8         | 6.0                     | 100.0 | 9.3   | 5.1               | 1527                          |
| Garifuna         43.5         0.0         4.8         1.9         36.0         4.9         4.6         0.2         2.5         100.0         8.3         8.6           Maya         83.1         0.1         4.4         0.6         7.1         1.4         1.6         0.1         1.4         10.0         5.3         2.4           Other         73.6         4.5         0.1         1.73         2.1         1.3         0.3         0.0         100.0         4.8         2.7           Missing/DK         69.4         0.0         6.0         0.9         20.3         0.0         2.6         0.0         100.0         100.0         6.9         1.8           Missing/DK         65.4         0.2         5.6         0.5         21.8         2.2         0.0         0.0         100.0         6.9         3.8   | household    | Mestizo                                   | 68.8                     |     | 0.3                        | 5.4       | 0.4           | 19.3                    | 2.0           | 1.9                     | 0.3         | 1.2                     | 100.0 | 6.5   |                   | 3486                          |
| Maya         83.1         0.1         4.4         0.6         7.1         1.4         1.6         0.1         1.4         100.0         5.3         2.4           Other         73.6         4.5         0.1         17.3         2.1         1.3         0.3         0.6         100.0         4.8         2.7           Missing/DK         69.4         0.0         6.0         0.0         20.3         0.0         2.6         0.0         100.0         4.8         2.7           Missing/DK         66.4         0.2         5.6         0.2         21.8         2.2         0.2         0.0         100.0         6.9         1.8   | nead         | Garifuna                                  | 43.5                     |     | 0.0                        | 4.8       | 1.9           | 36.0                    | 4.9           | 4.6                     | 0.2         | 2.5                     | 100.0 | 8.3   | 8.6               | 380                           |
| Other Dissing/DK         73.6         65.4   |              | Maya                                      | 83.1                     |     | 0.1                        | 4.4       | 9.0           | 7.1                     | 1.4           | 1.6                     | 0.1         | 1.4                     | 100.0 | 5.3   | 2.4               | 953                           |
| Missing/DK         69.4         0.0         6.0         0.0         2.0         0.0         2.0         0.0 <th< td=""><td></td><td>Other</td><td>73.6</td><td></td><td>0.2</td><td>4.5</td><td>0.1</td><td>17.3</td><td>2.1</td><td>1.3</td><td>0.3</td><td>9.0</td><td>100.0</td><td>4.8</td><td></td><td>653</td></th<>  |              | Other                                     | 73.6                     |     | 0.2                        | 4.5       | 0.1           | 17.3                    | 2.1           | 1.3                     | 0.3         | 9.0                     | 100.0 | 4.8   |                   | 653                           |
| 65.4 0.2 5.6 0.5 21.8 2.2 2.2 0.3 1.2 100.0 6.9 3.8   |              | Missing/DK                                | 69.4                     |     | 0.0                        | 0.9       | 6.0           | 20.3                    | 0.0           |                         | 0.0         | 0.0                     | 100.0 | 7.8   | 1.8               | 93                            |
|   | Total        |   | 65.4                     |     | 0.2                        | 5.6       | 0.5           | 21.8                    | 2.2           | 2.2                     | 0.3         | 1.2                     | 100.0 | 6.9   | 3.8               | 7094                          |

[1] MICS indicator 9.17 [2] MICS indicator 9.18

**175** 

One of the measures developed for the assessment of the status of orphaned children relative to their peers looks at the school attendance of children 10-14 for children who have lost both parents versus children whose parents are alive (and who live with at least one of these parents). If children whose parents have died do not have the same access to school as their peers, then families and schools are not ensuring that these children's rights are being met.

In Belize, 0.4 percent of children aged 10-14 have lost both parents (Table HA.13). Among the children age 10-14 who have not lost a parent and who live with at least one parent, 95.0 percent are attending school. Total numbers for orphaned children age 10 to 14 years are low (Table HA.13) and this does not allow comparisons between orphans and non-orphans.

Table HA.13: School attendance of orphans and non-orphans School attendance of children age 10-14 years by orphanhood, Belize, 2011

|       |        | Percentage<br>of children<br>whose<br>mother<br>and father<br>have died<br>(orphans) | Percentage<br>of children of<br>whom both<br>parents are<br>alive and child<br>is living with<br>at least one<br>parent (non-<br>orphans) | Number<br>of children<br>age 10-14<br>years | Percentage<br>of children<br>who are<br>orphans and<br>are attending<br>school | Total<br>number<br>of orphan<br>children<br>age 10-14<br>years | Percentage<br>of children<br>who are non-<br>orphans and<br>are attending<br>school [1] | Total<br>number<br>of non-<br>orphan<br>children<br>age 10-14<br>years | Orphans to<br>non-orphans<br>school<br>attendance<br>ratio |
|-------|--------|--|---|---|--|--|---|--|--|
| Sex   | Male   | 0.3  | 88.2  | 1002  | (*)  | 3  | 96.0  | 884  | 1.04   |
|       | Female | 0.4  | 87.1  | 1066  | (*)  | 4  | 94.0  | 928  | 0.85   |
| Area  | Urban  | 0.6  | 86.3  | 811   | (*)  | 5  | 98.6  | 700  | 1.01   |
|       | Rural  | 0.2  | 88.5  | 1256  | (*)  | 3  | 92.7  | 1112   | 0.71   |
| Total |        | 0.4  | 87.6  | 2068  | (*)  | 7  | 95.0  | 1812   | 0.92   |

<sup>[1]</sup> MICS indicator 9.20; MDG indicator 6.4

<sup>()</sup> Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases

### XIII. SUBJECTIVE WELL-BEING

t is well-known that the subjective perceptions of individuals of their incomes, health, living environments and the like, play a significant role in their lives and can impact their perception of well-being, irrespective of objective conditions such as actual income and physical health status. In the 2011 Belize MICS a set of questions were asked to women and men between 15-24 years of age to understand how satisfied this group of young people is in different areas of their lives, such as their family life, friendships, school, current job, health, where they live, how they are treated by others, how they look, and their current income.

Life satisfaction is a measure of an individual's perceived level of well-being.

Understanding young women and young men's satisfaction in different areas of their lives can help to gain a comprehensive picture of young people's life situations. A distinction can also be made between life satisfaction and happiness. Happiness is a fleeting emotion that can be affected by numerous factors, including day-to-day factors such as the weather, or a recent death in the family. It is possible for a person to be satisfied with her/his job, income, family life, friends, and other aspects of her life, but still be unhappy. In addition to the set of questions on life satisfaction, the 2011 Belize MICS also asked questions about happiness and the respondents' perceptions of a better life.

To assist respondents in answering the set of questions on happiness and life satisfaction they were shown a card with smiling faces (and not so smiling faces) that corresponded to the response categories (see the Questionnaires in Appendix G).

The indicators related to subjective well-being that were included in Belize MICS4 are as follows:

- Life satisfaction
   – the proportion of women age 15-24 years who are very or somewhat satisfied
   with their family life, friendships, school, current job, health, where they live, how they are treated
   by others, and how they look
- o Happiness the proportion of women age 15-24 years who are very or somewhat happy
- Perception of a better life
   – the proportion of women age 15-24 years who think that their lives
   improved during the last one year and who expect that their lives will be better after one year

Tables SW.1 shows the proportion of young women age 15-24 years, who are very or somewhat satisfied in selected domains. Of the different domains, young women are the most satisfied with their family life(95.0 percent), their school (94.0 percent) and their health (93.8 percent). Among the domains, young women are the least satisfied with their current income (82.6 percent), with 71.9 percent of young women not having an income at all.

Rural women are more satisfied with their living environment than urban women (urban 88.3 percent, rural 92.8 percent).

Women who were never married or in a union were more satisfied with life than all other women for all domains except the way they look and current income. Also women currently married or in a union were more satisfied than separated women in all domains.

Generally women with secondary or better education were less satisfied than women with a primary education. For example, 85.0 percent of women with a primary education were satisfied with their current income, while the percentage for women with secondary or better education was 81.5. With the exception of the current income domain, women from Maya households were more satisfied than women from other ethnic households

Table SW.1: Domains of life satisfaction
Percentage of women age 15-24 years who are very or somewhat satisfied in selected domains, Belize, 2011

|                                   |  | Percentage of women age 15-24 who are very or somewhat satisfied with selected domains: |                  |        |                |        |                            |                     | ins:                       |         |                                       |
|-----------------------------------|--|---|------------------|--------|----------------|--------|----------------------------|---------------------|----------------------------|---------|---------------------------------------|
|                                   |  | Family life   | Friend-<br>ships | School | Current<br>job | Health | Living<br>environ-<br>ment | Treatment by others | The<br>way<br>they<br>look | Current | Number of<br>women age<br>15-24 years |
| Age                               | 15-19  | 95.1  | 92.4             | 94.9   | 87.5           | 95.0   | 90.7                       | 90.3                | 96.7                       | 81.0    | 844                                   |
|                                   | 20-24  | 94.9  | 90.0             | 90.2   | 86.5           | 92.4   | 90.7                       | 91.0                | 96.0                       | 83.5    | 720                                   |
| Region                            | Corozal                                      | 93.9  | 89.7             | 98.4   | 91.8           | 94.3   | 95.5                       | 91.3                | 96.8                       | 89.5    | 194                                   |
|                                   | Orange Walk                                  | 95.9  | 92.6             | 98.8   | 87.1           | 95.2   | 93.9                       | 94.2                | 93.3                       | 88.4    | 258                                   |
|                                   | Belize (Excluding Belize<br>City South Side) | 92.9  | 88.1             | 97.6   | 81.4           | 92.0   | 87.5                       | 88.4                | 95.2                       | 76.3    | 255                                   |
|                                   | Belize City South Side                       | 92.2  | 85.9             | 89.0   | 84.2           | 91.8   | 82.6                       | 85.1                | 97.4                       | 81.2    | 216                                   |
|                                   | Belize District                              | 92.6  | 87.1             | 93.5   | 82.7           | 91.9   | 85.2                       | 86.9                | 96.2                       | 78.4    | 471                                   |
|                                   | Cayo   | 98.5  | 94.5             | 89.2   | 92.8           | 94.3   | 92.7                       | 93.0                | 97.8                       | 86.9    | 347                                   |
|                                   | Stann Creek                                  | 93.3  | 91.3             | 93.1   | 88.2           | 94.4   | 87.8                       | 86.0                | 97.1                       | 74.4    | 147                                   |
|                                   | Toledo                                       | 96.3  | 97.0             | 100.0  | 80.9           | 95.2   | 94.8                       | 94.4                | 97.7                       | 79.9    | 147                                   |
| Area                              | Urban  | 94.6  | 90.0             | 93.9   | 87.3           | 93.4   | 88.3                       | 90.1                | 97.0                       | 82.8    | 726                                   |
|                                   | Rural  | 95.4  | 92.4             | 94.1   | 86.1           | 94.2   | 92.8                       | 91.1                | 95.8                       | 82.4    | 838                                   |
| Marital/Union<br>status           | Currently married/in union                   | 94.5  | 90.7             | 89.4   | 85.4           | 93.6   | 90.8                       | 91.0                | 97.1                       | 86.3    | 497                                   |
|                                   | Separated                                    | 86.3  | 84.8             | 100.0  | 82.1           | 93.0   | 85.3                       | 86.6                | 91.8                       | 65.8    | 86                                    |
|                                   | Never married/in union                       | 96.0  | 92.2             | 94.3   | 88.0           | 94.0   | 91.2                       | 90.8                | 96.4                       | 82.8    | 981                                   |
| Education                         | None   | (*)   | (*)              | (*)    | (*)            | (*)    | (*)                        | (*)                 | (*)                        | (*)     | 22                                    |
|                                   | Primary                                      | 94.6  | 91.8             | 100.0  | 90.5           | 94.3   | 92.1                       | 90.9                | 95.9                       | 85.0    | 443                                   |
|                                   | Secondary +                                  | 94.9  | 90.9             | 93.7   | 85.6           | 93.7   | 89.8                       | 90.2                | 96.5                       | 81.5    | 1064                                  |
|                                   | CET/ITVET/VOTEC                              | (*)   | (*)              | (*)    | (*)            | (*)    | (*)                        | (*)                 | (*)                        | (*)     | 10                                    |
|                                   | Other  | (*)   | (*)              | (*)    | (*)            | (*)    | (*)                        | (*)                 | (*)                        | (*)     | 25                                    |
| Wealth index<br>quintiles         | Poorest                                      | 93.2  | 91.6             | 89.9   | 85.7           | 94.8   | 89.0                       | 88.9                | 96.8                       | 81.6    | 271                                   |
|                                   | Second                                       | 94.1  | 92.0             | 96.8   | 89.2           | 94.5   | 89.2                       | 91.2                | 97.2                       | 83.0    | 330                                   |
|                                   | Middle                                       | 95.8  | 89.0             | 95.6   | 87.6           | 95.0   | 90.5                       | 88.7                | 94.6                       | 85.6    | 356                                   |
|                                   | Fourth                                       | 95.1  | 90.9             | 92.4   | 85.4           | 90.0   | 91.1                       | 90.6                | 96.4                       | 72.6    | 308                                   |
|                                   | Richest                                      | 96.6  | 93.4             | 94.0   | 85.0           | 94.7   | 93.9                       | 93.8                | 97.0                       | 89.4    | 299                                   |
| Ethnicity of<br>household<br>head | Creole                                       | 92.5  | 88.5             | 90.9   | 79.6           | 90.2   | 85.9                       | 87.2                | 96.0                       | 77.3    | 376                                   |
|                                   | Mestizo                                      | 95.8  | 91.8             | 94.1   | 88.0           | 94.7   | 92.6                       | 91.9                | 96.2                       | 86.7    | 784                                   |
|                                   | Garifuna                                     | 91.4  | 83.7             | 93.6   | 89.9           | 92.4   | 81.6                       | 82.8                | 97.3                       | 63.1    | 93                                    |
|                                   | Maya   | 97.1  | 96.6             | 100.0  | 95.9           | 94.7   | 94.0                       | 94.9                | 97.8                       | 83.0    | 179                                   |
|                                   | Other  | 97.2  | 94.5             | 100.0  | 87.1           | 99.4   | 95.3                       | 92.6                | 97.2                       | 88.4    | 113                                   |
|                                   | Missing/DK                                   | (*)   | (*)              | (*)    | (*)            | (*)    | (*)                        | (*)                 | (*)                        | (*)     | 19                                    |
| Total                             |  | 95.0  | 91.3             | 94.0   | 86.8           | 93.8   | 90.7                       | 90.6                | 96.4                       | 82.6    | 1564                                  |

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases

Table SW.1 indicates that the percentage of women age 15-24 years who are very or somewhat satisfied with life is 59.9 for those not currently attending school, 78.3 percent for those women who do not have a job and 71.9 percent for women without any income. For these three domains rural women are consistently more satisfied than urban women and similarly women with primary education are more satisfied than women with secondary or better education (Figure SW.1). Women 15-19 years are more satisfied when they do not have a job or any income than women 20-24 years.

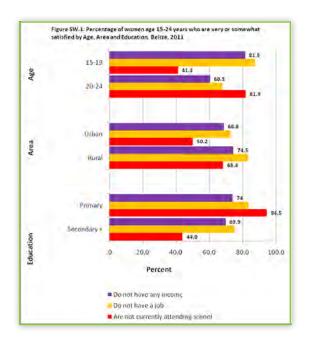


Table SW.1: Domains of life satisfaction [continued)

Percentage of women age 15-24 years who are very or somewhat satisfied in selected domains, Belize, 2011

|                                |   | Percentage                         |                      |                        |                                    |
|--------------------------------|---|------------------------------------|----------------------|------------------------|------------------------------------|
|                                |   | Are not currently attending school | Do not have<br>a job | Do not have any income | Number of women age<br>15-24 years |
| Age                            | 15-19<br>20-24                            | 41.3<br>81.9                       | 87.3<br>67.8         | 81.5<br>60.5           | 844<br>720                         |
| Region                         | Corozal<br>Orange Walk                    | 72.1<br>71.4                       | 81.6<br>84.3         | 77.4<br>82.8           | 194<br>258                         |
|                                | Belize (Excluding Belize City South Side) | 51.3                               | 73.0                 | 68.4                   | 255                                |
|                                | Belize City South Side                    | 48.7                               | 73.3                 | 73.3                   | 216                                |
|                                | Belize District                           | 50.1                               | 73.1                 | 70.7                   | 471                                |
|                                | Cayo                                      | 57.2                               | 79.0                 | 67.9                   | 347                                |
|                                | Stann Creek                               | 58.6                               | 76.3                 | 75.2                   | 147                                |
|                                | Toledo                                    | 63.2                               | 80.3                 | 55.1                   | 147                                |
| Area                           | Urban                                     | 50.2                               | 72.7                 | 68.8                   | 726                                |
| 7 11 0 0                       | Rural                                     | 68.4                               | 83.2                 | 74.5                   | 838                                |
| Marital/Union status           | Currently married/in union                | 90.3                               | 81.1                 | 70.1                   | 497                                |
|                                | Separated                                 | 95.5                               | 63.6                 | 59.3                   | 86                                 |
|                                | Never married/in union                    | 41.5                               | 78.2                 | 73.8                   | 981                                |
| Education                      | None                                      | (*)                                | (*)                  | (*)                    | 22                                 |
|                                | Primary                                   | 94.5                               | 83.7                 | 74.0                   | 443                                |
|                                | Secondary +                               | 44.0                               | 75.1                 | 69.9                   | 1064                               |
|                                | CET/ITVET/VOTEC                           | (*)                                | (*)                  | (*)                    | 10                                 |
|                                | Other                                     | (*)                                | (*)                  | (*)                    | 25                                 |
| Wealth index quintiles         | Poorest                                   | 80.6                               | 87.4                 | 71.1                   | 271                                |
|                                | Second                                    | 74.4                               | 75.4                 | 68.7                   | 330                                |
|                                | Middle                                    | 60.4                               | 78.1                 | 72.8                   | 356                                |
|                                | Fourth                                    | 49.6                               | 76.3                 | 73.4                   | 308                                |
|                                | Richest                                   | 35.5                               | 75.6                 | 73.4                   | 299                                |
| Ethnicity of household<br>head |   | 50.0                               | 75.7                 | 73.4                   | 376                                |
|                                | Mestizo                                   | 63.0                               | 78.9                 | 73.0                   | 784                                |
|                                | Garifuna                                  | 43.2                               | 71.4                 | 72.0                   | 93                                 |
|                                | Maya                                      | 73.1                               | 81.3                 | 60.8                   | 179                                |
|                                | Other                                     | 65.6                               | 84.2                 | 76.0                   | 113                                |
|                                | Missing/DK                                | (*)                                | (*)                  | (*)                    | 19                                 |
| Total                          |   | 59.9                               | 78.3                 | 71.9                   | 1564                               |

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases

In TableSW.2 the proportion of women age 15-24 years with life satisfaction is presented. "Life satisfaction" is defined as those who are very or somewhat satisfied with their family life, friendships, school, current job, health, where they live, how they are treated by others and how they look. About two thirds (73.7 percent) of 15-24 year old women are satisfied with life. Of the women living in the richest households 77.0 percent are satisfied

with life as opposed to 72.6 percent in the poorest households. The proportion of women satisfied with life is higher in rural areas (76.7percent) than in urban areas (70.2percent).

The average life satisfaction score is the arithmetic mean of responses to questions included in the calculation of life satisfaction. Lower scores indicate higher satisfaction levels. Table SW.2 identifies the lowest level of satisfaction in the Belize District (1.5) with Belize (Excluding Belize City South side) at 1.5 and Belize City South Side at 1.6 and the highest level in the Toledo District (1.2). Evidently, highest life satisfaction among ethnicities is found in the Maya households (1.2).

#### Table SW.2: Life satisfaction and happiness

Percentage of women age 15-24 years who are very or somewhat satisfied with their family life, friendships, school, current job, health, living environment, treatment by others, and the way they look, the average life satisfaction score, percentage of women with life satisfaction who are also very or somewhat satisfied with their income,

and percentage of women age 15-24 years who are very or somewhat happy, Belize, 2011

|                                  | •                          |  |                                      | •                                    | ,   |  |   |                                    |
|----------------------------------|----------------------------|--|--------------------------------------|--------------------------------------|---|--|---|------------------------------------|
|                                  |                            | Percentage of<br>women with life<br>satisfaction [1] | Average life sat-<br>isfaction score | Missing /<br>Cannot be<br>calculated | Women with life<br>satisfaction who<br>are very or some-<br>what satisfied<br>with their income | No income /<br>Cannot be calcu-<br>lated | Percentage who<br>are very or some-<br>what happy [2] | Number of women age<br>15-24 years |
| Age                              | 15-19                      | 73.8   | 1.4                                  | 0.1                                  | 59.2  | 81.6                                     | 92.4  | 844                                |
|                                  | 20-24                      | 73.6   | 1.4                                  | 1.3                                  | 66.4  | 61.8                                     | 90.0  | 720                                |
| Region                           | Corozal                    | 76.6   | 1.3                                  | 0.7                                  | 65.2  | 78.1                                     | 89.7  | 194                                |
|                                  | Orange Walk                | 80.2   | 1.3                                  | 1.0                                  | 70.7  | 83.8                                     | 92.6  | 258                                |
|                                  | Belize (Excluding Belize   |  |                                      |                                      |   |  |   |                                    |
|                                  | City South Side)           | 69.9   | 1.5                                  | 1.2                                  | 59.6  | 69.6                                     | 88.1  | 255                                |
|                                  | Belize City South Side     | 60.6   | 1.6                                  | 0.4                                  | 49.7  | 73.7                                     | 85.9  | 216                                |
|                                  | Belize District            | 65.6   | 1.5                                  | 0.8                                  | 55.4  | 71.5                                     | 87.1  | 471                                |
|                                  | Cayo                       | 76.6   | 1.3                                  | 0.0                                  | 71.3  | 67.9                                     | 94.5  | 347                                |
|                                  | Stann Creek                | 66.8   | 1.5                                  | 0.0                                  | 51.1  | 75.2                                     | 91.3  | 147                                |
|                                  | Toledo                     | 84.5   | 1.2                                  | 1.1                                  | 70.0  | 56.3                                     | 97.0  | 147                                |
| Area                             | Urban                      | 70.2   | 1.4                                  | 0.6                                  | 62.8  | 69.5                                     | 90.0  | 726                                |
|                                  | Rural                      | 76.7   | 1.3                                  | 0.6                                  | 64.9  | 75.1                                     | 92.4  | 838                                |
| Marital/Union<br>status          | Currently married/in union | 78.0   | 1.3                                  | 1.5                                  | 72.0  | 71.6                                     | 90.7  | 497                                |
|                                  | Separated                  | 61.9   | 1.6                                  | 0.0                                  | 41.8  | 59.3                                     | 84.8  | 86                                 |
|                                  | Never married/in union     | 72.6   | 1.4                                  | 0.2                                  | 62.3  | 74.1                                     | 92.2  | 981                                |
| Education                        | None                       | (*)  | (*)                                  | (*)                                  | (*)   | (*)                                      | (*)   | 22                                 |
|                                  | Primary                    | 76.3   | 1.3                                  | 0.7                                  | 66.8  | 74.8                                     | 91.8  | 443                                |
|                                  | Secondary +                | 71.8   | 1.4                                  | 0.6                                  | 62.2  | 70.5                                     | 90.9  | 1064                               |
|                                  | CET/ITVET/VOTEC            | (*)  | (*)                                  | (*)                                  | (*)   | (*)                                      | (*)   | 10                                 |
|                                  | Other                      | (*)  | (*)                                  | (*)                                  | (*)   | (*)                                      | (*)   | 25                                 |
| Wealth index quin-<br>tiles      | Poorest                    | 72.6   | 1.4                                  | 0.4                                  | 60.7  | 71.5                                     | 91.6  | 271                                |
| tiles                            | Second                     | 73.3   | 1.4                                  | 0.9                                  | 66.8  | 69.6                                     | 92.0  | 330                                |
|                                  | Middle                     | 72.9   | 1.4                                  | 0.5                                  | 66.0  | 73.3                                     | 89.0  | 356                                |
|                                  | Fourth                     | 72.8   | 1.4                                  | 1.0                                  | 54.3  | 74.3                                     | 90.9  | 308                                |
|                                  | Richest                    | 77.0   | 1.3                                  | 0.3                                  | 69.8  | 73.7                                     | 93.4  | 299                                |
| Ethnicity of house-<br>hold head | Creole                     | 63.2   | 1.5                                  | 0.7                                  | 51.1  | 74.1                                     | 88.5  | 376                                |
|                                  | Mestizo                    | 75.9   | 1.3                                  | 0.7                                  | 67.2  | 73.7                                     | 91.8  | 784                                |
|                                  | Garifuna                   | 59.8   | 1.5                                  | 1.0                                  | 45.9  | 72.9                                     | 83.7  | 93                                 |
|                                  | Maya                       | 84.6   | 1.2                                  | 0.3                                  | 72.6  | 61.1                                     | 96.6  | 179                                |
|                                  | Other                      | 85.7   | 1.3                                  | 0.0                                  | 73.7  | 76.0                                     | 94.5  | 113                                |
|                                  | Missing/DK                 | (*)  | (*)                                  | (*)                                  | (*)   | (*)                                      | (*)   | 19                                 |
| Total                            | -                          | 73.7   | 1.4                                  | 0.6                                  | 63.8  | 72.5                                     | 91.3  | 1564                               |

<sup>[1]</sup> MICS Indicator SW.1; [2] MICS indicator SW.2

<sup>(\*)</sup> Figures that are based on less than 25 un-weighted cases

According to Table SW.2, 91.3 percent of women age 15-24 years are very or somewhat happy. Women from the Toledo District and the Maya households are most satisfied. Comparing 15-19 year old women to 20-24 year old women, the proportion of women who are very or somewhat happy is roughly the same, 92.4 and 90.0percent, respectively.

Table SW.3 shows women's perceptions of a better life. The proportion of women age 15-24 years who think that their lives improved during the last one year <u>and</u> who expect that their lives will get better after one year is 65.5 percent.

There is a small difference between urban (64.7 percent) and rural (66.3 percent) women who perceive a better life. Women in the Toledo District (76.8 percent) and from Maya households (71.0 percent) perceive improved lives when compared with women from other districts and ethnicities.

Women with better education (secondary or greater education 68.7 percent) thought that their life improved over the last year and will get better over the next: this compares with women having a primary education (57.6 percent).

The perception that life improved over the last year is positively correlated with wealth with richer households perceiving increased improvement (Figure SW.2).

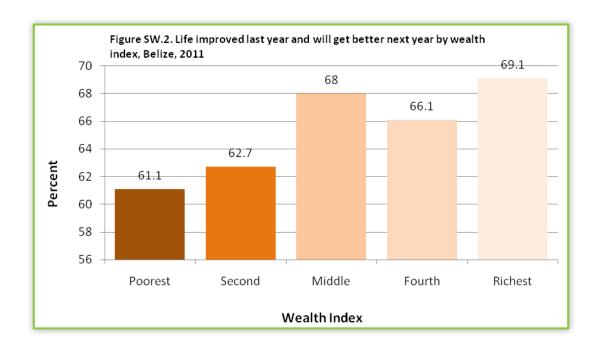


Table SW.3: Perception of a better life
Percentage of women age 15-24 years who think that their lives improved during the last one
year and those who expect that their lives will get better after one year, Belize, 2011

|                   |   | Percentage of                     | women who th<br>life                 | ink that their |                                       |
|-------------------|---|-----------------------------------|--------------------------------------|----------------|---------------------------------------|
|                   |   | Improved during the last one year | Will get<br>better after<br>one year | Both [1]       | Number of<br>women age 15-24<br>years |
| Age               | 15-19                                     | 69.7                              | 86.8                                 | 64.4           | 844                                   |
|                   | 20-24                                     | 70.4                              | 89.2                                 | 66.9           | 720                                   |
| Region            | Corozal                                   | 72.8                              | 89.4                                 | 67.7           | 194                                   |
|                   | Orange Walk                               | 73.1                              | 88.0                                 | 66.9           | 258                                   |
|                   | Belize (Excluding Belize City South Side) | 63.7                              | 83.9                                 | 58.3           | 255                                   |
|                   | Belize City South Side                    | 71.5                              | 91.3                                 | 69.0           | 216                                   |
|                   | BelizeDistrict                            | 67.3                              | 87.3                                 | 63.2           | 471                                   |
|                   | Cayo                                      | 69.1                              | 88.5                                 | 65.7           | 347                                   |
|                   | Stann Creek                               | 61.5                              | 86.9                                 | 56.2           | 147                                   |
|                   | Toledo                                    | 80.2                              | 87.5                                 | 76.8           | 147                                   |
| Area              | Urban                                     | 68.4                              | 90.9                                 | 64.7           | 726                                   |
|                   | Rural                                     | 71.5                              | 85.3                                 | 66.3           | 838                                   |
| Marital/Union     | Currently married/in union                | 73.4                              | 87.7                                 | 68.7           | 497                                   |
| status            | Formerly married/in union                 | 52.2                              | 84.1                                 | 50.6           | 86                                    |
|                   | Never married/in union                    | 69.9                              | 88.4                                 | 65.2           | 981                                   |
| Education         | None                                      | (*)                               | (*)                                  | (*)            | 22                                    |
|                   | Primary                                   | 63.3                              | 82.0                                 | 57.6           | 443                                   |
|                   | Secondary +                               | 72.7                              | 90.5                                 | 68.7           | 1064                                  |
|                   | CET/ITVET/VOTEC                           | (*)                               | (*)                                  | (*)            | 10                                    |
|                   | Other                                     | (*)                               | (*)                                  | (*)            | 25                                    |
| Wealth index      | Poorest                                   | 66.8                              | 80.1                                 | 61.1           | 271                                   |
| quintiles         | Second                                    | 67.5                              | 87.4                                 | 62.7           | 330                                   |
|                   | Middle                                    | 71.0                              | 90.8                                 | 68.0           | 356                                   |
|                   | Fourth                                    | 70.3                              | 88.3                                 | 66.1           | 308                                   |
|                   | Richest                                   | 74.3                              | 91.7                                 | 69.1           | 299                                   |
| Ethnicity of      | Creole                                    | 68.7                              | 90.6                                 | 64.8           | 376                                   |
| household<br>head | Mestizo                                   | 68.4                              | 86.3                                 | 63.7           | 784                                   |
| nedü              | Garifuna                                  | 70.9                              | 90.5                                 | 65.8           | 93                                    |
|                   | Maya                                      | 74.0                              | 88.5                                 | 71.0           | 179                                   |
|                   | Other                                     | 78.2                              | 88.9                                 | 73.1           | 113                                   |
|                   | Missing/DK                                | (*)                               | (*)                                  | (*)            | 19                                    |
| Total             |   | 70.0                              | 87.9                                 | 65.5           | 1564                                  |

<sup>[1]</sup> MICS indicator SW.3
(\*) Figures that are based on less than 25 unweighted cases

### APPENDIX A. SAMPLE DESIGN

The major features of the sample design are described in this appendix. Sample design features include target sample size, sample allocation, sampling frame and listing, choice of domains, sampling stages, stratification, and the calculation of sample weights.

The primary objective of the sample design for the Belize Multiple Indicator Cluster Survey was to produce statistically reliable estimates of most indicators, at the national level, for urban and rural areas, and for the seven regions Corozal, Orange Walk, Belize City South Side, Belize Other, Cayo, Stann Creek and Toledo of the country. Urban and rural areas in each of the seven regions were defined as the sampling strata.

A multi-stage, stratified cluster sampling approach was used for the selection of the survey sample.

### Sample Size and Sample Allocation

The target sample size for the Belize MICS was calculated as 4,900 households. For the calculation of the sample size, the key indicator used was the vitamin A supplementation prevalence among children aged 0-4 years. The following formula was used to estimate the required sample size for this indicator:

$$n = \frac{[4(r)(1 \square r)(f)(1.1)]}{[0.2 \ r)^2(p)(\bar{n})}$$

#### where

- o *n* is the required sample size, expressed as number of households
- o 4 is a factor to achieve the 95 percent level of confidence
- o r is the predicted or anticipated value of the indicator, expressed in the form of a proportion
- 0 1.1 is the factor necessary to raise the sample size by 10 per cent for the expected non-response [the actual factor will be based on the non-response level experienced in previous surveys in the country]
- o f is the shortened symbol for deff (design effect)
- o 0.12r is the margin of error to be tolerated at the 95 percent level of confidence, defined as 12 per cent of r (relative margin of error of r)
- o p is the proportion of the total population upon which the indicator, r, is based
- n is the average household size (number of persons per household).

For the calculation, *r* (vitamin A supplementation prevalence) was obtained for the national and district levels from the Census 2000 (Table SD.1). The value of *deff* (design effect) was taken as 1.5 based on estimates from

previous surveys, p (percentage of children aged 6 – 59 months in the total population) and n (average household size) were obtained for the national and district levels and presented in Table SD.1, and the response rate was assumed to be 90%.

Table SD.1. Determining sample size for MICS 4: the example of Vitamin A supplementation for children

|   | Prevalence<br>r | Design effect<br>deff | Relevant group as % of total population p | Average household size, n <sub>h</sub> | d Relative margin of<br>error | Required sample<br>size<br>n |
|---|-----------------|-----------------------|---|--|-------------------------------|------------------------------|
| National estimate only                      | 0.238           | 1.5                   | 0.129                                     | 4.3                                    | 0.09                          | 4,900                        |
| Urban                                       | 0.295           | 1.5                   | 0.117                                     | 3.9                                    | 0.12                          | 2,493                        |
| Rural                                       | 0.189           | 1.5                   | 0.140                                     | 5.0                                    | 0.13                          | 2,483                        |
| National estimate & U/R                     |                 |                       |   |  |                               | 4,976                        |
| Corozal                                     | 0.149           | 1.5                   | 0.118                                     | 4.7                                    | 0.31                          | 699                          |
| Orange Walk                                 | 0.223           | 1.5                   | 0.124                                     | 5.1                                    | 0.23                          | 701                          |
| Belize(Excluding Belize City<br>South Side) | 0.374           | 1.5                   | 0.118                                     | 3.5                                    | 0.19                          | 730                          |
| Belize City South Side                      | 0.374           | 1.5                   | 0.118                                     | 3.6                                    | 0.19                          | 708                          |
| Cayo  | 0.220           | 1.5                   | 0.137                                     | 5.2                                    | 0.22                          | 699                          |
| Stann Creek                                 | 0.264           | 1.5                   | 0.141                                     | 4.1                                    | 0.21                          | 701                          |
| Toledo                                      | 0.087           | 1.5                   | 0.160                                     | 5.2                                    | 0.34                          | 702                          |
| District estimates                          |                 |                       |   |  |                               | 4,940                        |

Equal allocation of the total sample size to the seven regions was used. The resulting number of households from this exercise was 700 households which is the sample size needed in each region – thus yielding about 4,900 households in total. The average number of households selected per cluster for the Belize MICS was determined as 25 households, based on a number of considerations, including the design effect, the budget available, and the time that would be needed per team to complete one cluster. Dividing the total number of households by the number of sample households per cluster, it was calculated that 28 sample clusters (enumeration districts or EDs) would need to be selected in each region.

Therefore, 28 clusters (EDs) were allocated to each region, with the final sample size calculated at 4,900 households (28 clusters \* 7 regions \* 25 sample households per cluster). In each region, the clusters (primary sampling units) were distributed to urban and rural domains, proportional to the number of households in the urban and rural areas of that region. The table below shows the allocation of clusters to the sampling strata.

Table SD.2. Allocation of Sample Clusters (Primary Sampling Units) to Sampling Strata

| Region                                       | Ног    | useholds (2010 E | stimates) | Number of Cl | usters (Enumera | tion Districts) |
|--|--------|------------------|-----------|--------------|-----------------|-----------------|
|  | Total  | Urban            | Rural     | Urban        | Rural           | Total           |
| Corozal                                      | 9,247  | 2,699            | 6,548     | 8            | 20              | 28              |
| Orange Walk                                  | 10,394 | 3,361            | 7,033     | 10           | 18              | 28              |
| Belize (Excluding Belize<br>City South Side) | 16,083 | 8,852            | 7,231     | 15           | 13              | 28              |
| Belize City South Side                       | 10,078 | 10,078           | 0         | 28           | 0               | 28              |
| Cayo   | 16,897 | 9,221            | 7,676     | 15           | 13              | 28              |
| Stann Creek                                  | 9,057  | 2,562            | 6,495     | 8            | 20              | 28              |
| Toledo                                       | 6,516  | 1,358            | 5,158     | 6            | 22              | 28              |
| Total  | 78,272 | 38,131           | 40,141    | 90           | 106             | 196             |

#### **Sampling Frame and Selection of Clusters**

The 2010 census frame was used for the selection of clusters. Census enumeration districts (ED) were defined as primary sampling units (PSUs), and were selected from each of the sampling strata by using systematic pps (probability proportional to size) sampling procedures, based on the estimated sizes of the enumeration areas from the 2010 Population Census. The first stage of sampling was thus completed by selecting the required number of enumeration areas from each of the 7 regions, separately by urban and rural strata.

### **Listing Activities**

A new listing of households was conducted in all the sample enumeration districts prior to the selection of households. For this purpose, listing teams were formed, who visited each selected enumeration district, and listed the occupied households.

Field work: 5th to 20th May, 2011

Data entry: 23<sup>rd</sup> May, 2011 to 24<sup>th</sup> June, 2011.

Number of ED: 196

Number of interviewers: 98 (one interviewer for two EDs)

Number of supervisors: 6 (one for each district, urban and rural)

#### **Selection of Households**

Lists of households were prepared by the listing teams in the field for each selected enumeration district. The households were then sequentially numbered from 1 to n (the total number of households in each enumeration area) at the Central Statistical Office, where the selection of 25 households in each enumeration area was carried out using random systematic selection procedures.

#### **Calculation of Sample Weights**

The Belize Multiple Indicator Cluster Survey sample is not self-weighting. Essentially, by allocating equal numbers of households to each of the regions, different sampling fractions were used in each region since the size of the regions varied. For this reason, sample weights were calculated and these were used in the subsequent analyses of the survey data.

Thirteen primary sampling units (PSU) were used in producing the sample of households:

Corozal urban, Corozal rural,

Belize other urban,

Cayo urban, Cayo rural,

Orange Walk urban, Orange Walk rural,

Belize Other rural, Belize City South Side,

Stann Creek urban, Stann Creek rural,

Toledo urban, Toledo rural.

Seven strata (regions) were used: Corozal, Orange Walk, Belize District (Excluding Belize City South Side), Belize City South Side, Cayo, Stann Creek and Toledo and enumeration districts (ED) constitute the clusters.

It was decided that 28 clusters (ED) would be chosen from each stratum and that 25 households would be chosen from each selected ED.

The major component of the weight is the reciprocal of the sampling fraction employed in selecting the number of sample households in that particular sampling stratum (h) and PSU (i):

$$W_h = \frac{1}{f_h}$$

The term  $f_{ni}$ , the sampling fraction for the *i-th* sample PSU(district by urban/rural) in the *h-th* stratum (ED), is the product of probabilities of selection at every stage in each sampling stratum:

$$f_h = p_{1h} \square p_{2h} \square p_{3h}$$

where  $p_{shi}$  is the probability of selection of the sampling unit at stage s for the i-th sample PSU in the h-th sampling stratum.

Since the estimated number of households in each enumeration district (PSU) in the sampling frame used for the first stage selection and the updated number of households in the enumeration district from the listing exercise were different, individual sampling fractions for households in each sample enumeration district (cluster) were calculated. The sampling fractions for households in each enumeration district (cluster) therefore included the first stage probability of selection of the enumeration area in that particular sampling stratum and the second stage probability of selection of a household in the sample enumeration area (cluster).

A second component in the calculation of sample weights takes into account the level of non-response for the household and individual interviews. The adjustment for household non-response is equal to the inverse value of:

RR<sub>h</sub> = Number of interviewed households in stratum h/ Number of occupied households listed in stratum h

After the completion of fieldwork, response rates were calculated for each sampling stratum. These were used to adjust the sample weights calculated for each cluster. Response rates in the Belize Multiple Indicator Cluster Survey are shown in Table HH.1 in this report.

Similarly, the adjustment for non-response at the individual level (women and under-5 children) for each stratum is equal to the inverse value of:

 $RR_h = Completed$  women's (or under-5's) questionnaires in stratum h / Eligible women (or under-5s) in stratum h

The non-response adjustment factors for women's and under-5's questionnaires are applied to the adjusted household weights. Numbers of eligible women and under-5 children were obtained from the roster of household members in the Household Questionnaire for households where interviews were completed.

The design weights for the households were calculated by multiplying the above factors for each enumeration area. These weights were then standardized (or normalized), one purpose of which is to make the weighted sum of the interviewed sample units equal the total sample size at the national level. Normalization is achieved by dividing the full sample weights (adjusted for nonresponse) by the average of these weights across all households at the national level. This is performed by multiplying the sample weights by a constant factor equal to the un-weighted number of households at the national level divided by the weighted total number of households (using the full sample weights adjusted for nonresponse). A similar standardization procedure was followed in obtaining standardized weights for the women's and under-5's questionnaires. Adjusted (normalized) weights varied between 0.452178 and 1.768905 in the 196 sample enumeration districts (clusters).

Sample weights were appended to all data sets and analyses were performed by weighting each household, woman or under-5 with these sample weights.

Appendix B. Budget

BELIZE MICS 4
DETAILED BUDGET and FINANCING REQUIREMENTS

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| Households  Locst Item  Locst Item  Linterviewers  Linterviewer/monitoring staff  Linterviewe |             |                                   |       | Ĕ            | Total Cost |       |        |           | <b>Fime-bound E</b> | Time-bound Expenditure Forecast | ecast     |
|--|-------------|-----------------------------------|-------|--------------|------------|-------|--------|-----------|---------------------|---------------------------------|-----------|
| Detailed Cost Item         units         Adays         Unit         10t         Qrt           Personnel: interviewers         4         2 days         15         120         120           Personnel: interviewer/monitoring staff         2 days         15         30         30           Personnel: monitoring staff         2 days         15         30         30           Personnel: monitoring staff         2 days         15         30         30           Staff (driver         1 nights         41.5         332         30           Accomodation:         2 days         3         12         12           Accomodation:         8         1 nights         41.5         332         332           Fuel:         1         2 days         5         35         332           Communications         1         1         2 days         35         35           Supplies         1         1         2 days         35         35           Communications         1         1         4,900         4,900         4,900           Freshies         1         1         1         4,900         4,200         4,200           Personnel: drivers   | Sample siz  | e: 4,900 Households               |       |              |            |       | ı      | Jan - Mar | Apr - Jun           | Jul - Sept                      | Oct - Dec |
| Detailed Cost Item         units         weeks         Cost         1           Personnel: interviewers         4         2 days         15         120         120           Personnel: interviewer/monitoring staff monitoring staff furier         2         2 days         15         60         60           Personnel: monitoring staff monitoring staff furier         2         2 days         15         60         60           Transportation:         2         2 days         32.5         380         380           Accomodation:         8         1 nights         41.5         332         32           Fuel:         4ccomodation:         8         1 nights         41.5         332         32           Supplies         1         1         2 days         375         375         375           Communications         1         1         2 days         375         375         375           Communications         1         1         4 300         4,300         4,300           Communications         1         1         4,600         4,200         4,200           Personnel: Presented         1         1         4,900         4,200         4,200 <t< th=""><th></th><th></th><th></th><th></th><th>days/</th><th>Unit</th><th>Tot</th><th>ţ</th><th>grt</th><th>בַּס</th><th>Ort</th></t<>   |             |                                   |       |              | days/      | Unit  | Tot    | ţ         | grt                 | בַּס                            | Ort       |
| Personnel: interviewers         4         2 days         15         120           Personnel: driver(s)         1         2 days         15         30           Personnel: monitoring staff Per diems: interviewer/monitoring staff/driver         2         2 days         15         60           Staff/driver         1         2         days         22.5         360         33           Transportation:         2         2 days         3         12         33           Accomodation:         8         1         nights         41.5         332         33           Fuel:         Supplies         1         1         2 days         60         120         120           Supplies         1         1         2 days         60         4.50         4.59           Communications         1         1         2 days         60         4.50         4.59           Supplies         1         1         1         4.50         4.20         4.20           Communications         1         1         1         4.50         4.20         4.20           Personnel: Issters         2         2         2         2         2         2         4.20   | Activity    | Detailed Cost Item                | nnits |              | weeks      | Cost  | Cost   | -         | 2                   | က                               | 4         |
| Personnel: driver(s)         1         2 days         15         30           Per diems: interviewer/monitoring staff drivers         2         2 days         15         60           Per diems: interviewer/monitoring staff drivers         8         2.5.5         360         3           Transportation:         8         1         1.61         375         332         3           Accomodation:         8         1         1.61         375         332         3         3           Fuel:         Supplies         1         1         2 days         60         120         1         1           Supplies         1         1         2 days         60         120         4,9         4,20   | Pre-testing | Personnel: interviewers           | 4     | 7            | days       | 15    | 120    | 120       |                     |                                 |           |
| Personnel: monitoring staff flates: interviewer/monitoring staff flativer         2         days         15         60           Per diems: interviewer/monitoring staff flativer         8         2         days         22.5         360           Transportation:         8         1         nights         41.5         332           Accomodation:         8         1         nights         41.5         332           Fuel:         Supplies         1         1         2         days         60         120           Supplies         1         1         1         2.50         250         250           Communications         1         1         1         4.900         4.900         4.900           Communications         1         1         4.900         4.900         4.900         4.900           Personnel: Preparation of sample frame         1         1         4.900         4.900         4.900           Training of listers         5         4         1         4.900         4.900         4.900           Personnel: listers         4         1         days         7.5         7.00           Per diems: monitoring staff HQ         4         1         0  |             | Personnel: driver(s)              | _     | 2            | days       | 15    | 30     | 30        |                     |                                 |           |
| staff/driver         2         days         22.5         360           Transportation:         2         2         days         3         12           Accomodation:         8         1         nights         41.5         332           Fuel:         8         1         nights         41.5         332           Supplies         1         2         days         60         120           Supplies         1         1         375         375         375           Communications         1         1         250         250         250           Personnel: Preparation of sample frame         1         1         4,900         4,900         4,900         4,900         4,900         4,900         4,200         4,  |             | Personnel: monitoring staff       | 2     | 2            | days       | 15    | 09     | 09        |                     |                                 |           |
| Transportation:       2       2       days       3       12         Accomodation:       Accomodation:       8       1       iights       41.5       332         Fuel:       Supplies       1       2       days       60       120         Communications       1       1       250       250       250         Personnel: Preparation of sample frame       1       1       4,900       4,900       4,200         Training of listers       7       1       region       600       4,200       4,200         Personnel: listers       98       2       ED       100       4,200       4,200         Personnel: listers       98       2       ED       100       4,200       4,200         Personnel: listers       98       2       ED       100       4,200       4,200         Personnel: listers       4       10       days       75       700       700         Per diems: monitoring staff other       2       ED       100       4,200       700         Per diems: drivers       7       10       days       75       5,250         Cannelies       7       10       days       75   |             | staff/driver                      | 80    | 2            | days       | 22.5  | 360    | 360       |                     |                                 |           |
| Accomodation:         8         1         rights         41.5         332           Fuel:         2         days         60         120           Supplies         1         1         250         250           Communications         1         1         4,900         4,900           Personnel: Preparation of sample frame         1         1         4,900         4,900           Training of listers         7         1         region         600         4,200           Personnel: listers         98         2         ED         100         19,600           Personnel: drivers         4         10         days         75         700           Per diems: monitoring staff other         21         10         days         75         3,675           Per diems: monitoring staff other         21         10         days         75         3,675           Per diems: monitoring staff other         7         10         days         75         3,675           Per diems: monitoring staff other         7         10         days         75         5,250           Car Rental         7         1         1         1         1         1         1   |             | Transportation:                   | 2     | 2            | days       | က     | 12     | 12        |                     |                                 |           |
| Fuel:         1         2         days         60         120           Supplies         1         1         375         375         375           Communications         1         1         250         250         250           Personnel: Preparation of sample frame         1         1         4,900         4,900         4,900           Training of listers         7         1         region         600         4,200         4,900           Personnel: listers         98         2         ED         100         19,600         10,600           Personnel: divers         4         10         days         75         700         700           Per diems: monitoring staff HQ         4         10         days         75         3,675           Per diems: drivers         3         10         days         75         5,250           Car Rental         7         10         days         75         5,250           Sundiage         7         1         1         1         1         2           Authorized         7         1         1         2         2         2           Ber diems: monitoring staff other         2 </td <td></td> <td>Accomodation:</td> <td>80</td> <td>~</td> <td>nights</td> <td>41.5</td> <td>332</td> <td>332</td> <td></td> <td></td> <td></td>   |             | Accomodation:                     | 80    | ~            | nights     | 41.5  | 332    | 332       |                     |                                 |           |
| Supplies         1         1         375         375           Communications         1         1         250         250           Personnel: Preparation of sample frame         1         1         4,900         4,900           Training of listers         7         1         4,900         4,200           Personnel: listers         98         2         ED         100         19,600           Personnel: divers         4         10         days         75         700           Per diems: monitoring staff HQ         4         10         days         75         3,600           Per diems: monitoring staff other         21         10         days         75         3,675           Per diems: drivers         3         10         days         75         5,250           Car Rental         7         10         days         75         5,250           Sundiage         7         1         1         1         1         1   |             | Fuel:                             | _     | 2            | days       | 09    | 120    | 120       |                     |                                 |           |
| Communications         1         1         250         250           Personnel: Preparation of sample frame         1         1         4,900         4,900           Training of listers         7         1         region         600         4,200           Personnel: listers         98         2         ED         100         19,600           Personnel: drivers         4         10         days         75         700           Per diems: monitoring staff HQ         4         10         days         75         3,000           Per diems: monitoring staff other         21         10         days         75         3,675           Per diems: drivers         3         10         days         75         5,250           Car Rental         7         10         days         75         5,250           Sundiage         7         10         days         75         5,250   |             | Supplies                          | ~     | ~            |            | 375   | 375    | 375       |                     |                                 |           |
| Personnel: Preparation of sample frame       1       1       4,900       4,900         Training of listers       7       1       region       600       4,900         Personnel: listers       98       2       ED       100       4,200         Personnel: drivers       4       10       days       17.5       700         Per diems: monitoring staff HQ       4       10       days       75       3,000         Per diems: monitoring staff other       21       10       days       75       3,675         Per diems: drivers       3       10       days       75       3,675         Car Rental       7       10       days       75       5,250         Sundiac       7       10       days       75       5,250         Sundiac       7       10       days       75       5,250   |             | Communications                    | _     | _            |            | 250   | 250    | 250       |                     |                                 |           |
| Personnel: Preparation of sample frame         1         1         4,900         4,900           Training of listers         7         1         region         600         4,200         1           Personnel: listers         98         2         ED         100         4,200         1           Personnel: drivers         4         10         days         17.5         700           Per diems: monitoring staff HQ         4         10         days         75         3,600           Per diems: monitoring staff other         21         10         days         75         3,675           Per diems: drivers         3         10         days         75         2,250           Car Rental         7         10         days         75         5,250           Sundiac         7         10         days         75         5,250  |             |                                   |       |              |            | _     | ,659   |           |                     |                                 |           |
| frame         1         1         4,900         4,900           Training of listers         7         1         region         600         4,200           Personnel: listers         98         2         ED         100         19,600         1           Per diems: monitoring staff HQ         4         10         days         75         3,000           Per diems: monitoring staff other         21         10         days         75         3,675           Per diems: drivers         3         10         days         75         2,250           Car Rental         7         10         days         75         5,250           Sundiage         7         10         days         75         5,250   |             | Personnel: Preparation of sample  |       |              |            |       |        |           |                     |                                 |           |
| ing of listers         7         1         region         600         4,200         1           onnel: listers         98         2         ED         100         19,600         1           onnel: divers         4         10         days         7         700           siems: monitoring staff HQ         4         10         days         75         3,675           siems: monitoring staff other         21         10         days         75         2,250           Rental         7         10         days         75         5,250           Isas         7         10         days         75         5,250           Isas         7         10         days         75         5,250  | Listing     | frame                             | _     | ~            |            | 4,900 | 4,900  | 4,900     |                     |                                 |           |
| Dannel: listers         98         2         ED         100         19,600         1           Dannel: drivers         4         10         days         75         700           Bilems: monitoring staff other         21         10         days         75         3,000           Bilems: monitoring staff other         21         10         days         75         2,250           Rental         7         10         days         75         5,250           Rental         7         10         days         75         5,250           Isas         7         10         days         75         5,250  |             | Training of listers               | 7     | ~            | region     | 009   | 4,200  | 4,200     |                     |                                 |           |
| iems: monitoring staff HQ         4         10 days         17.5         700           liems: monitoring staff other         21         10 days         75         3,000           silems: drivers         3         10 days         75         2,250           Rental         7         10 days         75         5,250           iles         7         10 days         75         5,250           7         10 days         75         5,250           7         1 days         75         5,250   |             | Personnel: listers                | 86    | 2            | ED         | 100   | 19,600 | 19,600    |                     |                                 |           |
| liems: monitoring staff HQ         4         10         days         75         3,000           liems: monitoring staff other         21         10         days         17.5         3,675           silems: drivers         3         10         days         75         2,250           Rental         7         10         days         75         5,250           lies         7         1         days         75         5,250  |             | Personnel: drivers                | 4     | 10           | days       | 17.5  | 200    | 700       |                     |                                 |           |
| liems: monitoring staff other         21         10         days         17.5         3,675           sliems: drivers         3         10         days         75         2,250           Rental         7         10         days         75         5,250           Isos         7         10         days         75         5,250   |             | Per diems: monitoring staff HQ    | 4     | 10           | days       | 75    | 3,000  | 3,000     |                     |                                 |           |
| liems: drivers     3     10 days     75     2,250       Rental     7     10 days     75     5,250       7     10 days     75     5,250       11 days     75     5,250       12 days     75     5,250   |             | Per diems: monitoring staff other | 21    | 10           | days       | 17.5  | 3,675  | 3,675     |                     |                                 |           |
| Xental         7         10 days         75         5,250           7         10 days         75         5,250           1ise         7         4 days         75         6,250  |             | Per diems: drivers                | 3     | 10           | days       | 75    | 2,250  | 2,250     |                     |                                 |           |
| 10 days 75 5,250   |             | Car Rental                        | 7     | 10           | days       | 75    | 5,250  | 5,250     |                     |                                 |           |
| 7 1 days 75 525  |             | Fuel                              | 7     | 10           | days       | 75    | 5,250  | 5,250     |                     |                                 |           |
| 220  |             | Supplies                          | 7     | <del>-</del> | days       | 75    | 525    | 525       |                     |                                 |           |

|                |             | 1,575               | 2,835         | 336             | 1,275    | 20       |       | 1,733                                    | 10,780              | 23,000        | 250                     | 240                | 270                    | 720  | 3,300        | 550      |        |                | 8,680                              | 7,196              | 1,799                                | 34,720                  | 1,050                 | 1,050             | 840                                 | 2,160                      | 1,080                            | 3,600       | 23.100     | 18,480 | 15,750                         | 3,000                      | 2,100                           | 1.000          |
|----------------|-------------|---------------------|---------------|-----------------|----------|----------|-------|--|---------------------|---------------|-------------------------|--------------------|------------------------|------|--------------|----------|--------|----------------|------------------------------------|--------------------|--------------------------------------|-------------------------|-----------------------|-------------------|-------------------------------------|----------------------------|----------------------------------|-------------|------------|--------|--------------------------------|----------------------------|---------------------------------|----------------|
| 980            |             |                     |               |                 |          |          |       |  |                     |               |                         |                    |                        |      |              |          |        |                |                                    |                    |                                      |                         |                       |                   |                                     |                            |                                  |             |            |        |                                |                            |                                 |                |
| 980            | 50,330      | 1,575               | 2,835         | 336             | 1,275    | 90       | 6,071 | 1,733                                    | 10,780              | 23,000        | 250                     | 240                | 270                    | 720  | 3,300        | 920      | 40,843 |                | 8,680                              | 7,196              | 1,799                                | 34,720                  | 1,050                 | 1,050             | 840                                 | 2,160                      | 1,080                            | 3,600       | 23,100     | 18,480 | 15,750                         | 3,000                      | 2,100                           | 1,000          |
| 2              |             | 22.5                | 45            | 12              | 7.5      | 20       |       | 22.5                                     | 17.5                | 20            | 2.5                     | 4                  | 22.5                   | 09   | 300          | 90       |        |                | 155                                | 128.5              | 128.5                                | 155                     | 10                    | 10                | 10                                  | 22.5                       | 22.5                             | 20          | 75         | 09     | 0.75                           | 0.5                        | 300                             | 1,000          |
| map            |             | days                | nights        | days            | days     |          |       | days                                     | days                | nights        |                         |                    | days                   | days | days         | days     |        |                | wks                                | wks                | wks                                  | wks                     | days                  | days              | days                                | days                       | days                             | nights      | davs       | davs   |                                |                            |                                 |                |
| _              |             | 10                  | 6             | 4               | 10       | _        |       | 11                                       | 11                  | 10            | _                       | _                  | 9                      | 9    | 11           | 11       |        |                | 80                                 | 80                 | 2                                    | 80                      | 15                    | 15                | 12                                  | 16                         | 16                               | 00          | 44         | 44     | _                              | _                          | _                               | _              |
| 196            |             | 7                   | 7             | 7               | 17       | ₩        |       | 7  | 99                  | 46            | 100                     | 09                 | 2                      | 2    | _            | _        |        |                | 7                                  | 7                  | 7                                    | 28                      | 7                     | 7                 | 7                                   | 9                          | 3                                | 6           | 7          | 7      | 21,000                         | 000'9                      | 7                               | <del>-</del>   |
| Copies of maps |             | Per diems: trainers | Accomodation: | Transportation: | Catering | Supplies |       | Per diems: trainers (for field training) | Per diems: trainees | Accomodation: | Printing questionnaires | Pinting of manuals | Per diems: SIB drivers | Fuel | Rental venue | Supplies |        |                | Personnel: Field Supervisor/Driver | Personnel: Editors | Personnel: Asst Editors for wk 1 & 2 | Personnel: Interviewers | Per diem: Supervisors | Per diem: Editors | Per diem: Asst Editors for wk 1 & 2 | Per diem: Monitoring staff | Per diem: Drivers for Monitoring | and drivers | Car Rental | Fuel   | Printing questionnaires, forms | Supplies for anthropometry | Supplies (stationary, IDs, etc) | Communications |
|                | Training of | trainers            |               |                 |          |          |       | Field Training                           |                     |               |                         |                    |                        |      |              |          |        | Fieldwork Data | Collection                         |                    |                                      |                         |                       |                   |                                     |                            |                                  |             |            |        |                                |                            |                                 |                |

| 15,000   | 15,000           | 22,738                  |                           |
|--|------------------|-------------------------|---------------------------|
| 3,000 6,000 15,000   | 24,000           | 31,638                  |                           |
| 5,000  | 14,000           | 194,257                 |                           |
| 9,000  | 000'6            | 68,727                  |                           |
| 3,000<br>5,000<br>24,000<br>30,000   | 62,000           | 317,360                 | 130,000                   |
| Data Analysis & Report Writing Procurement 3 Desktop Computer (data entry) MICS 4 Coordination Jan - Aug Dissemination |                  | 4                       |                           |
|  | TOTAL for UNICEF | OVERALL<br>TOTAL MICS 4 | CO BELIZE<br>Contribution |

## APPENDIX C. SENSITIZATION CAMPAIGN

The sensitization campaign started two weeks prior to the fieldwork and lasted throughout the entire fieldwork. The initial two weeks of the campaign made the public aware of the purpose, goals and duration of the proposed MICS survey. This campaign utilized the slogan "Get in the MICS4 improving the lives of our children" which was reproduced on flyers, banners t-shirts, bags, key rings and pens. All samples can be accessed at: http://www.youtube.com/watch?v=NsTZhiKWHdQ&feature=plcp

There was a radio jingle and 3-minute TV animation message which was aired throughout the fieldwork. In addition there were four TV talk show appearances featuring the Statistical Institute of Belize (SIB) and UNICEF which encouraged public participation. Also, a documentary of the entire MICS fieldwork process was aired on the TV show Belize Watch on the TV station LOVE FM.

Banners were hung across the major streets in each district town or city and also in the offshore Cayes. Flyers were distributed from the major shopping centers in urban and rural areas of each district and were also placed on street lamp posts at these locations. A flyer is reproduced in Figure 1.

Each respondent participating in the survey was given a small gift package consisting of a MICS bag, a pen and a key ring all emblazoned with the MICS slogan. In addition all interviewers and persons from the SIB and UNICEF were issued t-shirts with the MICS slogan on display. These t-shirts identified interviewers with the MICS survey.

The Mennonite communities required special attention prior to the start of fieldwork. Each selected Mennonite community was visited and the elders were informed and their approval and help solicited.

A detailed monitoring and evaluation calendar along with budget projections is presented in Table 1.

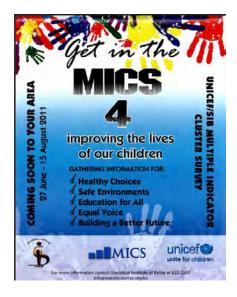


Figure 1. MICS4 Flyer, Belize, 2011

| Table 1 | Table 1: MICS4 SENSITIZATION MONITORING AND EVALUATION CALENDAR, 2011 | ND EVALU                | ATION CAL   | ENDAR, 201    | _                 |      |        |            |         |      |     |     |        |
|---------|---|-------------------------|-------------|---------------|-------------------|------|--------|------------|---------|------|-----|-----|--------|
|         |   | =                       | -           |               |                   |      | TIME   | TIME FRAME |         |      | Ē   |     |        |
| PROG    | PROGRAMME ACTIVITIES & DESCRIPTION                                    |                         |             |               |                   |      | 2      | 2011       |         | -    |     |     |        |
|         | חס  | QUANTITY                | COST        | TOTAL<br>COST | May               | 7    | June   |            | July    |      | Aug | STA | STATUS |
|         |   |                         |             |               | 23 30             | 6 13 | 20 27  | 4          | 11 18 2 | 25 1 | ∞   |     |        |
| 0       |   |                         |             | \$702200      |                   |      |        |            |         |      |     |     |        |
| 2       | By July of 2011, 90% of all HH aware of the MICS-4.                   | e of the MI             | CS-4.       | 0.622.0       |                   |      |        |            |         |      |     |     |        |
| 1.1     | Conduct media campaign through press relea                            | ease, radio and TV Ads, | nd TV Ads,  | \$9,600.00    |                   |      |        |            |         | ÷    |     | -   |        |
| 1.1.1   | Draft Concept for 3minute Animation                                   |                         |             |               | ×                 |      |        |            |         |      |     |     |        |
| 1.1.2   | Contract Company  | 1                       | \$4,000.00  | \$4,000.00    | ×                 |      |        |            |         |      |     |     |        |
| 1.1.3   | Air Animation (Unit= 1day x 3), primetime => after news               | 14                      | \$400.00    | \$5,600.00    |                   | ×    | *      |            |         |      |     |     |        |
| 1.2     | a Campaign through appearanc  | e on Radio and TV talk  | and TV talk | \$3.000.00    |                   |      |        |            |         |      |     |     |        |
| 1.2.1   | Letters sent to media for approval                                    | 1                       | \$0.00      | \$0.00        | ×                 |      |        |            |         |      |     |     |        |
| 1.2.2   | Appearance on Open Your Eyes  | 1                       | \$0.00      | \$0.00        |                   | ×    |        |            |         |      |     |     |        |
| 1.2.3   | Appearance on Wake Up Belize  | 1                       | \$0.00      | \$0.00        |                   |      | ×      |            |         |      |     |     |        |
| 1.2.4   | Appearance on Love TV   | 1                       | \$0.00      | \$0.00        |                   |      | ×      |            |         |      |     |     |        |
| 1.3     | Conduct Awareness campaign (media)                                    |                         |             | \$3,000.00    |                   |      |        |            |         |      |     |     |        |
| 1.3.1   | Contract LOVE FM  | П                       | \$500.00    | \$500.00      |                   | ×    |        |            |         |      |     |     |        |
|         | Documentary   | Н                       | \$2,500.00  | \$2,500.00    |                   | ×    |        |            |         |      |     |     |        |
|         | Appearance on Belize Watch  | ⊣                       | \$0.00      | \$0.00        |                   |      | ×      |            |         |      |     |     |        |
| 1.3     | Conduct media campaign through Facebook 1                             | page, blog and          | nd txt      | 000\$         |                   |      |        |            |         |      |     |     |        |
| 131     | Frankol ram   |                         |             | 2000          |                   |      |        |            |         |      |     | L   |        |
|         | racebook page   | _                       | L           | ŀ             |                   |      |        |            |         |      |     |     |        |
|         |   |                         | -           | 000           | 00                | *    |        |            |         |      |     |     |        |
| 1.3.1.b | Approval  |                         |             |               | \$0.00            | ×    |        |            |         |      |     |     |        |
| 1.3.1.c | _   | 1000                    |             |               | \$0.00            | ×    |        |            |         |      |     |     |        |
| 1.3.2   | Sending mass Txt  |                         |             |               |                   |      |        |            |         |      |     |     |        |
| 1.3.2.a |   |                         | 00.0\$      |               | \$0.00            | ×    |        |            |         |      |     |     |        |
| 1.3.2.b | _   | 10 000                  |             |               | \$0.00            | *    | ×      |            |         |      |     |     |        |
| 1.4     | Conduct awareness campaign through                                    | eh lingle competition   | npetition   | \$4.4         | 0.00              |      | -<br>! |            |         |      |     |     |        |
| 1.4.1   | Advertise Completion  | 2                       | \$400       |               | <b>x</b> 00.008\$ | ×    |        |            |         |      |     |     |        |
| 1.4.2   | Procure first place prize   | 1                       | \$1,500.00  | 31,500.00     | 0.00              | ×    |        |            |         |      |     |     |        |
| 1.4.3   | Procure second place prize  | 1                       | \$1,000.00  | 31,000.00     | 0.00              | ×    |        |            |         |      |     |     |        |
| 1.4.4   | Procure third place prize   | 1                       | \$800.00    |               | \$800.00          | ×    |        |            |         |      |     |     |        |
| 1.4.5   | Selection of Winners  |                         |             | 47            | \$0.00            |      | ×      |            |         |      |     |     |        |
| 1.4.6   | Media moment with winners (UNICEF                                     | 7                       | 00104       |               | 000               |      | ×      |            |         |      |     |     |        |
|         | CONTESTENCE FOOM)   | 1                       | \$350.00    |               | \$330.00          | _    | _      |            |         |      |     | _   |        |
| 1 5     |   |                         |             |               |                   |      |        |            |         |      |     |     |        |
| ? !     | Conduct awareness campaig   | gn banners              |             | \$11,554.00   | 4.00              | _    | -      |            |         |      | -   | -   |        |
| 1.5.1   | Design Banners  |                         | 2 \$200.00  |               | \$400.00 <b>x</b> |      |        |            |         |      |     |     |        |
|         |   |                         |             |               |                   |      |        |            |         |      |     |     |        |

|         |   |                     | -          |             | - | - |   | l | 1 | - | _ |  | İ |  |
|---------|---|---------------------|------------|-------------|---|---|---|---|---|---|---|--|---|--|
| 1.5.2   | Produce 14 Banners  | 14                  | \$400.00   | \$5,600.00  |   | × |   |   |   |   |   |  |   |  |
| 1.5.3   | Letters to City and Town Councils                                     | I                   |            |             | × |   |   |   |   |   |   |  |   |  |
|         | requesting to hang banners  | 7                   | \$0.00     | \$0.00      | : |   |   |   |   |   |   |  |   |  |
| 1.5.4   | Procure rope 1/4 inch (100 ft. per banner)                            | 1,400               | \$2.00     | \$2,800.00  | × |   |   |   |   |   |   |  |   |  |
| 1.5.5   | Procure 1/3 sticks  | 28                  | \$2.50     | \$70.00     | × |   |   |   |   |   |   |  |   |  |
| 1.5.6   | Cost to transport banners to the districts and cayes                  | 9                   | \$14.00    | \$84.00     |   | × |   |   |   |   |   |  |   |  |
| 1.5.7   | Hang Banners  | 13                  | \$200.00   | \$2,600.00  |   |   |   |   |   |   |   |  |   |  |
| 1.6     | Conduct awareness campaign through flyers (Low rings T Shirts)        | s and paraphernalia | hernalia   | \$35,225,00 |   |   |   |   |   |   |   |  |   |  |
| 1.6.0a  | Contract Company  | 1                   | \$0.00     | \$0.00      | × |   |   |   |   |   |   |  |   |  |
| 1.6.0.b | Art Work  | 1                   | \$100.00   | \$100.00    |   | × |   |   |   |   |   |  |   |  |
| 1.9.1   | T Shirts  |                     |            |             |   |   |   |   |   |   |   |  |   |  |
| 1.6.1.a | Design T Shirts   | 1                   | \$125.00   | \$125.00    |   | × |   |   |   |   |   |  |   |  |
| 1.6.1.b | Produce 500 T Shirts  | 200                 | \$15.00    | \$7,500.00  |   |   | × |   |   |   |   |  |   |  |
| 1.6.2   | Flyers  |                     |            |             |   |   |   |   |   |   |   |  |   |  |
| 1.6.2.a | Design Flyers   | 1                   | \$0.00     | \$0.00      |   | × |   |   |   |   |   |  |   |  |
| 1.6.2.b | Print 5000 coloured flyers  | 5,000               | \$0.75     | \$3,750.00  |   |   | × |   |   |   |   |  |   |  |
| 1.6.3   | Key rings   |                     |            |             |   |   |   |   |   |   |   |  |   |  |
| 1.6.3.a | Design Key rings (Vertical bar chart-MICS logo)(1 colour 2 side print | 1                   | \$0.00     | \$0.00      |   | × |   |   |   |   |   |  |   |  |
| 1.6.3.b | Produce 5000 key rings  | 2,000               | \$2.25     | \$11,250.00 |   |   | × |   |   |   |   |  |   |  |
| 1.6.4   | Pens  |                     |            |             |   |   |   |   |   |   |   |  |   |  |
| 1.6.4.a | Design pens with MICS Logos/ Tagline                                  | 1                   | \$0.00     | \$0.00      |   | × |   |   |   |   |   |  |   |  |
| 1.6.4.b | Produce 5,000 pens  |                     |            |             |   |   |   |   |   |   |   |  |   |  |
| 1.6.5   | Bags  |                     |            |             |   |   |   |   |   |   |   |  |   |  |
| 1.6.5.a | Design Bags   | 5,000               | \$2.50     | \$12,500.00 |   |   | × |   |   |   |   |  |   |  |
| 1.6.5.b | Produce 5000 bags   |                     |            |             |   |   |   |   |   |   |   |  |   |  |
| 1.7     | Community Outreach Officers   | rs.                 |            | \$6,400.00  |   |   |   |   |   |   |   |  |   |  |
| 1.7.1   |   |                     |            |             |   |   |   |   |   |   |   |  |   |  |
|         | Identification and selection of Out-Reach<br>Officers                 | 7                   | \$0.00     | \$0.00      |   | × |   |   |   |   |   |  |   |  |
| 1.7.2   | DSA for officers  | 9                   | \$1,000.00 | \$6,000.00  |   |   | × | × | × |   |   |  |   |  |
| 1.7.3   | Travel  | 9                   | \$50.00    | \$300.00    |   |   | × | × | × |   |   |  |   |  |
| 1.7.4   | Sensitization session   | 1                   | \$100.00   | \$100.00    |   |   | × |   |   |   |   |  |   |  |
|         |   |                     |            |             |   |   |   |   |   |   |   |  |   |  |

#### 1. GOVERNANCE STRUCTURE

MICS IV Steering Committee: The Steering Committee is an advising body to UNICEF and the Statistical Institute of Belize on all issues related to the successful implementation of the MICS IV.

- o The membership is comprised of senior technical representatives from the following entities
  - a. Ministry of Education
  - b. Ministry of Health
  - c. Ministry of Human Development and Social Transformation
  - d. National Committee for Families and Children
  - e. National AIDS Commission
  - f. Statistical Institute of Belize
  - g. UNDP Belize
  - h. UNICEF Belize
  - i. MICS 4 Coordinator (Secretariat)

#### 2. IMPLEMENTING PERSONNEL

*Implementing Agency:* The Belize MICS IV is being implemented by the Statistical Institute of Belize, with the support and technical assistance of UNICEF.

The Statistical Institute of Belize Belmopan City Cayo

Glenn Avilez Director General
Tyrone Boyce Statistician II
Miriam Willoughby Statistician II

Desmond Gordon Information Technology Manager

Robert Marlin Information Technology
Tiffani Vasquez Assistant Statistician I

Curwen Arthurs Statistician II
Javan Chavarria Statistician II

Ms Audrey Villafranco Assistant Statistician II Ms Melinda Blancaneaux Assistant Statistician II Ms. Kenesha Richards Assistant Statistician II Robert Griffith Assistant Statistician II KarlTyndell Assistant Statistician II Javier Romero Assistant Statistician II Assistant Statistician II **Andy Morales** Rennick Jackson Assistant Statistician II Ms. Wendi Benavides Assistant Statistician III

Six data entry operators Twenty four interviewers

#### **UNICEF**

Ms Christine Norton UNICEF Belize Representative

Mr Joseph Hendrikx Social Policy Officer

Ms. Paulette Wade Planning, Monitoring and Evaluation Specialist

**MICS IV Coordinator:** A consultant has been hired by UNICEF to provide technical support to the Statistical Institute of Belize and to oversee the entire MICS IV process.

Leopold L. Perriott Ph. D. Statistical Consultant, UNICEF Belize

**Sampling expert:** A sampling expert is supplied by UNICEF to assist in sample size determination and in sample selection.

Peter Wingfield-Digby MICS Sampling Consultant

**Data Processing expert:** A data processing expert is supplied by UNICEF to assist in adjusting the CSPro and SPSS programs for data capture and editing.

Martin Wulfe
MICS Data Processing Expert

**Report writing consultant:** A consultant to assist in table production and report writing is supplied by UNICEF.

Shane Khan Ph.D.

MICSIV Report writing consultant

## APPENDIX E. ESTIMATES OF SAMPLING ERRORS

The sample of respondents selected in the Belize Multiple Indicator Cluster Survey is only one of the samples that could have been selected from the same population, using the same design and size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between the estimates from all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey data.

The following sampling error measures are presented in this appendix for each of the selected indicators:

- Standard error (se): Sampling errors are usually measured in terms of standard errors for particular indicators (means, proportions etc). Standard error is the square root of the variance of the estimate.
   The Taylor linearization method is used for the estimation of standard errors.
- Coefficient of variation (*se/r*) is the ratio of the standard error to the value of the indicator, and is a measure of the relative sampling error.
- Design effect (deff) is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect (deft) is used to show the efficiency of the sample design in relation to the precision. A deft value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a deft value above 1.0 indicates the increase in the standard error due to the use of a more complex sample design.
- Confidence limits are calculated to show the interval within which the true value for the population can
  be reasonably assumed to fall, with a specified level of confidence. For any given statistic calculated
  from the survey, the value of that statistic will fall within a range of plus or minus two times the standard
  error (r + 2.se or r 2.se) of the statistic in 95 percent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, SPSS Version 18 Complex Samples module has been used. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and un-weighted counts of denominators for each indicator.

Sampling errors are calculated for indicators of primary interest, for the national level, for the regions, and for urban and rural areas. Three of the selected indicators are based on households, 8 are based on household members, 13 are based on women, and 15 are based on children under 5. All indicators presented here are in the form of proportions. Table SE.1 shows the list of indicators for which sampling errors are calculated, including the base population (denominator) for each indicator. Table SE.2 to Table SE.9 show the calculated sampling errors for selected domains.

# Table SE.1: Indicators selected for sampling error calculations

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Belize, 2011

| MICS | 4 Indicator   | Base Population   |
|------|---|---|
|      | HOUSEHO   | LD MEMBERS  |
| 4.1  | Use of improved drinking water sources  | All household members   |
| 4.3  | Use of improved sanitation  | All household members   |
| 7.5  | Secondary school net attendance ratio (adjusted)  | Children of secondary school age  |
| 8.5  | Violent discipline  | Children age 2-14 years   |
| 9.18 | Prevalence of children with one or both parents dead  | Children age 0-17 years   |
| 8.2  | Child labour  | Children age 5-14 years   |
|      | W   | OMEN  |
| -    | Pregnant women  | Women age 15-49 years   |
| 5.2  | Early childbearing  | Women age 20-24 years   |
| 5.3  | Contraceptive prevalence  | Women age 15-49 years who are currently married or in union   |
| 5.4  | Unmet need  | Women age 15-49 years who are currently married or in union   |
| 5.5a | Antenatal care coverage - at least once by skilled personnel                                | Women age 15-49 years with a live birth in the 2 years preceding the survey                                       |
| 5.5b | Antenatal care coverage – at least four times by any provider                               | Women age 15-49 years with a live birth in the 2 years preceding the survey                                       |
| 5.7  | Skilled attendant at delivery   | Women age 15-49 years with a live birth in the 2 years preceding the survey                                       |
| 5.8  | Institutional deliveries  | Women age 15-49 years with a live birth in the 2 years preceding the survey                                       |
| 5.9  | Caesarean section   | Women age 15-49 years with a live birth in the 2 years preceding the survey                                       |
| 7.1  | Literacy rate among young women   | Women age 15-24 years   |
| 8.7  | Marriage before age 18  | Women age 20-49 years   |
| 8.9  | Polygyny  | Women age 15-49 years who are currently married or in union   |
| 9.2  | Comprehensive knowledge about HIV prevention among young people                             | Women age 15-24 years   |
| 9.3  | Knowledge of mother- to-child transmission of HIV   | Women age 15-49 years   |
| 9.4  | Accepting attitudes towards people living with HIV  | Women age 15-49 years   |
| 9.6  | Women who have been tested for HIV during last 12 months and who have been told the results | Women age 15-49 years   |
| 9.7  | Sexually active young women who have been tested for HIV and know the results               | Women age 15-24 years who have had sex in the 12 months preceding the survey                                      |
| 9.11 | Sex before age 15 among young women   | Women age 15-24 years   |
| 9.16 | Condom use with non-regular partners  | Women age 15-24 years that had a non-marital, non-<br>cohabiting partner in the 12 months preceding the<br>survey |

|      | UND  | ER-5s   |
|------|--|---|
| 2.1a | Underweight prevalence                           | Children under age 5  |
| 2.2a | Stunting prevalence                              | Children under age 5  |
| 2.3a | Wasting prevalence                               | Children under age 5  |
| 2.6  | Exclusive breastfeeding under 6 months           | Total number of infants under 6 months of age                         |
| 2.14 | Age-appropriate breastfeeding                    | Children age 0-23 months  |
| -    | Tuberculosis immunization coverage               | Children age 18-29 months   |
| -    | Polio or DTaP-P immunization                     | Children age 18-29 months   |
| -    | DPT (Pentavalent)                                | Children age 18-29 months   |
| -    | Received measles immunization                    | Children age 18-29 months   |
| -    | Received Hepatitis B or Pentavalent immunization | Children age 18-29 months   |
| -    | Received HiB or Pentavalent immunization         | Children age 18-29 months   |
| -    | Diarrhoea in the previous 2 weeks                | Children under age 5  |
| -    | Illness with a cough in the previous 2 weeks     | Children under age 5  |
| 3.8  | Oral rehydration therapy with continued feeding  | Children under age 5 with diarrhoea in the previous 2 weeks           |
| 3.10 | Antibiotic treatment of suspected pneumonia      | Children under age 5 with suspected pneumonia in the previous 2 weeks |
| 6.1  | Support for learning                             | Children age 36-59 months   |
| 6.7  | Attendance to early childhood education          | Children age 36-59 months   |
| 8.1  | Birth registration                               | Children under age 5  |

Table SE.2: Sampling errors: Total sample Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011

|   |      |           |                        | ÷ ciciji               | 2                | 200                        |          |            | Confider | Confidence limits |
|---|------|-----------|------------------------|------------------------|------------------|----------------------------|----------|------------|----------|-------------------|
|   | MICS | Value (r) | Standard<br>error (se) | of variation<br>(se/r) | effect<br>(deff) | of design<br>effect (deft) | Weighted | Unweighted | r - 2se  | r + 2se           |
| Use of improved drinking water sources  | 4.1  | 0.9765    | 0.0060                 | 900'0                  | 7.019            | 2.649                      | 17288    | 4424       | 0.964    | 0.989             |
| Use of improved sanitation  | 4.3  | 0.9190    | 0.0041                 | 0.004                  | 0.965            | 0.982                      | 16779    | 4257       | 0.911    | 0.927             |
| Secondary school net attendance ratio (adjusted)                              | 7.5  | 0.5544    | 0.0155                 | 0.028                  | 1.508            | 1.228                      | 1530     | 1558       | 0.523    | 0.585             |
| Child labour  | 8.2  | 0.1001    | 0.0061                 | 0.061                  | 1.709            | 1.307                      | 4072     | 4194       | 0.088    | 0.112             |
| Prevalence of children with one or both parents dead                          | 9.18 | 0.0383    | 0.0041                 | 0.108                  | 3.382            | 1.839                      | 7094     | 7321       | 0.030    | 0.047             |
| Violent discipline  | 8.5  | 0.7049    | 0.0115                 | 0.016                  | 1.568            | 1.252                      | 5231     | 2467       | 0.682    | 0.728             |
|   |      | WOMEN     |                        |                        |                  |                            |          |            |          |                   |
| Pregnant women  | ı    | 0.0583    | 0.0043                 | 0.074                  | 1.394            | 1.181                      | 4096     | 4096       | 0.050    | 0.067             |
| Early childbearing  | 5.2  | 0.1689    | 0.0131                 | 0.078                  | 0.891            | 0.944                      | 720      | 729        | 0.143    | 0.195             |
| Contraceptive prevalence  | 5.3  | 0.5516    | 0.0132                 | 0.024                  | 1.694            | 1.301                      | 2386     | 2394       | 0.525    | 0.578             |
| Unmet need  | 5.4  | 0.1588    | 0.0074                 | 0.047                  | 0.977            | 0.989                      | 2386     | 2394       | 0.144    | 0.174             |
| Antenatal care coverage - at least once by skilled personnel                  | 5.5a | 0.9622    | 0.0067                 | 0.007                  | 0.864            | 0.930                      | 989      | 702        | 0.949    | 926.0             |
| Antenatal care coverage - at least four times by any provider                 | 5.5b | 0.8312    | 0.0128                 | 0.015                  | 0.825            | 0.908                      | 685      | 702        | 0.806    | 0.857             |
| Skilled attendant at delivery   | 5.7  | 0.9616    | 0.0094                 | 0.010                  | 1.675            | 1.294                      | 989      | 702        | 0.943    | 0.980             |
| Institutional deliveries  | 5.8  | 0.9383    | 0.0108                 | 0.011                  | 1.409            | 1.187                      | 685      | 702        | 0.917    | 0.960             |
| Caesarean section   | 5.9  | 0.2811    | 0.0176                 | 0.062                  | 1.069            | 1.034                      | 685      | 702        | 0.246    | 0.316             |
| Literacy rate among young women   | 7.1  | 0.9053    | 0.0108                 | 0.012                  | 2.141            | 1.463                      | 1564     | 1581       | 0.884    | 0.927             |
| Marriage before age 18  | 8.7  | 0.2941    | 0.0099                 | 0.034                  | 1.528            | 1.236                      | 3252     | 3244       | 0.274    | 0.314             |
| Polygyny  | 8.9  | 0.0345    | 0.0038                 | 0.110                  | 1.032            | 1.016                      | 2386     | 2394       | 0.027    | 0.042             |
| Comprehensive knowledge about HIV prevention among young people               | 9.2  | 0.4287    | 0.0146                 | 0.034                  | 1.372            | 1.171                      | 1564     | 1581       | 0.400    | 0.458             |
| Knowledge of mother-to-child transmission of HIV                              | 9.3  | 0.5571    | 9600.0                 | 0.017                  | 1.515            | 1.231                      | 4096     | 4096       | 0.538    | 0.576             |
| Accepting attitudes towards people living with HIV                            | 9.4  | 0.1928    | 0.0078                 | 0.040                  | 1.482            | 1.217                      | 3879     | 3804       | 0.177    | 0.208             |
| Women who have been tested for HIV during last 12 months and who have been    | 9.6  | 0.2838    | 0.0097                 | 0.034                  | 1.896            | 1.377                      | 4096     | 4096       | 0.264    | 0.303             |
| ימות תום ופצחות?  | ļ    |           |                        |                        |                  | ,                          |          | ļ          |          | I                 |
| Sexually active young women who have been tested for HIV and know the results | 9.7  | 0.3392    | 0.0184                 | 0.054                  | 1.232            | 1.110                      | 820      | 817        | 0.302    | 0.376             |
| Sex before age 15 among young women   | 9.11 | 0.0528    | 0.0058                 | 0.109                  | 1.046            | 1.023                      | 1564     | 1581       | 0.041    | 0.064             |
| Condom use with non-regular partners  | 9.16 | 0.6460    | 0.0266                 | 0.041                  | 0.987            | 0.993                      | 341      | 320        | 0.593    | 669.0             |
|   |      | UNDER-58  |                        |                        |                  |                            |          |            |          |                   |
| Underweight prevalence  | 2.1a | 0.0616    | 0.0049                 | 0.080                  | 0.771            | 0.878                      | 1809     | 1822       | 0.052    | 0.071             |
| Stunting prevalence   | 2.2a | 0.1930    | 0.0103                 | 0.053                  | 1.219            | 1.104                      | 1780     | 1798       | 0.172    | 0.214             |
| Wasting prevalence  | 2.3a | 0.0329    | 0.0044                 | 0.135                  | 1.095            | 1.046                      | 1768     | 1781       | 0.024    | 0.042             |
| Exclusive breastfeeding under 6 months  | 2.6  | 0.1466    | 0.0225                 | 0.153                  | 0.581            | 0.762                      | 148      | 145        | 0.102    | 0.191             |
| Age-appropriate breastfeeding   | 2.14 | 0.3819    | 0.01/2                 | 0.045                  | 0.950            | 0.975                      | 761      | 755        | 0.347    | 0.416             |
| Tuberculosis immunization coverage  |      | 0.97.90   | 0.0073                 | 0.007                  | 080.1            | 1.044                      | 403      | 410        | 0.905    | 0.334             |
| DDT (Bootsoveloot)  |      | 0.7170    | 0.0210                 | 0.030                  | 0.000            | 0.00                       | 306      | 004        | 0.000    | 0.742             |
| Dri (relitavalent)<br>Boceived messles imminization                           |      | 0.717.0   | 0.0212                 | 0.030                  | 0.000<br>1 FG 8  | 1.341                      | 300      | 397        | 0.070    | 007.00            |
| Received Henatitis B or Pentavalent imminization                              | ,    | 0.7139    | 0.011                  | 0.030                  | 0 866            | 0.931                      | 394      | 399        | 0.672    | 0.250             |
| Received His or Pentavalent immunization                                      |      | 0.7114    | 0.0209                 | 0.039                  | 0.847            | 0.921                      | 394      | 668        | 0.670    | 0.753             |
| Diarrhoea in last two weeks   |      | 0.0788    | 0.0060                 | 0.077                  | 976.0            | 0.988                      | 1946     | 1946       | 0.067    | 0.091             |
| Illness with cough in the previous 2 weeks                                    | 1    | 0.0295    | 0.0048                 | 0.161                  | 1.533            | 1.238                      | 1946     | 1946       | 0.020    | 0.039             |
| Oral rehydration therapy with continued feeding                               | 3.8  | 0.4254    | 0.0309                 | 0.073                  | 0.575            | 0.759                      | 153      | 148        | 0.364    | 0.487             |
| Antibiotic treatment of suspected pneumonia                                   | 3.10 | 0.7066    | 0.0198                 | 0.028                  | 0.123            | 0.351                      | 22       | 99         | 0.667    | 0.746             |
| Support for learning  | 6.1  | 0.8565    | 0.0160                 | 0.019                  | 1.642            | 1.281                      | 792      | 788        | 0.824    | 0.888             |
| Attendance to early childhood education                                       | 6.7  | 0.3172    | 0.0203                 | 0.064                  | 1.498            | 1.224                      | 792      | 788        | 0.277    | 0.358             |
| Birth registration  | <br> | 0.9524    | 0.0048                 | 0.005                  | 0.979            | 0.989                      | 1946     | 1946       | 0.943    | 0.962             |
|   |      |           |                        |                        |                  |                            |          |            |          |                   |

Table SE.3: Sampling errors: Urban Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011

|  | MICS Indi- | Value (r)         | Standard     | Coefficient of variation | Design | Square root of design | Weighted | Unweighted |         |         |
|--|------------|-------------------|--------------|--------------------------|--------|-----------------------|----------|------------|---------|---------|
|  |            | Value (r)         | Arror (SA)   |                          |        | 4                     |          |            |         |         |
|  | cator      | 111               | מווסו ופני   | (se/r)                   | (deff) | effect (deft)         | count    | count      | r - 2se | r + 2se |
|  | HOUSE      | HOUSEHOLD MEMBERS | <b>ABERS</b> |                          |        |                       |          |            |         |         |
| Use of improved drinking water sources   | 4.1        | 0.9954            | 0.0020       | 0.002                    | 1.678  | 1.295                 | 7536     | 2004       | 0.991   | 0.999   |
| Use of improved sanitation   | 4.3        | 0.9378            | 0.0053       | 900.0                    | 0.955  | 0.977                 | 7410     | 1961       | 0.927   | 0.948   |
| Secondary school net attendance ratio (adjusted)                                     | 7.5        | 0.6920            | 0.0207       | 0.030                    | 1.165  | 1.080                 | 625      | 629        | 0.651   | 0.733   |
| Child labour   | 8.2        | 0.0412            | 0.0056       | 0.136                    | 1.182  | 1.087                 | 1582     | 1485       | 0.030   | 0.052   |
| Prevalence of children with one or both parents dead                                 | 9.18       | 0.0448            | 0.0058       | 0.129                    | 2.036  | 1.427                 | 2780     | 2615       | 0.033   | 0.056   |
| Violent discipline   | 8.5        | 0.7020            | 0.0153       | 0.022                    | 1.122  | 1.059                 | 2022     | 1000       | 0.671   | 0.733   |
|  |            | WOMEN             |              |                          |        |                       |          |            |         |         |
| Pregnant women   | ı          | 0.0496            | 0.0058       | 0.117                    | 1.268  | 1.126                 | 1926     | 1772       | 0.038   | 0.061   |
| Early childbearing   | 5.2        | 0.1415            | 0.0201       | 0.142                    | 1.066  | 1.033                 | 343      | 323        | 0.101   | 0.182   |
| Contraceptive prevalence   | 5.3        | 0.5775            | 0.0196       | 0.034                    | 1.413  | 1.189                 | 991      | 896        | 0.538   | 0.617   |
| Unmet need   | 5.4        | 0.1413            | 0.0108       | 0.077                    | 0.865  | 0.930                 | 991      | 896        | 0.120   | 0.163   |
| Antenatal care coverage - at least once by skilled personnel                         | 5.5a       | 0.9732            | 0.0064       | 0.007                    | 0.388  | 0.623                 | 262      | 247        | 096.0   | 0.986   |
| Antenatal care coverage - at least four times by any provider                        | 5.5b       | 0.8736            | 0.0188       | 0.022                    | 0.787  | 0.887                 | 262      | 247        | 0.836   | 0.911   |
| Skilled attendant at delivery  | 5.7        | 0.9843            | 0.0084       | 0.009                    | 1.128  | 1.062                 | 262      | 247        | 0.967   | 1.000   |
| Institutional deliveries   | 5.8        | 0.9750            | 0.0111       | 0.011                    | 1.245  | 1.116                 | 262      | 247        | 0.953   | 0.997   |
| Caesarean section  | 5.9        | 0.2966            | 0.0340       | 0.115                    | 1.360  | 1.166                 | 262      | 247        | 0.229   | 0.364   |
| Literacy rate among young women  | 7.1        | 0.9582            | 9600.0       | 0.010                    | 1.545  | 1.243                 | 726      | 029        | 0.939   | 0.977   |
| Marriage before age 18   | 8.7        | 0.2431            | 0.0137       | 0.056                    | 1.446  | 1.202                 | 1542     | 1425       | 0.216   | 0.270   |
| Polygyny   | 8.9        | 0.0410            | 0.0064       | 0.157                    | 0.938  | 0.968                 | 991      | 968        | 0.028   | 0.054   |
| Comprehensive knowledge about HIV prevention among young people                      | 9.2        | 0.5467            | 0.0193       | 0.035                    | 1.009  | 1.005                 | 726      | 029        | 0.508   | 0.585   |
| Knowledge of mother-to-child transmission of HIV                                     | 9.3        | 0.5861            | 0.0129       | 0.022                    | 1.215  | 1.102                 | 1926     | 1772       | 0.560   | 0.612   |
| Accepting attitudes towards people living with HIV                                   | 9.4        | 0.2339            | 0.0119       | 0.051                    | 1.362  | 1.167                 | 1886     | 1738       | 0.210   | 0.258   |
| Women who have been tested for HIV during last 12 months and who have been told      | 9.6        | 0.3376            | 0.0119       | 0.035                    | 1.113  | 1.055                 | 1926     | 1772       | 0.314   | 0.361   |
| Countilly noting the recent and the botto been tooked for DIV and brown the received | 0          | 0.0714            | 0.000        | 090                      | ,      | 1006                  | 707      | 273        | 1000    | 722     |
| Sexually active young wolliell Wild Have been tested for hit and know the results    | 9.7        | 4-70.0            | 0.000        | 0.000                    | 0.0    | 000.1                 | 104      | 070        | 125.0   | 22470   |
| Condom too with non really northers  | 9.11       | 1000.0            | 0.0003       | 0.167                    | 0.30   | 0.330                 | 07/      | 0/0        | 0.033   | 0.007   |
| COLLOCIT use with Hot-regular partitions   |            | UNDER-5s          | 0.0200       | 10.0                     | 0.002  | 0000                  | 477      | 000        | 0.0     | 70.70   |
| Underweight prevalence   | 2.1a       | 0.0539            | 0.0084       | 0.156                    | 0.862  | 0.929                 | 678      | 626        | 0.037   | 0.071   |
| Stunting prevalence  | 2.2a       | 0.1572            | 0.0162       | 0.103                    | 1.218  | 1.104                 | 662      | 614        | 0.125   | 0.190   |
| Wasting prevalence   | 2.3a       | 0.0282            | 0.0067       | 0.237                    | 0.998  | 0.999                 | 661      | 612        | 0.015   | 0.042   |
| Exclusive breastfeeding under 6 months   | 2.6        | 0.1093            | 0.0291       | 0.267                    | 0.471  | 0.686                 | 61       | 55         | 0.051   | 0.168   |
| Age-appropriate breastfeeding  | 2.14       | 0.3305            | 0.0260       | 0.079                    | 0.821  | 906.0                 | 298      | 270        | 0.279   | 0.382   |
| Tuberculosis immunization coverage   |            | 0.9886            | 0.0085       | 0.009                    | 0.851  | 0.923                 | 145      | 135        | 0.972   | 1.000   |
| Polio or DTaP-P immunization   | í          | 0.6898            | 0.0378       | 0.055                    | 0.883  | 0.940                 | 143      | 133        | 0.614   | 0.765   |
| DPT (Pentavalent)  | í          | 0.6943            | 0.0338       | 0.049                    | 0.716  | 0.846                 | 143      | 134        | 0.627   | 0.762   |
| Received measles immunization  | ı          | 0.8874            | 0.0293       | 0.033                    | 1.141  | 1.068                 | 144      | 134        | 0.829   | 0.946   |
| Received Hepatitis B or Pentavalent immunization                                     | ,          | 0.6955            | 0.0339       | 0.049                    | 0.710  | 0.843                 | 142      | 132        | 0.628   | 0.763   |
| Received HiB or Pentavalent immunization   | ,          | 0.6907            | 0.0345       | 0.050                    | 0.734  | 0.857                 | 143      | 133        | 0.622   | 0.760   |
| Diarrhoea in last two weeks  | í          | 0.0641            | 0.0120       | 0.186                    | 1.620  | 1.273                 | 743      | 681        | 0.040   | 0.088   |
| Illness with cough in the previous 2 weeks   | í          | 0.0204            | 0.0058       | 0.286                    | 1.159  | 1.077                 | 743      | 681        | 0.009   | 0.032   |
| Oral rehydration therapy with continued feeding                                      | 3.8        | *                 | *            | *                        | *      | *                     | 48       | 40         | *       | *       |
| Antibiotic treatment of suspected pneumonia  | 3.10       | *                 | *            | *                        | *      | *                     | 15       | 14         | *       | *       |
| Support for learning   | 6.1        | 0.8852            | 0.0209       | 0.024                    | 1.173  | 1.083                 | 300      | 275        | 0.844   | 0.927   |
| Attendance to early childhood education  | 6.7        | 0.4044            | 0.0328       | 0.081                    | 1.226  | 1.107                 | 300      | 275        | 0.339   | 0.470   |
| Birth registration   | 8.1        | 0.9463            | 0.0083       | 0.00                     | 0.922  | 096.0                 | 743      | 681        | 0.930   | 0.963   |

Table SE.4: Sampling errors: Rural Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011

|  |      |                   |          |                          |                  |                          |          |            | i de la companya de l | Confidence Limits |
|--|------|-------------------|----------|--------------------------|------------------|--------------------------|----------|------------|--|-------------------|
|  | MICS | (r) onley         | Standard | Coefficient of variation | Design<br>effect | Square root<br>of design | Weighted | Unweighted | 000  | 4                 |
|  | HOUS | HOUSEHOLD MEMBERS | /BERS    |                          |                  | (100)                    |          |            |  |                   |
| Use of improved drinking water sources   | 4.1  | 0.9619            | 0.0105   | 0.011                    | 7.339            | 2.709                    | 9752     | 2420       | 0.941  | 0.983             |
| Use of improved sanitation   | 4.3  | 0.9041            | 0.0060   | 0.007                    | 0.952            | 0.976                    | 9368     | 2296       | 0.892  | 0.916             |
| Secondary school net attendance ratio (adjusted)   | 7.5  | 0.4594            | 0.0186   | 0.041                    | 1.367            | 1.169                    | 906      | 979        | 0.422  | 0.497             |
| Child labour   | 8.2  | 0.1375            | 0.0093   | 0.068                    | 1.969            | 1.403                    | 2489     | 2709       | 0.119  | 0.156             |
| Prevalence of children with one or both parents dead   | 9.18 | 0.0342            | 0.0056   | 0.165                    | 4.529            | 2.128                    | 4314     | 4706       | 0.023  | 0.045             |
| Violent discipline   | 8.5  | 0.7068            | 0.0158   | 0.022                    | 1.768            | 1.330                    | 3209     | 1467       | 0.675  | 0.738             |
|  |      | WOMEN             |          |                          |                  |                          |          |            |  |                   |
| Pregnant women   |      | 0990.0            | 0.0061   | 0.093                    | 1.411            | 1.188                    | 2170     | 2324       | 0.054  | 0.078             |
| Early childbearing   | 5.2  | 0.1938            | 0.0174   | 0.090                    | 0.781            | 0.884                    | 377      | 406        | 0.159  | 0.229             |
| Contraceptive prevalence   | 5.3  | 0.5332            | 0.0180   | 0.034                    | 1.947            | 1.395                    | 1395     | 1498       | 0.497  | 0.569             |
| Unmet need   | 5.4  | 0.1713            | 0.0097   | 0.057                    | 0.989            | 0.994                    | 1395     | 1498       | 0.152  | 0.191             |
| Antenatal care coverage - at least once by skilled personnel                                 | 5.5a | 0.9554            | 0.0100   | 0.010                    | 1.064            | 1.031                    | 424      | 455        | 0.935  | 0.975             |
| Antenatal care coverage - at least four times by any provider                                | 2.5b | 0.8050            | 0.0172   | 0.021                    | 0.855            | 0.925                    | 424      | 455        | 0.771  | 0.839             |
| Skilled attendant at delivery  | 5.7  | 0.9476            | 0.0143   | 0.015                    | 1.863            | 1.365                    | 424      | 455        | 0.919  | 926.0             |
| Institutional deliveries   | 2.8  | 0.9157            | 0.0160   | 0.017                    | 1.504            | 1.227                    | 424      | 455        | 0.884  | 0.948             |
| Caesarean section  | 5.9  | 0.2715            | 0.0181   | 0.067                    | 0.751            | 0.866                    | 424      | 455        | 0.235  | 0.308             |
| Literacy rate among young women  | 7.1  | 0.8595            | 0.0178   | 0.021                    | 2.400            | 1.549                    | 838      | 911        | 0.824  | 0.895             |
| Marriage before age 18   | 8.7  | 0.3401            | 0.0138   | 0.041                    | 1.542            | 1.242                    | 1710     | 1819       | 0.312  | 0.368             |
| Polygyny   | 8.9  | 0.0299            | 0.0045   | 0.150                    | 1.034            | 1.017                    | 1395     | 1498       | 0.021  | 0.039             |
| Comprehensive knowledge about HIV prevention among young people                              | 9.2  | 0.3266            | 0.0189   | 0.058                    | 1.481            | 1.217                    | 838      | 911        | 0.289  | 0.364             |
| Knowledge of mother-to-child transmission of HIV   | 9.3  | 0.5314            | 0.0139   | 0.026                    | 1.806            | 1.344                    | 2170     | 2324       | 0.504  | 0.559             |
| Accepting attitudes towards people living with HIV   | 9.4  | 0.1539            | 0.0100   | 0.065                    | 1.588            | 1.260                    | 1993     | 2066       | 0.134  | 0.174             |
| Women who have been tested for HIV during last 12 months and who have been told the results. | 9.6  | 0.2360            | 0.0143   | 0.061                    | 2.648            | 1.627                    | 2170     | 2324       | 0.207  | 0.265             |
| Sexually active young women who have been tested for HIV and know the results                | 9.7  | 0.3079            | 0.0270   | 0.088                    | 1.511            | 1.229                    | 416      | 444        | 0.254  | 0.362             |
| Sex before age 15 among young women  | 9.11 | 0.0552            | 0.0075   | 0.137                    | 0.995            | 0.997                    | 838      | 911        | 0.040  | 0.070             |
| Condom use with non-regular partners   | 9.16 | 0.5412            | 0.0474   | 0.088                    | 1.006            | 1.003                    | 116      | 112        | 0.446  | 9:99:0            |
|  | -    | UNDER-58          |          |                          |                  |                          |          |            |  |                   |
| Underweight prevalence   | 2.1a | 0.0662            | 0.0062   | 0.093                    | 0.736            | 0.858                    | 1132     | 1196       | 0.054  | 0.079             |
| Stunting prevalence  | 2.2a | 0.2143            | 0.0135   | 0.063                    | 1.276            | 1.129                    | 1118     | 1184       | 0.187  | 0.241             |
| Wasting prevalence   | 2.3a | 0.0357            | 0.0058   | 0.164                    | 1.158            | 1.076                    | 1107     | 1169       | 0.024  | 0.047             |
| Exclusive breastfeeding under 6 months   | 2.6  | 0.1726            | 0.0320   | 0.186                    | 0.640            | 0.800                    | 87       | 06         | 0.109  | 0.237             |
| Age-appropriate breastfeeding  | 2.14 | 0.4151            | 0.0225   | 0.054                    | 1.012            | 1.006                    | 463      | 485        | 0.370  | 0.460             |
| Tuberculosis immunization coverage   | •    | 0.9745            | 0.0103   | 0.011                    | 1.173            | 1.083                    | 258      | 275        | 0.954  | 0.995             |
| Polio or DTaP-P immunization   | •    | 0.7058            | 0.0252   | 0.036                    | 0.810            | 0.900                    | 252      | 267        | 0.656  | 0.756             |
| DPT (Pentavalent)  | •    | 0.7311            | 0.0275   | 0.038                    | 1.019            | 1.010                    | 253      | 266        | 0.676  | 0.786             |
| Received measles immunization  | í    | 0.8922            | 0.0261   | 0.029                    | 1.840            | 1.356                    | 249      | 260        | 0.840  | 0.944             |
| Received Hepatitis B or Pentavalent immunization   | i    | 0.7242            | 0.0271   | 0.037                    | 0.981            | 0.990                    | 252      | 267        | 0.670  | 0.779             |
| Received HiB or Pentavalent immunization   | •    | 0.7231            | 0.0266   | 0.037                    | 0.937            | 0.968                    | 252      | 266        | 0.670  | 0.776             |
| Diarrhoea in last two weeks  | ı    | 0.0879            | 0.0063   | 0.072                    | 0.633            | 0.795                    | 1203     | 1265       | 0.075  | 0.101             |
| Illness with cough in the previous 2 weeks   | •    | 0.0352            | 0.0067   | 0.192                    | 1.692            | 1.301                    | 1203     | 1265       | 0.022  | 0.049             |
| Oral rehydration therapy with continued feeding  | 3.8  | 0.3560            | 0.0464   | 0.130                    | 1.007            | 1.003                    | 106      | 108        | 0.263  | 0.449             |
| Antibiotic treatment of suspected pneumonia  | 3.10 | 0.6371            | 0.0235   | 0.037                    | 0.122            | 0.349                    | 42       | 52         | 0.590  | 0.684             |
| Support for learning   | 6.1  | 0.8389            | 0.0226   | 0.027                    | 1.934            | 1.391                    | 492      | 513        | 0.794  | 0.884             |
| Attendance to early childhood education  | 6.7  | 0.2641            | 0.0254   | 0.096                    | 1.700            | 1.304                    | 492      | 513        | 0.213  | 0.315             |
| Birth registration   | 8.1  | 0.9562            | 0.0054   | 90000                    | 0.889            | 0.943                    | 1203     | 1265       | 0.945  | 0.967             |

Table SE.5: Sampling errors: Corozal Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011

|   |      |   |                        |                                 |                            | (   |           |                  | Confider | Confidence limits |
|---|------|---|------------------------|---------------------------------|----------------------------|---|-----------|------------------|----------|-------------------|
|   | MICS | Value (r)                               | Standard<br>error (se) | Coefficient of variation (se/r) | Design<br>effect<br>(deff) | Square root<br>of design<br>effect (deft) | Weighted  | Unweighted count | r - 2se  | r + 2se           |
|   | HOUS | HOUSEHOLD MEMBERS                       | MBERS                  |                                 |                            |   |           |                  |          |                   |
| Use of improved drinking water sources  | 4.1  | 0.9559                                  | 0.0147                 | 0.015                           | 3.273                      | 1.809                                     | 2296      | 642              | 0.927    | 0.985             |
| Use of improved sanitation  | 4.3  | 0.8688                                  | 0.0125                 | 0.014                           | 0.864                      | 0:630                                     | 2260      | 634              | 0.844    | 0.894             |
| Secondary school net attendance ratio (adjusted)  | 7.5  | 0.4517                                  | 0.0424                 | 0.094                           | 1.795                      | 1.340                                     | 201       | 248              | 0.367    | 0.536             |
| Child labour  | 8.2  | 0.1662                                  | 0.0174                 | 0.105                           | 1.415                      | 1.189                                     | 525       | 648              | 0.131    | 0.201             |
| Prevalence of children with one or both parents dead  | 9.18 | 0.0355                                  | 0.0065                 | 0.183                           | 1.415                      | 1.189                                     | 928       | 1146             | 0.023    | 0.049             |
| Violent discipline  | 8.5  | 0.6613                                  | 0.0274                 | 0.041                           | 1.298                      | 1.139                                     | 675       | 388              | 909.0    | 0.716             |
|   |      | WOMEN                                   |                        |                                 |                            |   |           |                  |          |                   |
| Pregnant women  |      | 0.0539                                  | 0.0076                 | 0.141                           | 0.736                      | 0.858                                     | 534       | 648              | 0.039    | 690.0             |
| Early childbearing  | 5.2  | 0.1526                                  | 0.0284                 | 0.186                           | 0.649                      | 0.806                                     | 87        | 105              | 960.0    | 0.209             |
| Contraceptive prevalence  | 5.3  | 0.6180                                  | 0.0235                 | 0.038                           | 0.979                      | 0.989                                     | 346       | 420              | 0.571    | 0.665             |
| Unmet need  | 5.4  | 0.1137                                  | 0.0124                 | 0.109                           | 0.640                      | 0.800                                     | 346       | 420              | 0.089    | 0.139             |
| Antenatal care coverage - at least once by skilled personnel                                  | 5.5a | 0.9911                                  | 0.0086                 | 0.00                            | 0.964                      | 0.982                                     | 92        | 115              | 0.974    | 1.000             |
| Antenatal care coverage - at least four times by any provider                                 | 5.5b | 0.8405                                  | 0.0450                 | 0.054                           | 1.719                      | 1.311                                     | 92        | 115              | 0.751    | 0.930             |
| Skilled attendant at delivery   | 5.7  | 0.9458                                  | 0.0234                 | 0.025                           | 1.219                      | 1.104                                     | 92        | 115              | 0.899    | 0.993             |
| Institutional deliveries  | 2.8  | 0.9822                                  | 0.0130                 | 0.013                           | 1.091                      | 1.045                                     | 92        | 115              | 0.956    | 1.000             |
| Caesarean section   | 5.9  | 0.3016                                  | 0.0355                 | 0.118                           | 0.681                      | 0.825                                     | 98        | 115              | 0.231    | 0.373             |
| Literacy rate among young women   | 7.1  | 0.8423                                  | 0.0444                 | 0.053                           | 3.478                      | 1.865                                     | 194       | 235              | 0.753    | 0.931             |
| Marriage before age 18  | 8.7  | 0.3517                                  | 0.0206                 | 0.059                           | 996.0                      | 0.983                                     | 427       | 518              | 0.310    | 0.393             |
| Polygyny  | 8.9  | 0.0769                                  | 0.0122                 | 0.158                           | 0.877                      | 0.936                                     | 346       | 420              | 0.053    | 0.101             |
| Comprehensive knowledge about HIV prevention among young people                               | 9.2  | 0.2656                                  | 0.0301                 | 0.113                           | 1.086                      | 1.042                                     | 194       | 235              | 0.205    | 0.326             |
| Knowledge of mother-to-child transmission of HIV  | 9.3  | 0.4868                                  | 0.0246                 | 0.051                           | 1.568                      | 1.252                                     | 534       | 648              | 0.438    | 0.536             |
| Accepting attitudes towards people living with HIV  | 9.4  | 0.1919                                  | 0.0286                 | 0.149                           | 3.268                      | 1.808                                     | 510       | 621              | 0.135    | 0.249             |
| Women who have been tested for HIV during last 12 months and who have been told               | 9.6  | 0.1960                                  | 0.0228                 | 0.116                           | 2.128                      | 1.459                                     | 534       | 648              | 0.150    | 0.241             |
| the results  Severally and because warmen who have been tented for DIV and because he requise | 7 0  | 33000                                   | 0.000                  | 000                             | 1 11 7                     | 1 057                                     | 0         | 001              | 171      | 0.00              |
| Sexually active young wolfner wild flave been tested for hiv and know tile results            | 9.7  | 0.0220                                  | 0.0420                 | 0.100                           |                            | 700.0                                     | 000       | 001              | 4 6      | 215.0             |
| Sex before age 15 among young women<br>Condom use with non-regular partners                   | 9.16 | *************************************** | **                     | coz:0<br>*                      | * 0.0                      | c08:0<br>*                                | 134<br>24 | 29               | ***      | * * *             |
|   |      | UNDER-58                                |                        |                                 |                            |   |           |                  |          |                   |
| Underweight prevalence  | 2.1a | 0.0695                                  | 0.0143                 | 0.206                           | 0.948                      | 0.974                                     | 251       | 300              | 0.041    | 0.098             |
| Stunting prevalence   | 2.2a | 0.1967                                  | 0.0320                 | 0.163                           | 1.915                      | 1.384                                     | 249       | 297              | 0.133    | 0.261             |
| Wasting prevalence  | 2.3a | 0.0306                                  | 0.0100                 | 0.326                           | 0.989                      | 0.994                                     | 248       | 296              | 0.011    | 0.050             |
| Exclusive breastfeeding under 6 months  | 2.6  | *                                       | *                      | *                               | *                          | *   | 18        | 21               | *        | *                 |
| Age-appropriate breastfeeding   | 2.14 | 0.5803                                  | 0.0406                 | 0.070                           | 0.881                      | 0.938                                     | 110       | 131              | 0.499    | 0.662             |
| Tuberculosis immunization coverage  |      | 0.9834                                  | 0.0165                 | 0.017                           | 1.084                      | 1.041                                     | 22        | 99               | 0.950    | 1.000             |
| Polio or DTaP-P immunization  | í    | 0.8207                                  | 0.0305                 | 0.037                           | 0.393                      | 0.627                                     | 53        | 63               | 0.760    | 0.882             |
| DPT (Pentavalent)   |      | 0.7132                                  | 0.0595                 | 0.083                           | 1.141                      | 1.068                                     | 26        | 29               | 0.594    | 0.832             |
| Received measles immunization   | i    | 0.9362                                  | 0.0379                 | 0.041                           | 1.566                      | 1.251                                     | 22        | 99               | 0.860    | 1.000             |
| Received Hepatitis B or Pentavalent immunization  | í    | 0.7622                                  | 0.0424                 | 0.056                           | 0.625                      | 0.791                                     | 54        | 64               | 0.677    | 0.847             |
| Received HiB or Pentavalent immunization  |      | 0.7733                                  | 0.0378                 | 0.049                           | 0.506                      | 0.711                                     | 23        | 63               | 0.698    | 0.849             |
| Diarrhoea in last two weeks   | ı    | 0.0923                                  | 0.0129                 | 0.140                           | 0.623                      | 0.789                                     | 263       | 314              | 990.0    | 0.118             |
| Illness with cough in the previous 2 weeks  |      | 0.0219                                  | 0.0111                 | 0.508                           | 1.808                      | 1.344                                     | 263       | 314              | 0.000    | 0.044             |
| Oral rehydration therapy with continued feeding   | 3.8  | *                                       | *                      | *                               | *                          | *   | 24        | 30               | *        | *                 |
| Antibiotic treatment of suspected pneumonia   | 3.10 | *                                       | *                      | *                               | *                          | *   | 9         | 7                | *        | *                 |
| Support for learning  | 6.1  | 0.8395                                  | 0.0560                 | 0.067                           | 2.791                      | 1.671                                     | 101       | 121              | 0.728    | 0.951             |
| Attendance to early childhood education   | 6.7  | 0.1906                                  | 0.0392                 | 0.205                           | 1.193                      | 1.092                                     | 101       | 121              | 0.112    | 0.269             |
| Birth registration  | <br> | 0.9333                                  | 0.0108                 | 0.012                           | 0.582                      | 0.763                                     | 263       | 314              | 0.912    | 0.955             |

<sup>(\*):</sup> the number of unweighted observations is less than 50

|   | MICS       | Value (r)         | Standard<br>error (se) | Coefficient<br>of variation<br>(se/r) | Design<br>effect<br>(deff) | Square root<br>of design<br>effect (deft) | Weighted       | Unweighted count |       | Confidence limits r - 2se |
|---|------------|-------------------|------------------------|---------------------------------------|----------------------------|---|----------------|------------------|-------|---------------------------|
|   | HOUS       | HOUSEHOLD MEMBERS | MBERS                  |                                       |                            |   |                |                  |       |                           |
| Use of improved drinking water sources  | 4.1        | 0.9756            | 0.0088                 | 0.009                                 | 2.174                      | 1.475                                     | 2584           | 662              | 0.958 | 0.993                     |
| Use of improved sanitation  | 4.3        | 0.9443            | 0.0098                 | 0.010                                 | 1.189                      | 1.090                                     | 2559           | 651              | 0.925 | 0.964                     |
| Secondary school net attendance ratio (adjusted)  | 7.5        | 0.4461            | 0.0423                 | 0.095                                 | 1.706                      | 1.306                                     | 216            | 236              | 0.361 | 0.531                     |
| Child labour  | 8.2        | 0.0740            | 0.0073                 | 0.099                                 | 0.497                      | 0.705                                     | 581            | 639              | 0.059 | 0.089                     |
| Prevalence of children with one or both parents dead  | 9.18       | 0.0309            | 0.0062                 | 0.200                                 | 1.451                      | 1.205                                     | 1039           | 1145             | 0.019 | 0.043                     |
| Violent discipline  | 8.5        | 0.5969            | 0.0220                 | 0.037                                 | 0.776                      | 0.881                                     | 755            | 386              | 0.553 | 0.641                     |
|   |            | WOMEN             |                        |                                       |                            |   |                |                  |       |                           |
| Pregnant women  | 1          | 0.0597            | 0.0106                 | 0.178                                 | 1.377                      | 1.173                                     | 618            | 688              | 0.039 | 0.081                     |
| Early childbearing  | 5.2        | 0.1744            | 0.0323                 | 0.185                                 | 0.971                      | 0.985                                     | 121            | 135              | 0.110 | 0.239                     |
| Contraceptive prevalence  | 5.3        | 0.5894            | 0.0323                 | 0.055                                 | 1.805                      | 1.344                                     | 373            | 419              | 0.525 | 0.654                     |
| Unmet need  | 5.4        | 0.1295            | 0.0146                 | 0.113                                 | 0.788                      | 0.887                                     | 373            | 419              | 0.100 | 0.159                     |
| Antenatal care coverage - at least once by skilled personnel                                | 5.5a       | 1.0000            | 0.0000                 | 0.000                                 |                            |   | 108            | 122              | 1.000 | 1.000                     |
| Antenatal care coverage - at least four times by any provider                               | 5.5b       | 0.8478            | 0.0145                 | 0.017                                 | 0.196                      | 0.443                                     | 108            | 122              | 0.819 | 0.877                     |
| Skilled attendant at delivery   | 2.7        | 0.9928            | 0.0072                 | 0.007                                 | 0.885                      | 0.941                                     | 108            | 122              | 0.978 | 1.000                     |
| Institutional deliveries  | 5.8        | 0.9158            | 0.0149                 | 0.016                                 | 0.348                      | 0.590                                     | 108            | 122              | 0.886 | 0.946                     |
| Caesarean section   | 6.3        | 0.1732            | 0.0361                 | 0.209                                 | 1.102                      | 1.050                                     | 108            | 122              | 0.101 | 0.245                     |
| Literacy rate among young women   | 7.1        | 0.8136            | 0.0329                 | 0.040                                 | 2.046                      | 1.430                                     | 258            | 287              | 0.748 | 0.879                     |
| Marriage before age 18  | 8.7        | 0.3102            | 0.0336                 | 0.108                                 | 2.816                      | 1.678                                     | 481            | 536              | 0.243 | 0.377                     |
| Polygyny  | 8.9        | 0.0069            | 0.0039                 | 0.574                                 | 0.953                      | 0.976                                     | 373            | 419              | 0.000 | 0.015                     |
| Comprehensive knowledge about HIV prevention among young people                             | 9.5        | 0.3389            | 0.0349                 | 0.103                                 | 1.552                      | 1.246                                     | 258            | 287              | 0.269 | 0.409                     |
| Knowledge of mother-to-child transmission of HIV  | 9.3        | 0.5963            | 0.0209                 | 0.035                                 | 1.247                      | 1.117                                     | 618            | 889              | 0.555 | 0.638                     |
| Accepting attitudes towards people living with HIV  | 9.4        | 0.1369            | 0.0117                 | 0.086                                 | 0.748                      | 0.865                                     | 280            | 643              | 0.113 | 0.160                     |
| Women who have been tested for HIV during last 12 months and who have been told the results | 9.6<br>p   | 0.2603            | 0.0165                 | 0.063                                 | 0.970                      | 0.985                                     | 618            | 889              | 0.227 | 0.293                     |
| Sexually active young women who have been tested for HIV and know the results               | 9.7        | 0.2908            | 0.0386                 | 0.133                                 | 1.076                      | 1.037                                     | 134            | 150              | 0.214 | 0.368                     |
| Sex before age 15 among young women   | 9.11       | 0.0514            | 0.0133                 | 0.259                                 | 1.042                      | 1.021                                     | 258            | 287              | 0.025 | 0.078                     |
| Condom use with non-regular partners  | 9.16       | *                 | *                      | *                                     | *                          | *   | 35             | 39               | *     | *                         |
|   |            | UNDER-58          |                        |                                       |                            |   |                |                  |       |                           |
| Underweight prevalence  | 2.1a       | 0.0468            | 0.0094                 | 0.201                                 | 0.587                      | 0.766                                     | 280            | 296              | 0.028 | 990.0                     |
| Stunting prevalence   | 2.2a       | 0.1725            | 0.0245                 | 0.142                                 | 1.233                      | 1.111                                     | 278            | 294              | 0.123 | 0.221                     |
| Wasting prevalence  | 2.3a       | 0.0237            | 0.0085                 | 0.358                                 | 0.919                      | 0.959                                     | 280            | 296              | 0.007 | 0.041                     |
| An appropriet brookfooding  | 2.0        | V 2 / 7 /         | 1000                   | П                                     | 1 607                      | 1 260                                     | 7.07           | 120              |       | 7 11 0                    |
| Age-applicate bloastreeding Tuberculosis immunization coverage                              | <u>†</u> ' | 1,0000            | 00000                  | 0000                                  | 00:                        | 0007-                                     | 67             | 20 2             | 1000  | 1,000                     |
| Polio or DTaP-P immunization  | ,          | 0.7436            | 0.0516                 | 0.069                                 | 0.962                      | 0.981                                     | 67             | 70               | 0.641 | 0.847                     |
| DPT (Pentavalent)   | 1          | 0.7590            | 0.0528                 | 0.070                                 | 1.020                      | 1.010                                     | 65             | 89               | 0.653 | 0.865                     |
| Received measles immunization   | 1          | 0.9575            | 0.0232                 | 0.024                                 | 0.897                      | 0.947                                     | 99             | 69               | 0.911 | 1.000                     |
| Received Hepatitis B or Pentavalent immunization  | •          | 0.7388            | 0.0563                 | 0.076                                 | 1.132                      | 1.064                                     | 29             | 70               | 0.626 | 0.851                     |
| Received HiB or Pentavalent immunization  | ı          | 0.7388            | 0.0563                 | 0.076                                 | 1.132                      | 1.064                                     | 29             | 70               | 0.626 | 0.851                     |
| Diarrhoea in last two weeks   | i e        | 0.0341            | 0.0087                 | 0.254                                 | 0.725                      | 0.852                                     | 302            | 320              | 0.017 | 0.051                     |
| Illness with cough in the previous 2 weeks  | 1          | 0.0089            | 0.0068                 | 0.760                                 | 1.656                      | 1.287                                     | 302            | 320              | 0.000 | 0.022                     |
| Oral rehydration therapy with continued feeding   | 3.8        | * :               | * :                    | * :                                   | * :                        | * :                                       | 10             | 1                | * :   | * :                       |
| Antibiotic treatment of suspected pneumonia   | 3.10       | * 0               | * 0                    | * 0                                   | * 0                        | * r                                       | w <del>{</del> | w (              | * 1   | * 0                       |
| Support for learning  | 0.1        | 0.8309            | 0.0262                 | 0.032                                 | 0.612                      | 0.782                                     | ×              | 971              | 0.778 | 0.883                     |
| Attendance to early childhood education   |            |                   |                        |                                       |                            |   |                | 000              | 1     |                           |

Confidence Standard errors, coefficients of variation, design effects (#I), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011 Table SE.7: Sampling errors: Belize (Excluding Belize City South Side)

|   | SOIM      | Value             | Standard   | Coefficient         | Design           | Square root                         | Weighted | Unweighted | Confi   | Confidence |
|---|-----------|-------------------|------------|---------------------|------------------|-------------------------------------|----------|------------|---------|------------|
|   | Indicator | 3                 | error (se) | of variation (se/r) | effect<br>(deff) | of design<br>effect ( <i>deft</i> ) | count    | count      | r - 2se | r + 2se    |
|   | HOUSE     | HOUSEHOLD MEMBERS | MBERS      |                     |                  |                                     |          |            |         |            |
| Use of improved drinking water sources  | 4.1       | 0.9974            | 0.0013     | 0.001               | 0.407            | 0.638                               | 2799     | 581        | 0.995   | 1.000      |
| Use of improved sanitation  | 4.3       | 0.9386            | 0.0116     | 0.012               | 1.340            | 1.158                               | 2783     | 573        | 0.915   | 0.962      |
| Secondary school net attendance ratio (adjusted)                                | 7.5       | 0.6962            | 0.0369     | 0.053               | 0.974            | 0.987                               | 223      | 152        | 0.622   | 0.770      |
| Child labour  | 8.2       | 0.0487            | 0.0091     | 0.187               | 0.699            | 0.836                               | 570      | 390        | 0.030   | 0.067      |
| Prevalence of children with one or both parents dead                            | 9.18      | 0.0404            | 0.0154     | 0.381               | 3.994            | 1.998                               | 926      | 655        | 0.010   | 0.071      |
| Violent discipline  | 8.5       | 0.7572            | 0.0123     | 0.016               | 0.211            | 0.459                               | 723      | 257        | 0.733   | 0.782      |
|   |           | WOMEN             |            |                     |                  |                                     |          |            |         |            |
| Pregnant women  | 1         | 0.0627            | 0.0140     | 0.224               | 1.500            | 1.225                               | 687      | 448        | 0.035   | 0.091      |
| Early childbearing  | 5.2       | 0.1301            | 0.0315     | 0.242               | 0.650            | 0.806                               | 116      | 75         | 0.067   | 0.193      |
| Contraceptive prevalence  | 5.3       | 0.5717            | 0.0346     | 0.061               | 1.181            | 1.087                               | 369      | 242        | 0.502   | 0.641      |
| Unmet need  | 5.4       | 0.1594            | 0.0240     | 0.150               | 1.033            | 1.016                               | 369      | 242        | 0.111   | 0.207      |
| Antenatal care coverage - at least once by skilled personnel                    | 5.5a      | *                 | *          | *                   | *                | *                                   | 74       | 48         | *       | *          |
| Antenatal care coverage - at least four times by any provider                   | 5.5b      | *                 | *          | *                   | *                | *                                   | 74       | 48         | *       | *          |
| Skilled attendant at delivery   | 5.7       | *                 | *          | *                   | *                | *                                   | 74       | 48         | *       | *          |
| Institutional deliveries  | 5.8       | *                 | *          | *                   | *                | *                                   | 74       | 48         | *       | *          |
| Caesarean section   | 5.9       | *                 | *          | *                   | *                | *                                   | 74       | 48         | *       | *          |
| Literacy rate among young women   | 7.1       | 0.9821            | 0.0099     | 0.010               | 0.931            | 0.965                               | 255      | 167        | 0.962   | 1.000      |
| Marriage before age 18  | 8.7       | 0.2654            | 0.0307     | 0.116               | 1.719            | 1.311                               | 548      | 356        | 0.204   | 0.327      |
| Polygyny  | 8.9       | 0.0196            | 0.0069     | 0.354               | 0.603            | 0.776                               | 369      | 242        | 900.0   | 0.033      |
| Comprehensive knowledge about HIV prevention among young people                 | 9.2       | 9969.0            | 0.0353     | 0.051               | 0.976            | 0.988                               | 255      | 167        | 0.626   | 0.767      |
| Knowledge of mother-to-child transmission of HIV                                | 9.3       | 0.5822            | 0.0258     | 0.044               | 1.221            | 1.105                               | 289      | 448        | 0.531   | 0.634      |
| Accepting attitudes towards people living with HIV                              | 9.4       | 0.2180            | 0.0200     | 0.092               | 1.034            | 1.017                               | 929      | 441        | 0.178   | 0.258      |
| Women who have been tested for HIV during last 12 months and who have been told | 9.6       | 0.3078            | 0.0284     | 0.092               | 1.695            | 1.302                               | 687      | 448        | 0.251   | 0.365      |
| the results   |           |                   |            |                     |                  |                                     |          | 2          |         |            |
| Sexually active young women who have been tested for HIV and know the results   | 9.7       | 0.3201            | 0.0580     | 0.181               | 1.453            | 1.205                               | 146      | 95         | 0.204   | 0.436      |
| Sex before age 15 among young women   | 9.11      | 0.0595            | 0.0153     | 0.256               | 0.690            | 0.831                               | 255      | 167        | 0.029   | 0.090      |
| Condom use with non-regular partners  | 9.16      | 0.7203            | 0.0520     | 0.072               | 0.697            | 0.835                               | 82       | 53         | 0.616   | 0.824      |
|   | _         | UNDER-58          |            |                     |                  |                                     |          |            |         |            |
| Underweight prevalence  | 2.1a      | 0.0498            | 0.0183     | 0.367               | 0.880            | 0.938                               | 198      | 126        | 0.013   | 0.086      |
| Stunting prevalence   | 2.2a      | 0.1392            | 0.0307     | 0.221               | 0.923            | 0.961                               | 186      | 118        | 0.078   | 0.201      |
| Wasting prevalence  | 2.3a      | 0.0425            | 0.0138     | 0.324               | 0.544            | 0.738                               | 186      | 118        | 0.015   | 0.000      |
| Exclusive breastfeeding under 6 months  | 5.6       | *                 | *          | *                   | *                | *                                   | 17       | 11         | *       | *          |
| Age-appropriate breastfeeding   | 2.14      | 0.3807            | 0.0609     | 0.160               | 0.801            | 0.895                               | 83       | 52         | 0.259   | 0.502      |
| Tuberculosis immunization coverage  | ı         | *                 | *          | *                   | *                | *                                   | 36       | 23         | *       | *          |
| Polio or DTaP-P immunization  | í         | *                 | *          | *                   | *                | *                                   | 36       | 23         | *       | *          |
| DPT (Pentavalent)   | ı         | *                 | *          | *                   | *                | *                                   | 36       | 23         | *       | *          |
| Received measles immunization   | 1         | *                 | *          | *                   | *                | *                                   | 36       | 23         | *       | *          |
| Received Hepatitis B or Pentavalent immunization                                | 1         | *                 | *          | *                   | *                | *                                   | 36       | 23         | *       | *          |
| Received HiB or Pentavalent immunization  | ı         | *                 | *          | *                   | *                | *                                   | 36       | 23         | *       | *          |
| Diarrhoea in last two weeks   | 1         | 0.0537            | 0.0213     | 0.396               | 1.353            | 1.163                               | 240      | 153        | 0.011   | 960.0      |
| Illness with cough in the previous 2 weeks                                      | 1         | 0.0065            | 0.0068     | 1.056               | 1.103            | 1.050                               | 240      | 153        | 0.000   | 0.020      |
| Oral rehydration therapy with continued feeding                                 | 3.8       | *                 | *          | *                   | *                | *                                   | 13       | <b>∞</b>   | *       | *          |
| Antibiotic treatment of suspected pneumonia                                     | 3.10      | *                 | *          | *                   | *                | *                                   | 2        | Н          | *       | *          |
| Support for learning  | 6.1       | 0.8058            | 0.0448     | 0.056               | 0.935            | 0.967                               | 115      | 74         | 0.716   | 0.895      |
| Attendance to early childhood education   | 6.7       | 0.5620            | 0.0688     | 0.122               | 1.405            | 1.185                               | 115      | 74         | 0.424   | 0.700      |
| Birth registration  | 8.1       | 0.9624            | 0.0168     | 0.017               | 1.181            | 1.087                               | 240      | 153        | 0.929   | 0.996      |

Table SE.8: Sampling errors: Belize City, South Side Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011

|   |                   | indicate     | rs, Belize,            | 2011                                     |                            |   |                |                  |       |                             |
|---|-------------------|--------------|------------------------|--|----------------------------|---|----------------|------------------|-------|-----------------------------|
|   | MICS<br>Indicator | Value<br>(r) | Standard<br>error (se) | Coefficient<br>of<br>variation<br>(se/r) | Design<br>effect<br>(deff) | Square<br>root of<br>design<br>effect<br>(deft) | Weighted count | Unweighted count |       | dence<br>nits<br>r +<br>2se |
|   |                   | LIGUET       | IOLD MENAS             | L  |                            |   |                |                  |       | <u> </u>                    |
| Use of improved drinking water sources  | 4.1               | 0.9981       | O.0020                 | 0.002                                    | 1.255                      | 1.120   | 2177           | 638              | 0.994 | 1.000                       |
| Use of improved sanitation  | 4.1               | 0.9283       | 0.0020                 | 0.002                                    | 0.929                      | 0.964   | 2071           | 604              | 0.908 | 0.949                       |
| Secondary school net attendance ratio (adjusted)  | 7.5               | 0.7474       | 0.0101                 | 0.011                                    | 0.596                      | 0.304   | 175            | 182              | 0.698 | 0.343                       |
| Child labour  | 8.2               | 0.7474       | 0.0243                 | 0.033                                    | 2.257                      | 1.502   | 488            | 506              | 0.038 | 0.757                       |
| Prevalence of children with one or both parents dead  | 9.18              | 0.0460       | 0.0085                 | 0.327                                    | 1.481                      | 1.217   | 866            | 900              | 0.014 | 0.063                       |
| Violent discipline  | 8.5               | 0.7600       | 0.0261                 | 0.034                                    | 1.287                      | 1.134   | 646            | 345              | 0.708 | 0.812                       |
| Violent diodiplino  | 0.0               |              |                        | 0.004                                    | 1.207                      | 1.104   | 040            | 040              | 0.700 | 0.012                       |
| Pregnant women  | _                 | 0.0438       | 0.0086                 | 0.196                                    | 1.074                      | 1.037   | 573            | 612              | 0.027 | 0.061                       |
| Early childbearing  | 5.2               | 0.1582       | 0.0000                 | 0.136                                    | 1.015                      | 1.007   | 110            | 117              | 0.027 | 0.226                       |
| Contraceptive prevalence  | 5.3               | 0.5518       | 0.0250                 | 0.045                                    | 0.689                      | 0.830   | 257            | 274              | 0.502 | 0.602                       |
| Unmet need  | 5.4               | 0.1800       | 0.0250                 | 0.140                                    | 1.173                      | 1.083   | 257            | 274              | 0.130 | 0.230                       |
| Antenatal care coverage - at least once by skilled  |                   |              |                        |  |                            |   |                |                  |       |                             |
| personnel   | 5.5a              | 0.9641       | 0.0202                 | 0.021                                    | 0.951                      | 0.975   | 77             | 82               | 0.924 | 1.000                       |
| Antenatal care coverage - at least four times by any provider                               | 5.5b              | 0.8225       | 0.0406                 | 0.049                                    | 0.913                      | 0.956   | 77             | 82               | 0.741 | 0.904                       |
| Skilled attendant at delivery   | 5.7               | 0.9749       | 0.0179                 | 0.018                                    | 1.060                      | 1.029   | 77             | 82               | 0.939 | 1.000                       |
| Institutional deliveries  | 5.8               | 0.9749       | 0.0179                 | 0.018                                    | 1.060                      | 1.029   | 77             | 82               | 0.939 | 1.000                       |
| Caesarean section   | 5.9               | 0.3537       | 0.0675                 | 0.191                                    | 1.615                      | 1.271   | 77             | 82               | 0.219 | 0.489                       |
| Literacy rate among young women   | 7.1               | 0.9778       | 0.0049                 | 0.005                                    | 0.248                      | 0.498   | 216            | 230              | 0.968 | 0.987                       |
| Marriage before age 18  | 8.7               | 0.2157       | 0.0210                 | 0.097                                    | 1.299                      | 1.140   | 467            | 499              | 0.174 | 0.258                       |
| Polygyny  | 8.9               | 0.0365       | 0.0109                 | 0.297                                    | 0.916                      | 0.957   | 257            | 274              | 0.015 | 0.058                       |
| Comprehensive knowledge about HIV prevention among young people                             | 9.2               | 0.6292       | 0.0291                 | 0.046                                    | 0.834                      | 0.913   | 216            | 230              | 0.571 | 0.688                       |
| Knowledge of mother-to-child transmission of HIV  | 9.3               | 0.5819       | 0.0236                 | 0.041                                    | 1.404                      | 1.185   | 573            | 612              | 0.535 | 0.629                       |
| Accepting attitudes towards people living with HIV  | 9.4               | 0.2047       | 0.0112                 | 0.055                                    | 0.470                      | 0.686   | 571            | 610              | 0.182 | 0.227                       |
| Women who have been tested for HIV during last 12 months and who have been told the results | 9.6               | 0.4128       | 0.0213                 | 0.052                                    | 1.149                      | 1.072   | 573            | 612              | 0.370 | 0.455                       |
| Sexually active young women who have been tested for HIV and know the results               | 9.7               | 0.4165       | 0.0416                 | 0.100                                    | 0.984                      | 0.992   | 131            | 139              | 0.333 | 0.500                       |
| Sex before age 15 among young women   | 9.11              | 0.0605       | 0.0136                 | 0.225                                    | 0.744                      | 0.863   | 216            | 230              | 0.033 | 0.088                       |
| Condom use with non-regular partners  | 9.16              | 0.7034       | 0.0427                 | 0.061                                    | 0.831                      | 0.912   | 91             | 96               | 0.618 | 0.789                       |
|   |                   | L            | JNDER-5s               |  |                            |   |                |                  |       |                             |
| Underweight prevalence  | 2.1a              | 0.0560       | 0.0114                 | 0.204                                    | 0.579                      | 0.761   | 235            | 235              | 0.033 | 0.079                       |
| Stunting prevalence   | 2.2a              | 0.0815       | 0.0181                 | 0.222                                    | 1.022                      | 1.011   | 235            | 235              | 0.045 | 0.118                       |
| Wasting prevalence  | 2.3a              | 0.0336       | 0.0111                 | 0.331                                    | 0.886                      | 0.941   | 234            | 234              | 0.011 | 0.056                       |
| Exclusive breastfeeding under 6 months  | 2.6               | *            | *                      | *  | *                          | *   | 20             | 20               | *     | *                           |
| Age-appropriate breastfeeding   | 2.14              | 0.3234       | 0.0429                 | 0.133                                    | 0.749                      | 0.866   | 91             | 90               | 0.238 | 0.409                       |
| Tuberculosis immunization coverage  | -                 | 0.9800       | 0.0205                 | 0.021                                    | 1.095                      | 1.046   | 52             | 52               | 0.939 | 1.000                       |
| Polio or DTaP-P immunization  | -                 | *            | *                      | *  | *                          | *   | 49             | 49               | *     | *                           |
| DPT (Pentavalent)   | -                 | 0.7299       | 0.0569                 | 0.078                                    | 0.821                      | 0.906   | 51             | 51               | 0.616 | 0.844                       |
| Received measles immunization   | -                 | 0.9013       | 0.0330                 | 0.037                                    | 0.611                      | 0.782   | 51             | 51               | 0.835 | 0.967                       |
| Received Hepatitis B or Pentavalent immunization  | -                 | *            | *                      | *  | *                          | *   | 48             | 48               | *     | *                           |
| Received HiB or Pentavalent immunization  | -                 | *            | *                      | *  | *                          | *   | 49             | 49               | *     | *                           |
| Diarrhoea in last two weeks   | -                 | 0.0409       | 0.0138                 | 0.338                                    | 1.219                      | 1.104   | 252            | 252              | 0.013 | 0.068                       |
| Illness with cough in the previous 2 weeks  | -                 | 0.0411       | 0.0147                 | 0.356                                    | 1.368                      | 1.169   | 252            | 252              | 0.012 | 0.070                       |
| Oral rehydration therapy with continued feeding   | 3.8               | *            | *                      | *  | *                          | *   | 10             | 10               | *     | *                           |
| Antibiotic treatment of suspected pneumonia   | 3.10              | *            | *                      | *  | *                          | *   | 10             | 10               | *     | *                           |
| Support for learning  | 6.1               | 0.8816       | 0.0418                 | 0.047                                    | 1.810                      | 1.345   | 109            | 109              | 0.798 | 0.965                       |
| Attendance to early childhood education   | 6.7               | 0.4953       | 0.0683                 | 0.138                                    | 2.013                      | 1.419   | 109            | 109              | 0.359 | 0.632                       |
| Birth registration  | 8.1               | 0.9456       | 0.0139                 | 0.015                                    | 0.937                      | 0.968   | 252            | 252              | 0.918 | 0.973                       |

<sup>(\*):</sup> the number of unweighted observations is less than 50

Table SE.9: Sampling errors: Belize District
Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011

|   | lected            | i indicato   | ors, Belize,           |  |                            | Square                                |                        |                          | Confi | dence      |
|---|-------------------|--------------|------------------------|--|----------------------------|---------------------------------------|------------------------|--------------------------|-------|------------|
|   | MICS<br>Indicator | Value<br>(r) | Standard<br>error (se) | Coeffi-<br>cient of<br>variation<br>(se/r) | Design<br>effect<br>(deff) | root of<br>design<br>effect<br>(deft) | Weight-<br>ed<br>count | Un-<br>weighted<br>count | 1     | r +<br>2se |
|   | Н                 | DUSEHOL      | D MEMBER               | RS   |                            |                                       |                        |                          |       |            |
| Use of improved drinking water sources  | 4.1               | 0.9977       | 0.0011                 | 0.001                                      | 0.693                      | 0.833                                 | 4976                   | 1219                     | 0.995 | 1.000      |
| Use of improved sanitation  | 4.3               | 0.9342       | 0.0079                 | 0.008                                      | 1.200                      | 1.095                                 | 4854                   | 1177                     | 0.918 | 0.950      |
| Secondary school net attendance ratio (adjusted)  | 7.5               | 0.7188       | 0.0235                 | 0.033                                      | 0.911                      | 0.954                                 | 398                    | 334                      | 0.672 | 0.766      |
| Child labour  | 8.2               | 0.0448       | 0.0078                 | 0.173                                      | 1.258                      | 1.122                                 | 1058                   | 896                      | 0.029 | 0.060      |
| Prevalence of children with one or both parents dead  | 9.18              | 0.0431       | 0.0090                 | 0.210                                      | 3.084                      | 1.756                                 | 1822                   | 1555                     | 0.025 | 0.061      |
| Violent discipline  | 8.5               | 0.7585       | 0.0139                 | 0.018                                      | 0.637                      | 0.798                                 | 1369                   | 602                      | 0.731 | 0.786      |
|   |                   | WO           | MEN                    |  |                            |                                       |                        |                          |       |            |
| Pregnant women  | -                 | 0.0541       | 0.0086                 | 0.160                                      | 1.546                      | 1.243                                 | 1260                   | 1060                     | 0.037 | 0.071      |
| Early childbearing  | 5.2               | 0.1438       | 0.0232                 | 0.162                                      | 0.837                      | 0.915                                 | 226                    | 192                      | 0.097 | 0.190      |
| Contraceptive prevalence  | 5.3               | 0.5635       | 0.0228                 | 0.041                                      | 1.092                      | 1.045                                 | 625                    | 516                      | 0.518 | 0.609      |
| Unmet need  | 5.4               | 0.1678       | 0.0174                 | 0.104                                      | 1.116                      | 1.056                                 | 625                    | 516                      | 0.133 | 0.203      |
| Antenatal care coverage - at least once by skilled personnel                                | 5.5a              | 0.9173       | 0.0165                 | 0.018                                      | 0.464                      | 0.681                                 | 151                    | 130                      | 0.884 | 0.950      |
| Antenatal care coverage - at least four times by any provider                               | 5.5b              | 0.8170       | 0.0283                 | 0.035                                      | 0.692                      | 0.832                                 | 151                    | 130                      | 0.760 | 0.874      |
| Skilled attendant at delivery   | 5.7               | 0.9769       | 0.0138                 | 0.014                                      | 1.085                      | 1.042                                 | 151                    | 130                      | 0.949 | 1.000      |
| Institutional deliveries  | 5.8               | 0.9651       | 0.0187                 | 0.019                                      | 1.336                      | 1.156                                 | 151                    | 130                      | 0.928 | 1.000      |
| Caesarean section   | 5.9               | 0.3130       | 0.0427                 | 0.136                                      | 1.092                      | 1.045                                 | 151                    | 130                      | 0.228 | 0.398      |
| Literacy rate among young women   | 7.1               | 0.9801       | 0.0058                 | 0.006                                      | 0.682                      | 0.826                                 | 471                    | 397                      | 0.969 | 0.992      |
| Marriage before age 18  | 8.7               | 0.2425       | 0.0191                 | 0.079                                      | 1.695                      | 1.302                                 | 1014                   | 855                      | 0.204 | 0.281      |
| Polygyny  | 8.9               | 0.0265       | 0.0061                 | 0.230                                      | 0.742                      | 0.861                                 | 625                    | 516                      | 0.014 | 0.039      |
| Comprehensive knowledge about HIV prevention among young people                             | 9.2               | 0.6657       | 0.0232                 | 0.035                                      | 0.955                      | 0.977                                 | 471                    | 397                      | 0.619 | 0.712      |
| Knowledge of mother-to-child transmission of HIV  | 9.3               | 0.5821       | 0.0177                 | 0.030                                      | 1.363                      | 1.168                                 | 1260                   | 1060                     | 0.547 | 0.617      |
| Accepting attitudes towards people living with HIV  | 9.4               | 0.2119       | 0.0121                 | 0.057                                      | 0.914                      | 0.956                                 | 1247                   | 1051                     | 0.188 | 0.236      |
| Women who have been tested for HIV during last 12 months and who have been told the results | 9.6               | 0.3555       | 0.0185                 | 0.052                                      | 1.583                      | 1.258                                 | 1260                   | 1060                     | 0.319 | 0.393      |
| Sexually active young women who have been tested for HIV and know the results               | 9.7               | 0.3658       | 0.0362                 | 0.099                                      | 1.317                      | 1.148                                 | 278                    | 234                      | 0.293 | 0.438      |
| Sex before age 15 among young women   | 9.11              | 0.0600       | 0.0104                 | 0.173                                      | 0.753                      | 0.868                                 | 471                    | 397                      | 0.039 | 0.081      |
| Condom use with non-regular partners  | 9.16              | 0.7114       | 0.0336                 | 0.047                                      | 0.813                      | 0.902                                 | 173                    | 149                      | 0.644 | 0.779      |
|   |                   | UND          | ER-5s                  |  |                            |                                       |                        |                          |       |            |
| Underweight prevalence  | 2.1a              | 0.0532       | 0.0104                 | 0.195                                      | 0.770                      | 0.878                                 | 434                    | 361                      | 0.032 | 0.074      |
| Stunting prevalence   | 2.2a              | 0.1069       | 0.0165                 | 0.155                                      | 1.009                      | 1.004                                 | 421                    | 353                      | 0.074 | 0.140      |
| Wasting prevalence  | 2.3a              | 0.0375       | 0.0087                 | 0.231                                      | 0.730                      | 0.855                                 | 420                    | 352                      | 0.020 | 0.055      |
| Exclusive breastfeeding under 6 months  | 2.6               | 0.0797       | 0.0037                 | 0.046                                      | 0.006                      | 0.075                                 | 37                     | 31                       | 0.072 | 0.087      |
| Age-appropriate breastfeeding   | 2.14              | 0.3507       | 0.0361                 | 0.103                                      | 0.809                      | 0.899                                 | 174                    | 142                      | 0.278 | 0.423      |
| Tuberculosis immunization coverage  | -                 | 0.9882       | 0.0120                 | 0.012                                      | 0.911                      | 0.954                                 | 88                     | 75                       | 0.964 | 1.000      |
| Polio or DTaP-P immunization  | -                 | 0.6474       | 0.0497                 | 0.077                                      | 0.768                      | 0.877                                 | 85                     | 72                       | 0.548 | 0.747      |
| DPT (Pentavalent)   | -                 | 0.6794       | 0.0414                 | 0.061                                      | 0.575                      | 0.758                                 | 87                     | 74                       | 0.597 | 0.762      |
| Received measles immunization   | -                 | 0.9238       | 0.0259                 | 0.028                                      | 0.693                      | 0.832                                 | 87                     | 74                       | 0.872 | 0.975      |
| Received Hepatitis B or Pentavalent immunization  | -                 | 0.6909       | 0.0416                 | 0.060                                      | 0.568                      | 0.754                                 | 84                     | 71                       | 0.608 | 0.774      |
| Received HiB or Pentavalent immunization  | -                 | 0.6828       | 0.0429                 | 0.063                                      | 0.604                      | 0.777                                 | 85                     | 72                       | 0.597 | 0.769      |
| Diarrhoea in last two weeks   | -                 | 0.0471       | 0.0125                 | 0.265                                      | 1.399                      | 1.183                                 | 492                    | 405                      | 0.022 | 0.072      |
| Illness with cough in the previous 2 weeks  | -                 | 0.0242       | 0.0081                 | 0.334                                      | 1.119                      | 1.058                                 | 492                    | 405                      | 0.008 | 0.040      |
| Oral rehydration therapy with continued feeding   | 3.8               | *            | *                      | *  | *                          | *                                     | 23                     | 18                       | *     | *          |
| Antibiotic treatment of suspected pneumonia   | 3.10              | *            | *                      | *  | *                          | *                                     | 12                     | 11                       | *     | *          |
| Support for learning  | 6.1               | 0.8428       | 0.0293                 | 0.035                                      | 1.179                      | 1.086                                 | 224                    | 183                      | 0.784 | 0.901      |
| Attendance to early childhood education   | 6.7               | 0.5295       | 0.0483                 | 0.091                                      | 1.704                      | 1.305                                 | 224                    | 183                      | 0.433 | 0.626      |
| Birth registration  | 8.1               | 0.9537       | 0.0108                 | 0.011                                      | 1.077                      | 1.038                                 | 492                    | 405                      | 0.932 | 0.975      |

<sup>(\*):</sup> the number of unweighted observations is less than 50

# Table SE.10: Sampling errors: Cayo Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011

|   | MICS<br>Indica- | Value  | Stan-<br>dard | Coeffi-             | Design<br>effect | Square<br>root of<br>design | Weight-<br>ed | Un-<br>weighted | lin        | idence<br>nits |
|---|-----------------|--------|---------------|---------------------|------------------|-----------------------------|---------------|-----------------|------------|----------------|
|   | tor             | (r)    | error<br>(se) | variation<br>(se/r) | (deff)           | effect<br>(deft)            | count         | count           | r -<br>2se | r +<br>2se     |
|   | HOU             | SEHOLD | MEMBE         | RS                  |                  |                             |               |                 |            |                |
| Use of improved drinking water sources  | 4.1             | 0.9556 | 0.0243        | 0.025               | 8.723            | 2.954                       | 3865          | 626             | 0.907      | 1.00           |
| Use of improved sanitation  | 4.3             | 0.9114 | 0.0080        | 0.009               | 0.491            | 0.701                       | 3829          | 620             | 0.895      | 0.92           |
| Secondary school net attendance ratio (adjusted)  | 7.5             | 0.5434 | 0.0347        | 0.064               | 1.284            | 1.133                       | 382           | 266             | 0.474      | 0.61           |
| Child labour  | 8.2             | 0.0937 | 0.0163        | 0.174               | 2.033            | 1.426                       | 952           | 650             | 0.061      | 0.12           |
| Prevalence of children with one or both parents dead  | 9.18            | 0.0318 | 0.0102        | 0.320               | 3.869            | 1.967                       | 1676          | 1148            | 0.011      | 0.05           |
| Violent discipline  | 8.5             | 0.6576 | 0.0364        | 0.055               | 2.238            | 1.496                       | 1201          | 381             | 0.585      | 0.73           |
|   |                 | WON    | 1EN           |                     |                  |                             |               |                 |            |                |
| Pregnant women  | -               | 0.0599 | 0.0104        | 0.173               | 1.156            | 1.075                       | 933           | 605             | 0.039      | 0.08           |
| Early childbearing  | 5.2             | 0.1453 | 0.0380        | 0.262               | 1.142            | 1.069                       | 151           | 99              | 0.069      | 0.22           |
| Contraceptive prevalence  | 5.3             | 0.5686 | 0.0362        | 0.064               | 2.057            | 1.434                       | 601           | 387             | 0.496      | 0.64           |
| Unmet need  | 5.4             | 0.1180 | 0.0151        | 0.128               | 0.844            | 0.919                       | 601           | 387             | 0.088      | 0.14           |
| Antenatal care coverage - at least once by skilled personnel                                | 5.5a            | 0.9751 | 0.0179        | 0.018               | 1.572            | 1.254                       | 189           | 120             | 0.939      | 1.00           |
| Antenatal care coverage - at least four times by any provider                               | 5.5b            | 0.9088 | 0.0213        | 0.023               | 0.651            | 0.807                       | 189           | 120             | 0.866      | 0.95           |
| Skilled attendant at delivery   | 5.7             | 0.9660 | 0.0271        | 0.028               | 2.664            | 1.632                       | 189           | 120             | 0.912      | 1.00           |
| Institutional deliveries  | 5.8             | 0.9474 | 0.0307        | 0.032               | 2.245            | 1.498                       | 189           | 120             | 0.886      | 1.00           |
| Caesarean section   | 5.9             | 0.3960 | 0.0413        | 0.104               | 0.851            | 0.922                       | 189           | 120             | 0.313      | 0.47           |
| Literacy rate among young women   | 7.1             | 0.9096 | 0.0273        | 0.030               | 2.046            | 1.431                       | 347           | 226             | 0.855      | 0.96           |
| Marriage before age 18  | 8.7             | 0.2698 | 0.0172        | 0.064               | 0.718            | 0.847                       | 737           | 478             | 0.235      | 0.30           |
| Polygyny  | 8.9             | 0.0517 | 0.0109        | 0.211               | 0.940            | 0.969                       | 601           | 387             | 0.030      | 0.07           |
| Comprehensive knowledge about HIV prevention among young people                             | 9.2             | 0.2724 | 0.0319        | 0.117               | 1.152            | 1.073                       | 347           | 226             | 0.209      | 0.33           |
| Knowledge of mother-to-child transmission of HIV  | 9.3             | 0.5704 | 0.0245        | 0.043               | 1.485            | 1.219                       | 933           | 605             | 0.521      | 0.61           |
| Accepting attitudes towards people living with HIV  | 9.4             | 0.1824 | 0.0180        | 0.099               | 1.266            | 1.125                       | 898           | 584             | 0.146      | 0.21           |
| Women who have been tested for HIV during last 12 months and who have been told the results | 9.6             | 0.3081 | 0.0268        | 0.087               | 2.041            | 1.429                       | 933           | 605             | 0.254      | 0.36           |
| Sexually active young women who have been tested for HIV and know the results               | 9.7             | 0.4172 | 0.0431        | 0.103               | 0.834            | 0.913                       | 170           | 110             | 0.331      | 0.50           |
| Sex before age 15 among young women   | 9.11            | 0.0313 | 0.0137        | 0.439               | 1.396            | 1.182                       | 347           | 226             | 0.004      | 0.05           |
| Condom use with non-regular partners  | 9.16            | *      | *             | *                   | *                | *                           | 59            | 38              | *          | *              |
|   |                 | UNDE   | R-5s          |                     |                  |                             |               |                 |            |                |
| Underweight prevalence  | 2.1a            | 0.0526 | 0.0107        | 0.204               | 0.636            | 0.798                       | 421           | 276             | 0.031      | 0.07           |
| Stunting prevalence   | 2.2a            | 0.1857 | 0.0265        | 0.142               | 1.245            | 1.116                       | 413           | 270             | 0.133      | 0.23           |
| Wasting prevalence  | 2.3a            | 0.0278 | 0.0108        | 0.388               | 1.151            | 1.073                       | 410           | 268             | 0.006      | 0.04           |
| Exclusive breastfeeding under 6 months  | 2.6             | *      | *             | *                   | *                | *                           | 40            | 28              | *          | *              |
| Age-appropriate breastfeeding   | 2.14            | 0.2885 | 0.0263        | 0.091               | 0.424            | 0.651                       | 195           | 127             | 0.236      | 0.34           |
| Tuberculosis immunization coverage  | -               | 0.9690 | 0.0220        | 0.023               | 1.067            | 1.033                       | 99            | 67              | 0.925      | 1.00           |
| Polio or DTaP-P immunization  | -               | 0.6986 | 0.0512        | 0.073               | 0.823            | 0.907                       | 99            | 67              | 0.596      | 0.80           |
| DPT (Pentavalent)   | -               | 0.7779 | 0.0517        | 0.066               | 1.006            | 1.003                       | 98            | 66              | 0.674      | 0.88           |
| Received measles immunization   | -               | 0.8042 | 0.0650        | 0.081               | 1.772            | 1.331                       | 99            | 67              | 0.674      | 0.93           |
| Received Hepatitis B or Pentavalent immunization  | -               | 0.7684 | 0.0514        | 0.067               | 0.981            | 0.990                       | 99            | 67              | 0.666      | 0.87           |
| Received HiB or Pentavalent immunization  | -               | 0.7684 | 0.0514        | 0.067               | 0.981            | 0.990                       | 99            | 67              | 0.666      |                |
| Diarrhoea in last two weeks   | -               | 0.1356 | 0.0158        | 0.116               | 0.624            | 0.790                       | 450           | 295             | 0.104      | 0.16           |
| Illness with cough in the previous 2 weeks  | -               | 0.0280 | 0.0121        | 0.433               | 1.586            | 1.259                       | 450           | 295             | 0.004      | 0.0            |
| Oral rehydration therapy with continued feeding   | 3.8             | *      | *             | *                   | *                | *                           | 61            | 40              | *          | *              |
| Antibiotic treatment of suspected pneumonia   | 3.10            | *      | *             | *                   | *                | *                           | 13            | 8               | *          | *              |
| Support for learning  | 6.1             | 0.9121 | 0.0403        | 0.044               | 2.164            | 1.471                       | 167           | 108             | 0.832      | 0.99           |
| Attendance to early childhood education   | 6.7             | 0.2472 | 0.0569        | 0.230               | 1.863            | 1.365                       | 167           | 108             | 0.133      | 0.30           |

<sup>(\*):</sup> the number of unweighted observations is less than 50

207

### Table SE.11: Sampling errors: Stann Creek

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011

|   | selected          | indica       | tors, Bel                      | ize, 2011                                  |                            |                                       |                        |                       |       |            |
|---|-------------------|--------------|--------------------------------|--|----------------------------|---------------------------------------|------------------------|-----------------------|-------|------------|
|   | MICS<br>Indicator | Value<br>(r) | Stan-<br>dard<br>error<br>(se) | Coeffi-<br>cient of<br>variation<br>(se/r) | Design<br>effect<br>(deff) | Square<br>root of<br>design<br>effect | Weight-<br>ed<br>count | Unweight-<br>ed count |       | r +<br>2se |
|   | ЦОІ               | ICELIOI      | D MEMBI                        |  |                            | (deft)                                |                        |                       | 200   | 200        |
| Her of increased deighing contact accuracy  |                   | 0.9951       | 0.0038                         | 0.004                                      | 1 704                      | 1.340                                 | 1000                   | COE                   | 0.000 | 1.000      |
| Use of improved drinking water sources  | 4.1               |              |                                |  | 1.794                      |                                       | 1833                   | 605                   | 0.988 |            |
| Use of improved sanitation  | 4.3               | 0.9187       | 0.0136                         | 0.015                                      | 1.395                      | 1.181                                 | 1718                   | 565                   | 0.892 | 0.946      |
| Secondary school net attendance ratio (adjusted)  | 7.5               | 0.5557       | 0.0567                         | 0.102                                      | 2.774                      | 1.665                                 | 173                    | 214                   | 0.442 | 0.669      |
| Child labour  | 8.2               | 0.1349       | 0.0169                         | 0.125                                      | 1.405                      | 1.185                                 | 467                    | 575                   | 0.101 | 0.169      |
| Prevalence of children with one or both parents dead  | 9.18              | 0.0644       | 0.0164                         | 0.254                                      | 4.405                      | 2.099                                 | 804                    | 993                   | 0.032 | 0.097      |
| Violent discipline  | 8.5               | 0.7481       | 0.0346                         | 0.046                                      | 1.999                      | 1.414                                 | 599                    | 315                   | 0.679 | 0.817      |
|   |                   |              | MEN                            | 0.004                                      | 4.070                      | 4.470                                 | 40.4                   | 400                   | 0.007 | 0.000      |
| Pregnant women  | -                 | 0.0630       | 0.0128                         | 0.204                                      | 1.373                      | 1.172                                 | 404                    | 493                   | 0.037 | 0.089      |
| Early childbearing  | 5.2               | 0.2123       | 0.0296                         | 0.139                                      | 0.439                      | 0.662                                 | 70                     | 85                    | 0.153 | 0.271      |
| Contraceptive prevalence  | 5.3               | 0.5668       | 0.0292                         | 0.051                                      | 0.949                      | 0.974                                 | 225                    | 275                   | 0.508 | 0.625      |
| Unmet need  | 5.4               | 0.1974       | 0.0217                         | 0.110                                      | 0.817                      | 0.904                                 | 225                    | 275                   | 0.154 | 0.241      |
| Antenatal care coverage - at least once by skilled personnel                                | 5.5a              | 0.9760       | 0.0161                         | 0.017                                      | 0.944                      | 0.971                                 | 69                     | 86                    | 0.944 | 1.000      |
| Antenatal care coverage - at least four times by any provider                               | 5.5b              | 0.8855       | 0.0299                         | 0.034                                      | 0.750                      | 0.866                                 | 69                     | 86                    | 0.826 | 0.945      |
| Skilled attendant at delivery   | 5.7               | 0.9779       | 0.0113                         | 0.012                                      | 0.503                      | 0.709                                 | 69                     | 86                    | 0.955 | 1.000      |
| Institutional deliveries  | 5.8               | 0.9677       | 0.0148                         | 0.015                                      | 0.600                      | 0.774                                 | 69                     | 86                    | 0.938 | 0.997      |
| Caesarean section   | 5.9               | 0.1935       | 0.0445                         | 0.230                                      | 1.080                      | 1.039                                 | 69                     | 86                    | 0.104 | 0.283      |
| Literacy rate among young women   | 7.1               | 0.9089       | 0.0256                         | 0.028                                      | 1.407                      | 1.186                                 | 147                    | 179                   | 0.858 | 0.960      |
| Marriage before age 18  | 8.7               | 0.2797       | 0.0291                         | 0.104                                      | 1.670                      | 1.292                                 | 327                    | 399                   | 0.222 | 0.338      |
| Polygyny  | 8.9               | 0.0074       | 0.0053                         | 0.719                                      | 1.051                      | 1.025                                 | 225                    | 275                   | 0.000 | 0.018      |
| Comprehensive knowledge about HIV prevention among young people                             | 9.2               | 0.4889       | 0.0506                         | 0.104                                      | 1.824                      | 1.350                                 | 147                    | 179                   | 0.388 | 0.590      |
| Knowledge of mother-to-child transmission of HIV  | 9.3               | 0.5377       | 0.0240                         | 0.045                                      | 1.136                      | 1.066                                 | 404                    | 493                   | 0.490 | 0.586      |
| Accepting attitudes towards people living with HIV  | 9.4               | 0.2831       | 0.0280                         | 0.099                                      | 1.871                      | 1.368                                 | 399                    | 486                   | 0.227 | 0.339      |
| Women who have been tested for HIV during last 12 months and who have been told the results | 9.6               | 0.2850       | 0.0244                         | 0.086                                      | 1.438                      | 1.199                                 | 404                    | 493                   | 0.236 | 0.334      |
| Sexually active young women who have been tested for HIV and know the results               | 9.7               | 0.4237       | 0.0504                         | 0.119                                      | 1.082                      | 1.040                                 | 87                     | 105                   | 0.323 | 0.524      |
| Sex before age 15 among young women   | 9.11              | 0.0967       | 0.0235                         | 0.243                                      | 1.122                      | 1.059                                 | 147                    | 179                   | 0.050 | 0.144      |
| Condom use with non-regular partners  | 9.16              | *            | *                              | *  | *                          | *                                     | 39                     | 47                    | *     | *          |
|   | '                 | UND          | ER-5s                          |  |                            |                                       |                        |                       |       |            |
| Underweight prevalence  | 2.1a              | 0.0948       | 0.0173                         | 0.182                                      | 0.850                      | 0.922                                 | 207                    | 245                   | 0.060 | 0.129      |
| Stunting prevalence   | 2.2a              | 0.1748       | 0.0271                         | 0.155                                      | 1.232                      | 1.110                                 | 206                    | 243                   | 0.121 | 0.229      |
| Wasting prevalence  | 2.3a              | 0.0488       | 0.0171                         | 0.351                                      | 1.524                      | 1.234                                 | 205                    | 242                   | 0.015 | 0.083      |
| Exclusive breastfeeding under 6 months  | 2.6               | *            | *                              | *  | *                          | *                                     | 9                      | 11                    | *     | *          |
| Age-appropriate breastfeeding   | 2.14              | 0.3610       | 0.0526                         | 0.146                                      | 1.104                      | 1.051                                 | 77                     | 93                    | 0.256 | 0.466      |
| Tuberculosis immunization coverage  | -                 | *            | *                              | *  | *                          | *                                     | 39                     | 46                    | *     | *          |
| Polio or DTaP-P immunization  | -                 | *            | *                              | *  | *                          | *                                     | 38                     | 44                    | *     | *          |
| DPT (Pentavalent)   | -                 | *            | *                              | *  | *                          | *                                     | 40                     | 47                    | *     | *          |
| Received measles immunization   | -                 | *            | *                              | *  | *                          | *                                     | 38                     | 45                    | *     | *          |
| Received Hepatitis B or Pentavalent immunization  | -                 | *            | *                              | *  | *                          | *                                     | 37                     | 43                    | *     | *          |
| Received HiB or Pentavalent immunization  | -                 |              |                                |  |                            |                                       | 38                     | 44                    |       | *          |
| Diarrhoea in last two weeks Illness with cough in the previous 2 weeks                      | -                 | 0.0824       | 0.0118                         | 0.143                                      | 0.458                      | 0.677                                 | 212                    | 251                   | 0.059 | 0.106      |
| Oral rehydration therapy with continued feeding   | 2.0               | 0.0370       | 0.0148<br>*                    | 0.400<br>*                                 | 1.537                      | 1.240<br>*                            | 212                    | 251                   | 0.007 | 0.067      |
| Antibiotic treatment of suspected pneumonia   | 3.8               | *            | *                              | *  | *                          | *                                     | 18<br>8                | 21                    | *     | *          |
| Support for learning  | 3.10<br>6.1       | 0.8608       | 0.0464                         | 0.054                                      |                            | 1.380                                 | 92                     | 10<br>107             |       | 0.954      |
| Attendance to early childhood education   | 6.7               | 0.8608       | 0.0464                         | 0.054                                      | 1.904<br>0.337             | 0.580                                 | 92                     | 107                   | 0.768 | 0.954      |
| Birth registration  | 8.1               | 0.4496       | 0.0280                         | 0.062                                      | 0.337                      | 0.863                                 | 212                    | 251                   | 0.394 | 0.506      |

<sup>(\*):</sup> the number of unweighted observations is less than 50

Table SE.12: Sampling errors: Toledo
Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Belize, 2011

|   | 10                | ected inc        | licators,              | Belize, 201                      | 1                |                              |                     |                       |         |                |
|---|-------------------|------------------|------------------------|----------------------------------|------------------|------------------------------|---------------------|-----------------------|---------|----------------|
|   | MICS<br>Indicator | Value<br>(r)     | Stan-<br>dard<br>error | Coeffi-<br>cient of<br>variation | Design<br>effect | Square root of design effect | Weight-<br>ed count | Unweight-<br>ed count | lin     | dence          |
|   |                   |                  | (se)                   | (se/r)                           | (deff)           | (deft)                       |                     |                       | r - Zse | r + 2se        |
|   |                   | HOUS             | EHOLD M                | EMBERS                           |                  |                              |                     |                       |         |                |
| Use of improved drinking water sources  | 4.1               | 0.9712           | 0.0075                 | 0.008                            | 1.356            | 1.164                        | 1733                | 670                   | 0.956   | 0.986          |
| Use of improved sanitation  | 4.3               | 0.9216           | 0.0114                 | 0.012                            | 1.103            | 1.050                        | 1560                | 610                   | 0.899   | 0.945          |
| Secondary school net attendance ratio (adjusted)  | 7.5               | 0.4457           | 0.0309                 | 0.069                            | 1.004            | 1.002                        | 161                 | 260                   | 0.384   | 0.508          |
| Child labour  | 8.2               | 0.1591           | 0.0231                 | 0.145                            | 3.143            | 1.773                        | 489                 | 786                   | 0.113   | 0.205          |
| Prevalence of children with one or both parents   | 9.18              | 0.0283           | 0.0076                 | 0.268                            | 2.799            | 1.673                        | 825                 | 1334                  | 0.013   | 0.044          |
| dead<br>Violent discipline  | 8.5               | 0.8137           | 0.0122                 | 0.015                            | 0.384            | 0.620                        | 631                 | 395                   | 0.789   | 0.838          |
|   |                   |                  | WOMEN                  |                                  |                  |                              |                     |                       |         |                |
| Pregnant women  | -                 | 0.0675           | 0.0103                 | 0.153                            | 1.015            | 1.008                        | 347                 | 602                   | 0.047   | 0.088          |
| Early childbearing  | 5.2               | 0.2759           | 0.0415                 | 0.150                            | 0.965            | 0.982                        | 65                  | 113                   | 0.193   | 0.359          |
| Contraceptive prevalence  | 5.3               | 0.2828           | 0.0327                 | 0.115                            | 1.977            | 1.406                        | 217                 | 377                   | 0.218   | 0.348          |
| Unmet need  | 5.4               | 0.3285           | 0.0241                 | 0.073                            | 0.991            | 0.995                        | 217                 | 377                   | 0.280   | 0.377          |
| Antenatal care coverage - at least once by skilled personnel                                | 5.5a              | 0.9155           | 0.0149                 | 0.016                            | 0.368            | 0.607                        | 73                  | 129                   | 0.886   | 0.945          |
| Antenatal care coverage - at least four times by any provider                               | 5.5b              | 0.5724           | 0.0334                 | 0.058                            | 0.585            | 0.765                        | 73                  | 129                   | 0.506   | 0.639          |
| Skilled attendant at delivery   | 5.7               | 0.8776           | 0.0262                 | 0.030                            | 0.819            | 0.905                        | 73                  | 129                   | 0.825   | 0.930          |
| Institutional deliveries  | 5.8               | 0.8073           | 0.0337                 | 0.042                            | 0.935            | 0.967                        | 73                  | 129                   | 0.740   | 0.875          |
| Caesarean section   | 5.9               | 0.1339           | 0.0272                 | 0.203                            | 0.815            | 0.903                        | 73                  | 129                   | 0.080   | 0.188          |
| Literacy rate among young women   | 7.1               | 0.8956           | 0.0196                 | 0.022                            | 1.051            | 1.025                        | 147                 | 257                   | 0.856   | 0.935          |
| Marriage before age 18  | 8.7               | 0.4547           | 0.0237                 | 0.052                            | 1.036            | 1.018                        | 265                 | 458                   | 0.407   | 0.502          |
| Polygyny  | 8.9               | 0.0176           | 0.0081                 | 0.461                            | 1.432            | 1.197                        | 217                 | 377                   | 0.001   | 0.034          |
| Comprehensive knowledge about HIV prevention among young people                             | 9.2               | 0.3497           | 0.0277                 | 0.079                            | 0.861            | 0.928                        | 147                 | 257                   | 0.294   | 0.405          |
| Knowledge of mother-to-child transmission of HIV  | 9.3               | 0.4920           | 0.0256                 | 0.052                            | 1.574            | 1.255                        | 347                 | 602                   | 0.441   | 0.543          |
| Accepting attitudes towards people living with HIV  | 9.4               | 0.1211           | 0.0209                 | 0.173                            | 1.721            | 1.312                        | 245                 | 419                   | 0.079   | 0.163          |
| Women who have been tested for HIV during last 12 months and who have been told the results | 9.6               | 0.1332           | 0.0165                 | 0.124                            | 1.413            | 1.189                        | 347                 | 602                   | 0.100   | 0.166          |
| Sexually active young women who have been tested for HIV and know the results               | 9.7               | 0.1559           | 0.0389                 | 0.249                            | 1.253            | 1.119                        | 62                  | 110                   | 0.078   | 0.234          |
| Sex before age 15 among young women   | 9.11              | 0.0460           | 0.0121                 | 0.263                            | 0.857            | 0.926                        | 147                 | 257                   | 0.022   | 0.070          |
| Condom use with non-regular partners  | 9.16              | *                | *                      | *                                | *                | *                            | 10                  | 18                    | *       | *              |
|   | l .               |                  | UNDER-                 | 1                                |                  |                              |                     |                       | T       |                |
| Underweight prevalence  | 2.1a              | 0.0740           | 0.0136                 | 0.184                            | 0.927            | 0.963                        | 216                 | 344                   | 0.047   | 0.101          |
| Stunting prevalence Wasting prevalence  | 2.2a              | 0.4160           | 0.0264                 | 0.063                            | 0.974            | 0.987                        | 214                 | 341                   | 0.363   | 0.469          |
| Exclusive breastfeeding under 6 months  | 2.3a<br>2.6       | 0.0328           | 0.0095<br>*            | 0.290<br>*                       | 0.931<br>*       | 0.965<br>*                   | 206<br>16           | 327<br>25             | 0.014   | 0.052<br>*     |
| Age-appropriate breastfeeding   | 2.14              | 0.4746           | 0.0536                 | 0.113                            | 1.510            | 1.229                        | 82                  | 132                   | 0.367   | 0.582          |
| Tuberculosis immunization coverage  | -                 | 0.9409           | 0.0242                 | 0.026                            | 0.893            | 0.945                        | 54                  | 86                    | 0.893   | 0.989          |
| Polio or DTaP-P immunization  | _                 | 0.5426           | 0.0409                 | 0.075                            | 0.560            | 0.748                        | 53                  | 84                    | 0.461   | 0.624          |
| DPT (Pentavalent)   | _                 | 0.5714           | 0.0418                 | 0.073                            | 0.550            | 0.742                        | 49                  | 78                    | 0.488   | 0.655          |
| Received measles immunization   | -                 | 0.8266           | 0.0353                 | 0.043                            | 0.627            | 0.792                        | 46                  | 73                    | 0.756   | 0.897          |
| Received Hepatitis B or Pentavalent immunization  | -                 | 0.5079           | 0.0421                 | 0.083                            | 0.588            | 0.767                        | 53                  | 84                    | 0.424   | 0.592          |
| Received HiB or Pentavalent immunization  | -                 | 0.5026           | 0.0397                 | 0.079                            | 0.516            | 0.718                        | 52                  | 83                    | 0.423   | 0.582          |
| Diarrhoea in last two weeks   | -                 | 0.0754           | 0.0130                 | 0.172                            | 0.867            | 0.931                        | 226                 | 361                   | 0.049   | 0.101          |
| Illness with cough in the previous 2 weeks  | -                 | 0.0734           | 0.0179                 | 0.244                            | 1.702            | 1.305                        | 226                 | 361                   | 0.038   | 0.109          |
| Oral rehydration therapy with continued feeding   | 3.8               | *                | *                      | *                                | *                | *                            | 17                  | 28                    | *       | *              |
| Antibiotic treatment of suspected pneumonia   | 3.10              | *                | *                      | *                                | *                | *                            | 17                  | 27                    | *       | *              |
| Support for learning  | 6.1               | 0.8356           | 0.0401                 | 0.048                            | 1.662            | 1.289                        | 90                  | 143                   | 0.755   | 0.916          |
| Attendance to early childhood education Birth registration                                  | 6.7<br>8.1        | 0.1282<br>0.9581 | 0.0176<br>0.0126       | 0.137<br>0.013                   | 0.392<br>1.421   | 0.626<br>1.192               | 90<br>226           | 143<br>361            | 0.093   | 0.163<br>0.983 |

<sup>(\*):</sup> the number of unweighted observations is less than 50

# APPENDIX F. DATA QUALITY TABLES

Table DQ.1: Age distribution of household population

|   |            | Number | lale Percent | Female<br>Number | Percent      |
|---|------------|--------|--------------|------------------|--------------|
| A | Age 0      | 199    | 2.3          | 149              | 1.7          |
|   | 1          | 188    | 2.2          | 207              | 2.4          |
|   | 2          | 190    | 2.2          | 194              | 2.2          |
|   | 3          | 205    | 2.4          | 185              | 2.1          |
|   | 4          | 178    | 2.1          | 206              | 2.4          |
|   | 5          | 182    | 2.1          | 203              | 2.3          |
|   | 6          | 197    | 2.3          | 206              | 2.4          |
|   | 7          | 194    | 2.3          | 186              | 2.1          |
|   | 8          | 228    | 2.7          | 182              | 2.1          |
|   | 9          | 214    | 2.5          | 212              | 2.4          |
|   | 10         | 228    | 2.7          | 227              | 2.6          |
|   | 11         | 204    | 2.4          | 223              | 2.6          |
|   | 12         | 190    | 2.2          | 205              | 2.3          |
|   | 13         | 189    | 2.2          | 202              | 2.3          |
|   | 14         | 191    | 2.2          | 209              | 2.4          |
|   | 15         | 194    | 2.3          | 185              | 2.1          |
|   | 16         | 192    | 2.2          | 212              | 2.4          |
|   | 17         | 168    | 2.0          | 169              | 1.9          |
|   | 18         | 189    | 2.2          | 192              | 2.2          |
|   | 19         | 176    | 2.1          | 181              | 2.1          |
|   | 20         | 157    | 1.8          | 177              | 2.0          |
|   | 21         | 155    | 1.8          | 144              | 1.7          |
|   | 22         | 148    | 1.7          | 159              | 1.8          |
|   | 23         | 146    | 1.7          | 165              | 1.8          |
|   | 23         | 159    | 1.7          | 156              | 1.8          |
|   | 24<br>25   |        | 1.5          |                  | 1.8          |
|   |            | 128    |              | 142              |              |
|   | 26         | 119    | 1.4          | 133              | 1.5          |
|   | 27         | 135    | 1.6          | 142              | 1.6          |
|   | 28         | 123    | 1.4          | 151              | 1.7          |
|   | 29         | 110    | 1.3          | 146              | 1.7          |
|   | 30         | 120    | 1.4          | 136              | 1.6          |
|   | 31         | 115    | 1.3          | 99               | 1.1          |
|   | 32         | 113    | 1.3          | 110              | 1.3          |
|   | 33         | 135    | 1.6          | 127              | 1.5          |
|   | 34         | 121    | 1.4          | 115              | 1.3          |
|   | 35         | 99     | 1.2          | 132              | 1.5          |
|   | 36         | 103    | 1.2          | 117              | 1.3          |
|   | 37         | 110    | 1.3          | 105              | 1.2          |
|   | 38         | 108    | 1.3          | 118              | 1.4          |
|   | 39         | 118    | 1.4          | 116              | 1.3          |
|   | 40         | 118    | 1.4          | 115              | 1.3          |
|   | 41         | 87     | 1.0          | 99               | 1.1          |
|   | 42         | 117    | 1.4          | 86               | 1.0          |
|   | 43         | 97     | 1.1          | 81               | 0.9          |
|   | 44         | 68     | 0.8          | 93               | 1.1          |
|   | 45         | 88     | 1.0          | 85               | 1.0          |
|   | 46         | 78     | 0.9          | 78               | 0.9          |
|   | 47         | 94     | 1.1          | 82               | 0.9          |
|   | 48         | 75     | 0.9          | 70               | 0.8          |
|   | 49         | 65     | 0.8          | 63               | 0.7          |
|   | 50         | 84     | 1.0          | 91               | 1.0          |
|   | 51         | 65     | 0.8          | 76               | 0.9          |
|   | 52         | 65     | 0.8          | 67               | 0.8          |
|   | 53         | 75     | 0.9          | 79               | 0.9          |
|   | 54         | 59     | 0.7          | 63               | 0.7          |
|   | 55         | 39     | 0.5          | 54               | 0.6          |
|   | 56         | 60     | 0.7          | 58               | 0.7          |
|   | 57         | 60     | 0.7          | 41               | 0.5          |
|   | 58         | 52     | 0.6          | 42               | 0.5          |
|   | 59         | 53     | 0.6          | 47               | 0.5          |
|   | 60         | 42     | 0.5          | 48               | 0.6          |
|   | 61         | 34     | 0.4          | 45               | 0.5          |
|   | 62         | 36     | 0.4          | 40               | 0.5          |
|   | 63         | 45     | 0.5          | 42               | 0.5          |
|   | 64         | 45     | 0.5          | 42               | 0.5          |
|   | 65         | 23     | 0.3          | 27               | 0.3          |
|   | 66         | 37     | 0.4          | 24               | 0.3          |
|   | 67         | 31     | 0.4          | 28               | 0.3          |
|   | 68         | 26     | 0.4          | 23               | 0.3          |
|   |            |        |              |                  |              |
|   | 69         | 26     | 0.3          | 19               | 0.2          |
|   | 70         | 22     | 0.3          | 32               | 0.4          |
|   | 71         | 32     | 0.4          | 16               | 0.2          |
|   | 72         | 25     | 0.3          | 22               | 0.2          |
|   | 73         | 23     | 0.3          | 15               | 0.2          |
|   | 74         | 18     | 0.2          | 26               | 0.3          |
|   | 75         | 10     | 0.1          | 11               | 0.1          |
|   | 76         | 26     | 0.3          | 12               | 0.1          |
|   | 77         | 18     | 0.2          | 9                | 0.1          |
|   | 78         | 9      | 0.1          | 17               | 0.2          |
|   | 79         | 12     | 0.1          | 9                | 0.1          |
|   | 80+        | 95     | 1.1          | 85               | 1.0          |
|   |            |        |              | 19               |              |
|   | DK/missing | 29     | 0.3          | 19               | 0.2<br>100.0 |

Table DQ.2: Age distribution of eligible and interviewed women

Household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed,
by five-year age groups, Belize, 2011

|               |       | Household population of women age 10-54 | Interviewed w | omen age 15-49 | Percentage of<br>eligible women<br>interviewed<br>(Completion rate) |
|---------------|-------|---|---------------|----------------|---|
|               |       | Number                                  | Number        | Percent        |   |
| Age           | 10-14 | 1066                                    | na            | na             | na  |
|               | 15-19 | 939                                     | 836           | 20.6           | 89.1  |
|               | 20-24 | 801                                     | 715           | 17.6           | 89.2  |
|               | 25-29 | 714                                     | 644           | 15.9           | 90.1  |
|               | 30-34 | 587                                     | 540           | 13.3           | 92.0  |
|               | 35-39 | 587                                     | 529           | 13.0           | 90.1  |
|               | 40-44 | 475                                     | 437           | 10.8           | 91.9  |
|               | 45-49 | 379                                     | 355           | 8.8            | 93.8  |
|               | 50-54 | 376                                     | na            | na             | na  |
| Total (15-49) |       | 4482                                    | 4055          | 100.0          | 90.5  |

na: not applicable

Weights used for both household population of women (Column B) and interviewed women (Column D) are household weights. Age is based on the household schedule.

Table DQ.3: Age distribution of under-5s in household and under-5 questionnaires

Household population of children age 0-7, children age 0-4 whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed, by single ages, Belize, 2011

|                 |       | Household population of children 0-7 years | Interviewed under-5 children |       | Percentage of eligible under-5s interviewed (Completion rate) |
|-----------------|-------|--|------------------------------|-------|---|
|                 |       | Number                                     | Number Percent               |       |   |
| Age             | 0     | 348  | 340                          | 18.3  | 97.9  |
|                 | 1     | 395  | 388                          | 20.8  | 98.0  |
|                 | 2     | 384  | 376                          | 20.2  | 98.1  |
|                 | 3     | 391  | 381                          | 20.4  | 97.5  |
|                 | 4     | 384  | 379                          | 20.3  | 98.7  |
|                 | 5     | 386  | na                           | na    | na  |
|                 | 6     | 403  | na                           | na    | na  |
|                 | 7     | 380  | na                           | na    | na  |
| Total (0-4)     |       | 1902                                       | 1865                         | 100.0 | 98.0  |
| Ratio of 5 to 4 | 1.003 |  |                              |       |   |

na: not applicable
Weights used for both household population of children and under-5 interviews are household weights. Age is based on the household schedule.

# Table DQ.4: Women's completion rates by socio-economic characteristics of households Household population of women age 15-49, interviewed women age 15-49, and percentage of eligible women who were interviewed, by selected social and economic characteristics of the household, Belize, 2011

|                             |   |      | population of<br>a 15-49 years |      | women age | Percent of eligible women interviewed (Completion rates) |
|-----------------------------|---|------|--------------------------------|------|-----------|--|
| Region                      | Corozal                                   | 585  | 13.0                           | 525  | 12.9      | 89.7   |
|                             | Orange Walk                               | 677  | 15.1                           | 631  | 15.6      | 93.2   |
|                             | Belize (Excluding Belize City South Side) | 751  | 16.8                           | 659  | 16.3      | 87.7   |
|                             | Belize City South Side                    | 627  | 14.0                           | 589  | 14.5      | 93.8   |
|                             | Belize District                           | 1379 | 30.8                           | 1248 | 30.8      | 90.8   |
|                             | Cayo                                      | 1023 | 22.8                           | 880  | 21.7      | 86.1   |
|                             | Stann Creek                               | 439  | 9.8                            | 399  | 9.8       | 90.4   |
|                             | Toledo                                    | 380  | 8.5                            | 373  | 9.2       | 98.3   |
| Area                        | Urban                                     | 2115 | 47.2                           | 1904 | 46.9      | 90.0   |
|                             | Rural                                     | 2367 | 52.8                           | 2151 | 53.1      | 90.8   |
| Household size              | 1-3                                       | 1102 | 24.6                           | 1013 | 25.0      | 91.9   |
|                             | 4-6                                       | 2248 | 50.2                           | 2023 | 49.9      | 90.0   |
|                             | 7+  | 1132 | 25.3                           | 1018 | 25.1      | 89.9   |
| Education of household      | None                                      | 318  | 7.1                            | 297  | 7.3       | 93.3   |
| head                        | Primary                                   | 2165 | 48.3                           | 1974 | 48.7      | 91.1   |
|                             | Secondary +                               | 1818 | 40.6                           | 1626 | 40.1      | 89.4   |
|                             | CET/ITVET/VOTEC                           | 48   | 1.1                            | 44   | 1.1       | 91.7   |
|                             | Missing/DK                                | 66   | 1.5                            | 55   | 1.4       | 83.4   |
|                             | Other                                     | 65   | 1.5                            | 58   | 1.4       | 89.8   |
| Wealth index quintiles      | Poorest                                   | 689  | 15.4                           | 653  | 16.1      | 94.7   |
|                             | Second                                    | 866  | 19.3                           | 808  | 19.9      | 93.3   |
|                             | Middle                                    | 954  | 21.3                           | 866  | 21.4      | 90.8   |
|                             | Fourth                                    | 961  | 21.4                           | 849  | 20.9      | 88.4   |
|                             | Richest                                   | 1012 | 22.6                           | 879  | 21.7      | 86.7   |
| Ethnicity of household head | Creole                                    | 1099 | 24.5                           | 975  | 24.1      | 88.6   |
|                             | Mestizo                                   | 2219 | 49.5                           | 2012 | 49.6      | 90.7   |
|                             | Garifuna                                  | 270  | 6.0                            | 251  | 6.2       | 92.6   |
|                             | Maya                                      | 443  | 9.9                            | 417  | 10.3      | 94.1   |
|                             | Other                                     | 374  | 8.4                            | 331  | 8.2       | 88.5   |
|                             | Missing/DK                                | 76   | 1.7                            | 69   | 1.7       | 90.6   |
| Total                       |   | 4482 | 100.0                          | 4055 | 100.0     | 90.4   |

Table DQ.5: Completion rates for under-5 questionnaires by socio-economic characteristics of households
Household population of under-5 children, under-5 questionnaires completed, and percentage of under-5 children for whom
interviews were completed, by selected socio-economic characteristics of the household, Belize, 2011

|                        |  | popula | Household<br>population of<br>under-5 children |      | iewed<br>children | Percent of eligible<br>under-5s with<br>completed under-5<br>questionnaires<br>(Completion rates) |  |
|------------------------|--|--------|--|------|-------------------|---|--|
| Region                 | Corozal                                      | 257    | 13.5   | 254  | 13.6              | 98.8  |  |
|                        | Orange Walk                                  | 295    | 15.5   | 287  | 15.4              | 97.2  |  |
|                        | Belize (Excluding Belize City<br>South Side) | 234    | 12.3   | 223  | 11.9              | 95.0  |  |
|                        | Belize City South Side                       | 247    | 13.0   | 242  | 13.0              | 98.1  |  |
|                        | Belize District                              | 481    | 25.3   | 465  | 24.9              | 96.6  |  |
|                        | Cayo   | 439    | 23.1   | 434  | 23.3              | 98.8  |  |
|                        | Stann Creek                                  | 208    | 10.9   | 204  | 10.9              | 98.2  |  |
|                        | Toledo                                       | 221    | 11.6   | 221  | 11.8              | 99.7  |  |
| Area                   | Urban  | 728    | 38.3   | 710  | 38.1              | 97.5  |  |
|                        | Rural  | 1174   | 61.7   | 1155 | 61.9              | 98.3  |  |
| Household size         | 1-3  | 248    | 13.0   | 243  | 13.1              | 98.3  |  |
|                        | 4-6  | 1034   | 54.4   | 1009 | 54.1              | 97.6  |  |
|                        | 7+   | 621    | 32.6   | 613  | 32.8              | 98.7  |  |
| Education of household | None   | 145    | 7.6  | 145  | 7.8               | 100.0   |  |
| head                   | Primary                                      | 931    | 48.9   | 915  | 49.1              | 98.3  |  |
|                        | Secondary +                                  | 730    | 38.4   | 713  | 38.2              | 97.6  |  |
|                        | CET/ITVET/VOTEC                              | 29     | 1.5  | 28   | 1.5               | 94.6  |  |
|                        | Missing/DK                                   | 21     | 1.1  | 20   | 1.0               | 93.0  |  |
|                        | Other  | 46     | 2.4  | 45   | 2.4               | 98.1  |  |
| Wealth index quintiles | Poorest                                      | 476    | 25.0   | 472  | 25.3              | 99.2  |  |
|                        | Second                                       | 436    | 22.9   | 432  | 23.2              | 99.0  |  |
|                        | Middle                                       | 394    | 20.7   | 389  | 20.9              | 98.6  |  |
|                        | Fourth                                       | 326    | 17.1   | 316  | 16.9              | 96.9  |  |
|                        | Richest                                      | 269    | 14.2   | 256  | 13.7              | 95.0  |  |
| Ethnicity of household | Creole                                       | 375    | 19.7   | 361  | 19.4              | 96.2  |  |
| head                   | Mestizo                                      | 922    | 48.5   | 909  | 48.7              | 98.6  |  |
|                        | Garifuna                                     | 103    | 5.4  | 101  | 5.4               | 97.8  |  |
|                        | Maya   | 280    | 14.7   | 279  | 14.9              | 99.5  |  |
|                        | Other  | 191    | 10.0   | 186  | 10.0              | 97.5  |  |
|                        | Missing/DK                                   | 31     | 1.6  | 30   | 1.6               | 95.4  |  |
| Total                  |  | 1902   | 100.0  | 1865 | 100.0             | 98.0  |  |

# Table DQ.6: Completeness of reporting Percentage of observations that are missing information for selected questions and indicators, Belize, 2011

| Questionnaire and type of missing information | Reference group   | Percent with missing/<br>incomplete information* | Number of cases |  |
|---|---|--|-----------------|--|
| Household                                     |   |  |                 |  |
| Age   | All household members   | 0.3  | 1753            |  |
| Starting time of interview                    | All households interviewed  | 0.0  | 4424            |  |
| Ending time of interview                      | All households interviewed  | 0.0  | 442             |  |
| Women   |   |  |                 |  |
| Woman's date of birth                         | All women age 15-49   |  |                 |  |
| Only month                                    |   | 0.0  | 409             |  |
| Both month and year                           |   | 0.1  | 409             |  |
| Date of first birth                           | All women age 15-49 with at least one live birth                                  |  |                 |  |
| Only month                                    |   | 0.2  | 272             |  |
| Both month and year                           |   | 1.1  | 272             |  |
| Completed years since first birth             | All women age 15-49 with at least one live birth with year of first birth unknown | 16.1   | 5               |  |
| Date of last birth                            | All women age 15-49 with a live birth in last 2 years                             |  |                 |  |
| Only month                                    |   | 0.2  | 272             |  |
| Both month and year                           |   | 0.4  | 272             |  |
| Date of first marriage/union                  | All ever married women age 15-49  |  |                 |  |
| Only month                                    | _   | 11.5   | 287             |  |
| Both month and year                           |   | 21.1   | 287             |  |
| Age at first marriage/union                   | All ever married women age 15-49 with year of first marriage not known            | 0.6  | 287             |  |
| Age at first intercourse                      | All women age 15-24 who have ever had sex   | 2.6  | 88              |  |
| Time since last intercourse                   | All women age 15-24 who have ever had sex   | 1.6  | 88              |  |
| Starting time of interview                    | All women interviewed   | 0.0  | 409             |  |
| Ending time of interview                      | All women interviewed   | 0.0  | 409             |  |
| Under-5                                       |   |  |                 |  |
| Date of birth                                 | All under-5 children  |  |                 |  |
| Only month                                    |   | 0.0  | 194             |  |
| Both month and year                           |   | 0.0  | 194             |  |
| Anthropometric measurements                   | All under-5 children  | 7.0  | 194             |  |
| Weight  |   | 7.5  | 194             |  |
| Height  |   | 6.7  | 194             |  |
| Both weight and height                        |   |  |                 |  |
| Starting time of interview                    | All under-5 children  | 0.0  | 194             |  |
| Ending time of interview                      | All under-5 children  | 0.0  | 194             |  |

Table DQ.7: Completeness of information for anthropometric indicators

Distribution of children under 5 by completeness of information for anthropometric indicators, Belize, 2011

|                  |   | Reason for exclusion from analysis |                                    |  |                                |                       |  | 5, 2011                          |
|------------------|---|------------------------------------|------------------------------------|--|--------------------------------|-----------------------|--|----------------------------------|
|                  | Valid<br>weight<br>and date<br>of birth | Weight not measured                | Incomplete<br>date of birth        | Weight not<br>measured,<br>incomplete<br>date of birth | Flagged<br>cases<br>(outliers) | Total                 | Percent of<br>children<br>excluded<br>from<br>analysis | Number<br>of children<br>under 5 |
| Weight by age    |   |                                    |                                    |  |                                |                       |  |                                  |
| <6 months        | 86.9                                    | 13.1                               | 0.0                                | 0.0  | 0.0                            | 100.0                 | 13.1   | 145                              |
| 6-11 months      | 92.9                                    | 7.1                                | 0.0                                | 0.0  | 0.0                            | 100.0                 | 7.1  | 212                              |
| 12-23 months     | 95.2                                    | 4.8                                | 0.0                                | 0.0  | 0.0                            | 100.0                 | 4.8  | 398                              |
| 24-35 months     | 92.3                                    | 7.4                                | 0.0                                | 0.0  | 0.2                            | 100.0                 | 7.7  | 403                              |
| 36-47 months     | 95.1                                    | 4.9                                | 0.0                                | 0.0  | 0.0                            | 100.0                 | 4.9  | 39:                              |
| 48-59 months     | 94.7                                    | 5.3                                | 0.0                                | 0.0  | 0.0                            | 100.0                 | 5.3  | 39                               |
| Total            | 93.6                                    | 6.3                                | 0.0                                | 0.0  | 0.1                            | 100.0                 | 6.4  | 1946                             |
|                  |   | Re                                 | eason for exclus                   | ion from analysi                                       | S                              |                       |  |                                  |
|                  | Valid<br>height and<br>date of<br>birth | Height not<br>measured             | Incomplete<br>date of birth        | Height not<br>measured,<br>incomplete<br>date of birth | Flagged<br>cases<br>(outliers) | Total childre<br>from | Percent of<br>children<br>excluded<br>from<br>analysis | Number<br>of children<br>under 5 |
| Height by age    |   |                                    |                                    |  |                                |                       |  |                                  |
| <6 months        | 84.1                                    | 14.5                               | 0.0                                | 0.0  | 1.4                            | 100.0                 | 15.9   | 145                              |
| 6-11 months      | 91.0                                    | 7.1                                | 0.0                                | 0.0  | 1.9                            | 100.0                 | 9.0  | 21                               |
| 12-23 months     | 93.7                                    | 5.0                                | 0.0                                | 0.0  | 1.3                            | 100.0                 | 6.3  | 39                               |
| 24-35 months     | 90.8                                    | 8.7                                | 0.0                                | 0.0  | 0.5                            | 100.0                 | 9.2  | 40                               |
| 36-47 months     | 94.6                                    | 4.6                                | 0.0                                | 0.0  | 0.8                            | 100.0                 | 5.4  | 39                               |
| 48-59 months     | 94.2                                    | 5.3                                | 0.0                                | 0.0  | 0.5                            | 100.0                 | 5.8  | 39                               |
| Total            | 92.4                                    | 6.7                                | 0.0                                | 0.0  | 0.9                            | 100.0                 | 7.6  | 194                              |
|                  |   | Re                                 | Reason for exclusion from analysis |  |                                |                       |  |                                  |
|                  | Valid<br>weight<br>and height           | Weight not<br>measured             | Height not<br>measured             | Weight not<br>measured,<br>incomplete<br>date of birth | Flagged<br>cases<br>(outliers) | Total                 | Percent of<br>children<br>excluded<br>from<br>analysis | Number<br>of children<br>under 5 |
| Weight by height |   |                                    |                                    |  |                                |                       |  |                                  |
| <6 months        | 80.7                                    | 0.7                                | 2.1                                | 12.4   | 4.1                            | 100.0                 | 19.3   | 14                               |
| 6-11 months      | 90.1                                    | 0.0                                | 0.0                                | 7.1  | 2.8                            | 100.0                 | 9.9  | 21                               |
| 12-23 months     | 94.0                                    | 0.0                                | 0.3                                | 4.7  | 1.0                            | 100.0                 | 6.0  | 39                               |
| 24-35 months     | 89.8                                    | 0.0                                | 1.2                                | 7.5  | 1.5                            | 100.0                 | 10.2   | 40                               |
| 36-47 months     | 94.4                                    | 0.5                                | 0.3                                | 4.3  | 0.5                            | 100.0                 | 5.6  | 39                               |
| 48-59 months     | 92.7                                    | 0.3                                | 0.3                                | 4.9  | 1.8                            | 100.0                 | 7.3  | 39                               |
| Total            | 91.5                                    | 0.2                                | 0.6                                | 6.0  | 1.6                            | 100.0                 | 8.5  | 194                              |

Table DQ.8: Heaping in anthropometric measurements
Distribution of weight and height/length measurements by digits
reported for decimals, Belize, 2011

|        |        | Weig   | ht      | Height |         |  |
|--------|--------|--------|---------|--------|---------|--|
|        |        | Number | Percent | Number | Percent |  |
| Digits | 0      | 191    | 10.5    | 505    | 27.6    |  |
|        | 1      | 168    | 9.2     | 118    | 6.5     |  |
|        | 2      | 202    | 11.1    | 198    | 10.8    |  |
|        | 3      | 201    | 11.0    | 182    | 10.0    |  |
|        | 4      | 178    | 9.8     | 146    | 8.0     |  |
|        | 5      | 183    | 10.0    | 301    | 16.5    |  |
|        | 6      | 189    | 10.4    | 132    | 7.2     |  |
|        | 7      | 163    | 8.9     | 105    | 5.7     |  |
|        | 8      | 164    | 9.0     | 77     | 4.2     |  |
|        | 9      | 184    | 10.1    | 63     | 3.4     |  |
|        | 0 or 5 | 374    | 20.5    | 806    | 44.1    |  |
|        | Total  | 1823   | 100.0   | 1827   | 100.0   |  |

Table DQ.9: Observation of women's health cards

Percent distribution of women with a live birth in the last 2 years by presence of a health card, and the percentage of health cards seen by the interviewers, Belize, 2011

|              |   | <b>VA</b> /= =                              | Woman ha                            | s health card                           |            |       | Downsont of   |  |
|--------------|---|---|-------------------------------------|---|------------|-------|---|--|
|              |   | Woman<br>does not<br>have<br>health<br>card | Seen by<br>the inter-<br>viewer (1) | Not seen by<br>the inter-<br>viewer (2) | Missing/DK | Total | Percent of<br>health cards<br>seen by the<br>interviewer<br>(1)/(1+2)*100 | Number of<br>women with a<br>live birth in the<br>last two years |
| Region       | Corozal   | 17.4  | 22.6                                | 60.0                                    | 0.0        | 100.0 | 27.4  | 115  |
|              | Orange Walk                                     | 2.5   | 20.5                                | 76.2                                    | 0.8        | 100.0 | 21.2  | 122  |
|              | Belize (Excluding<br>Belize City South<br>Side) | 27.1  | 25.0                                | 45.8                                    | 2.1        | 100.0 | 35.3  | 48   |
|              | Belize City South<br>Side                       | 23.2  | 25.6                                | 50.0                                    | 1.2        | 100.0 | 33.9  | 82   |
|              | Belize District                                 | 24.6  | 25.4                                | 48.5                                    | 1.5        | 100.0 | 34.4  | 130  |
|              | Cayo  | 4.2   | 27.5                                | 68.3                                    | 0.0        | 100.0 | 28.7  | 120  |
|              | Stann Creek                                     | 11.6  | 32.6                                | 54.7                                    | 1.2        | 100.0 | 37.3  | 86   |
|              | Toledo  | 27.1  | 24.8                                | 45.7                                    | 2.3        | 100.0 | 35.2  | 129  |
| Area         | Urban   | 17.0  | 20.6                                | 61.5                                    | 0.8        | 100.0 | 25.1  | 247  |
|              | Rural   | 13.8  | 27.7                                | 57.4                                    | 1.1        | 100.0 | 32.6  | 455  |
| Wealth index | Poorest   | 20.8  | 23.1                                | 54.7                                    | 1.4        | 100.0 | 29.7  | 212  |
| quintiles    | Second  | 13.9  | 31.1                                | 54.3                                    | 0.7        | 100.0 | 36.4  | 151  |
|              | Middle  | 15.0  | 27.8                                | 56.4                                    | 0.8        | 100.0 | 33.0  | 133  |
|              | Fourth  | 9.5   | 20.6                                | 69.0                                    | 0.8        | 100.0 | 23.0  | 126  |
|              | Richest   | 10.0  | 22.5                                | 66.3                                    | 1.3        | 100.0 | 25.4  | 80   |
| Total        |   | 15.0  | 25.2                                | 58.8                                    | 1.0        | 100.0 | 30.0  | 702  |

Table DQ.10: Observation of under-5s birth certificates
Percent distribution of children under 5 by presence of birth certificates, and percentage of birth calendar seen, Belize, 2011

|         |   |  | Child has bir               | th certificate                          |                |       |   |  |
|---------|---|--|-----------------------------|---|----------------|-------|---|--|
|         |   | Child does<br>not have<br>birth certif-<br>icate | Seen by the interviewer (1) | Not seen by<br>the inter-<br>viewer (2) | Missing/<br>DK | Total | Percent of birth certificates seen by the interviewer (1)/(1+2)*100 | Number of<br>children un-<br>der age 5 |
| Region  | Corozal                                   | 14.3   | 24.8                        | 60.8                                    | 0.0            | 100.0 | 29.0  | 314                                    |
|         | Orange Walk                               | 10.0   | 68.4                        | 21.6                                    | 0.0            | 100.0 | 76.0  | 320                                    |
|         | Belize (Excluding Belize City South Side) | 10.5   | 53.6                        | 35.9                                    | 0.0            | 100.0 | 59.9  | 153                                    |
|         | Belize City South Side                    | 7.1  | 26.6                        | 66.3                                    | 0.0            | 100.0 | 28.6  | 252                                    |
|         | Belize District                           | 8.4  | 36.8                        | 54.8                                    | 0.0            | 100.0 | 40.2  | 405                                    |
|         | Cayo                                      | 7.8  | 32.9                        | 59.3                                    | 0.0            | 100.0 | 35.7  | 295                                    |
|         | Stann Creek                               | 13.1   | 49.8                        | 37.1                                    | 0.0            | 100.0 | 57.3  | 251                                    |
|         | Toledo                                    | 10.5   | 27.7                        | 61.8                                    | 0.0            | 100.0 | 31.0  | 361                                    |
| Area    | Urban                                     | 9.4  | 36.4                        | 54.2                                    | 0.0            | 100.0 | 40.2  | 681                                    |
|         | Rural                                     | 11.1   | 41.1                        | 47.7                                    | 0.0            | 100.0 | 46.3  | 1265                                   |
| Child's | 0   | 21.4   | 33.2                        | 45.4                                    | 0.0            | 100.0 | 42.3  | 355                                    |
| age     | 1   | 9.5  | 39.4                        | 51.0                                    | 0.0            | 100.0 | 43.6  | 398                                    |
|         | 2   | 6.9  | 44.4                        | 48.6                                    | 0.0            | 100.0 | 47.7  | 403                                    |
|         | 3   | 7.4  | 39.7                        | 52.9                                    | 0.0            | 100.0 | 42.9  | 393                                    |
|         | 4   | 8.6  | 39.8                        | 51.6                                    | 0.0            | 100.0 | 43.5  | 397                                    |
| Total   |   | 10.5   | 39.5                        | 50.0                                    | 0.0            | 100.0 | 44.1  | 1946                                   |

Table DQ.11: Observation of vaccination cards
Percent distribution of children under 5 by presence of a vaccination card, and the percentage of vaccination cards seen by the interviewers, Belize, 2011

|         |   |  |                            | CI VICVOIS, DOI             | ,  |                |       |  |                                  |
|---------|---|--|----------------------------|-----------------------------|--|----------------|-------|--|----------------------------------|
|         |   | Child does<br>vaccinat                   |                            | Child has vac               | cination card                            |                |       | Percent of   | Number                           |
|         |   | Had<br>vaccination<br>card<br>previously | Never had vaccination card | Seen by the interviewer (1) | Not seen<br>by the<br>interviewer<br>(2) | Missing/<br>DK | Total | vaccination<br>cards seen by<br>the interviewer<br>(1)/(1+2)*100 | of<br>children<br>under<br>age 5 |
| Region  | Corozal   | 3.2                                      | 4.1                        | 74.5                        | 18.2                                     | 0.0            | 100.0 | 80.4   | 314                              |
|         | Orange Walk                                     | 0.6                                      | 2.8                        | 79.1                        | 17.5                                     | 0.0            | 100.0 | 81.9   | 320                              |
|         | Belize (Excluding<br>Belize City South<br>Side) | 2.0                                      | 3.9                        | 63.4                        | 30.7                                     | 0.0            | 100.0 | 67.4   | 153                              |
|         | Belize City South<br>Side                       | 4.4                                      | 4.0                        | 65.1                        | 26.6                                     | 0.0            | 100.0 | 71.0   | 252                              |
|         | Belize District                                 | 3.5                                      | 4.0                        | 64.4                        | 28.1                                     | 0.0            | 100.0 | 69.6   | 405                              |
|         | Cayo  | 4.4                                      | 5.1                        | 74.6                        | 15.9                                     | 0.0            | 100.0 | 82.4   | 295                              |
|         | Stann Creek                                     | 7.6                                      | 1.6                        | 74.1                        | 16.7                                     | 0.0            | 100.0 | 81.6   | 251                              |
|         | Toledo  | 11.1                                     | 2.5                        | 53.2                        | 33.2                                     | 0.0            | 100.0 | 61.5   | 361                              |
| Area    | Urban   | 4.8                                      | 3.1                        | 68.3                        | 23.8                                     | 0.0            | 100.0 | 74.2   | 681                              |
|         | Rural   | 5.1                                      | 3.6                        | 69.6                        | 21.7                                     | 0.0            | 100.0 | 76.3   | 1265                             |
| Child's | 0   | 2.8                                      | 10.4                       | 74.4                        | 12.4                                     | 0.0            | 100.0 | 85.7   | 355                              |
| age     | 1   | 2.5                                      | 3.0                        | 73.6                        | 20.9                                     | 0.0            | 100.0 | 77.9   | 398                              |
|         | 2   | 4.0                                      | 0.7                        | 73.2                        | 22.1                                     | 0.0            | 100.0 | 76.8   | 403                              |
|         | 3   | 6.4                                      | 2.3                        | 65.9                        | 25.4                                     | 0.0            | 100.0 | 72.1   | 393                              |
|         | 4   | 9.3                                      | 1.3                        | 59.2                        | 30.2                                     | 0.0            | 100.0 | 66.2   | 397                              |
| Total   |   | 5.0                                      | 3.4                        | 69.2                        | 22.4                                     | 0.0            | 100.0 | 75.5   | 1946                             |

Table DQ.12: Presence of mother in the household and the person interviewed for the under-5 questionnaire

Distribution of children under five by whether the mother lives in the same household, and the person interviewed for the under-5 questionnaire,

Belize, 2011

|     |       | Мо                 | ther in the housel      | nold                                   | Moth                    | er not in the hous                     | ehold                                |       |                                  |
|-----|-------|--------------------|-------------------------|--|-------------------------|--|--------------------------------------|-------|----------------------------------|
|     |       | Mother interviewed | Father inter-<br>viewed | Other adult<br>female inter-<br>viewed | Father inter-<br>viewed | Other adult<br>female inter-<br>viewed | Other adult<br>male inter-<br>viewed | Total | Number<br>of children<br>under 5 |
| Age | 0     | 97.6               | 0.0                     | 0.3                                    | 0.2                     | 1.8                                    | 0.0                                  | 100.0 | 348                              |
|     | 1     | 96.7               | 0.4                     | 0.0                                    | 0.0                     | 2.4                                    | 0.4                                  | 100.0 | 395                              |
|     | 2     | 95.3               | 0.0                     | 0.5                                    | 0.4                     | 3.8                                    | 0.0                                  | 100.0 | 384                              |
|     | 3     | 94.1               | 0.0                     | 0.7                                    | 0.2                     | 5.0                                    | 0.0                                  | 100.0 | 391                              |
|     | 4     | 92.0               | 0.0                     | 0.0                                    | 0.2                     | 7.4                                    | 0.4                                  | 100.0 | 384                              |
|     | Total | 95.1               | 0.1                     | 0.3                                    | 0.2                     | 4.1                                    | 0.2                                  | 100.0 | 1902                             |

Table DQ.13: Selection of children age 2-14 years for the child discipline module

Percent of households with at least two children age 2-14 years where correct selection of one child for the child discipline module was

performed, Belize, 2011

|                            |   | Percent of households where correct selection was performed | Number of households with<br>2 or more children age 2-14<br>years |
|----------------------------|---|---|---|
| Region                     | Corozal                                   | 97.4  | 234   |
|                            | Orange Walk                               | 88.8  | 232   |
|                            | Belize (Excluding Belize City South Side) | 96.6  | 145   |
|                            | Belize City South Side                    | 91.7  | 180   |
|                            | Belize District                           | 93.8  | 325   |
|                            | Cayo                                      | 91.9  | 235   |
|                            | Stann Creek                               | 90.8  | 206   |
|                            | Toledo                                    | 86.8  | 280   |
| Area                       | Urban                                     | 93.2  | 531   |
|                            | Rural                                     | 90.7  | 981   |
| Number of                  | 2   | 94.6  | 701   |
| households<br>by number of | 3   | 90.3  | 435   |
| children 2-14              | 4   | 90.9  | 220   |
|                            | 5+  | 82.7  | 156   |
| Total                      |   | 91.6  | 1512  |

Table DQ.14: School attendance by single age
Distribution of household population age 5-24 by educational level and grade attended in the current (or most recent) school year,
Belize, 2011

| Not attending school Primary  | Secon | Secor |       |      |
|---|-------|-------|-------|------|
|   |       |       | ndary |      |
| 1 2 3 4 5 6 DK 1  | 2     | 2     | 3     | 4    |
| Age at 5 10.7 2.5 6.7 1.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| of school year         6         4.2         0.0         29.1         5.5         0.0         0.0         0.0         0.0         0.0         0.0 | 0.2   | 0.2   | 0.0   | 0.0  |
| 7 1.6 0.0 47.1 27.3 3.5 0.0 0.0 0.0 0.0 0.0 0.0   | 0.0   | 0.0   | 0.0   | 0.0  |
| 8     3.6     0.0     22.9     45.8     22.2     1.6     0.0     0.0     0.0     0.0  | 0.2   | 0.2   | 0.0   | 0.0  |
| 9 2.3 0.0 7.4 24.3 40.0 23.4 1.1 0.3 0.0 0.0  | 0.0   | 0.0   | 0.3   | 0.0  |
| 10 1.7 0.0 2.8 8.6 24.2 42.3 17.2 0.9 0.0 0.3   | 0.0   | 0.0   | 0.0   | 0.0  |
| 11 2.4 0.0 0.0 4.4 9.7 26.7 41.4 12.6 0.0 0.7   | 0.1   | 0.1   | 0.0   | 0.4  |
| 12 5.1 0.0 0.8 0.7 2.4 15.8 27.5 31.4 0.0 14.1  | 1.0   | 1.0   | 0.0   | 0.0  |
| 13 11.8 0.0 0.0 0.0 0.7 4.6 15.4 25.9 0.0 28.5  | 11.7  | 11.7  | 1.0   | 0.0  |
| 14 19.5 0.0 0.6 0.6 0.4 0.4 4.2 14.4 0.0 23.5   | 25.1  | 25.1  | 9.5   | 0.8  |
| 15 29.8 0.0 0.0 0.1 0.3 0.6 1.0 4.3 0.0 13.9  | 20.2  | 20.2  | 20.0  | 7.2  |
| 16 40.7 0.0 0.0 0.0 0.3 0.5 0.0 2.0 0.0 6.4   | 10.6  | 10.6  | 18.4  | 14.8 |
| 17     49.1     0.0     0.0     0.2     0.2     0.0     0.2     0.1     0.0     1.9   | 6.0   | 6.0   | 13.0  | 13.4 |
| 18 66.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.4 0.2 0.7   | 1.2   | 1.2   | 2.2   | 8.2  |
| 19 71.0 0.0 0.0 0.4 0.0 0.0 0.0 0.0 0.0 0.0 0   | 0.8   | 0.8   | 1.8   | 5.2  |
| 20 80.9 0.0 0.0 0.0 0.3 0.5 0.0 0.0 0.0 0.0   | 0.9   | 0.9   | 1.1   | 2.4  |
| 21 83.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0   | 0.0   | 0.0   | 0.4   | 1.1  |
| 22 90.4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0   | 0.0   | 0.0   | 0.8   | 0.7  |
| 23 91.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0   | 0.3   | 0.3   | 0.5   | 0.7  |
| 24 94.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0   | 0.0   | 0.0   | 0.0   | 0.0  |

Table DQ.14: School attendance by single age (continued)

Distribution of household population age 5-24 by educational level and grade attended in the current (or most recent) school year,

Belize, 2011

|                  |    | Associates | Bachelors<br>and higher | CET/ITVET/VOTEC | Infant | DK  | Total | Number of household members |
|------------------|----|------------|-------------------------|-----------------|--------|-----|-------|-----------------------------|
| Age at beginning | 5  | 0.0        | 0.0                     | 0.0             | 76.8   | 1.5 | 100.0 | 403                         |
| of school        | 6  | 0.0        | 0.0                     | 0.0             | 59.3   | 1.5 | 100.0 | 384                         |
| year             | 7  | 0.0        | 0.0                     | 0.0             | 18.9   | 1.6 | 100.0 | 404                         |
|                  | 8  | 0.0        | 0.0                     | 0.0             | 2.3    | 1.4 | 100.0 | 416                         |
|                  | 9  | 0.0        | 0.0                     | 0.0             | 0.3    | 0.5 | 100.0 | 466                         |
|                  | 10 | 0.0        | 0.2                     | 0.0             | 0.0    | 1.9 | 100.0 | 411                         |
|                  | 11 | 0.0        | 0.0                     | 0.0             | 0.3    | 1.3 | 100.0 | 406                         |
|                  | 12 | 0.0        | 0.0                     | 0.0             | 0.0    | 1.2 | 100.0 | 395                         |
|                  | 13 | 0.0        | 0.0                     | 0.0             | 0.0    | 0.4 | 100.0 | 417                         |
|                  | 14 | 0.3        | 0.0                     | 0.5             | 0.0    | 0.3 | 100.0 | 361                         |
|                  | 15 | 0.9        | 0.0                     | 0.7             | 0.0    | 0.8 | 100.0 | 414                         |
|                  | 16 | 4.0        | 0.3                     | 1.9             | 0.0    | 0.2 | 100.0 | 338                         |
|                  | 17 | 12.9       | 0.4                     | 2.6             | 0.0    | 0.0 | 100.0 | 379                         |
|                  | 18 | 17.2       | 1.7                     | 1.6             | 0.0    | 0.3 | 100.0 | 362                         |
|                  | 19 | 13.9       | 5.3                     | 0.9             | 0.0    | 0.0 | 100.0 | 343                         |
|                  | 20 | 10.6       | 3.3                     | 0.0             | 0.0    | 0.0 | 100.0 | 304                         |
|                  | 21 | 9.5        | 5.3                     | 0.5             | 0.0    | 0.0 | 100.0 | 297                         |
|                  | 22 | 3.9        | 3.6                     | 0.3             | 0.0    | 0.0 | 100.0 | 310                         |
|                  | 23 | 5.5        | 1.7                     | 0.0             | 0.0    | 0.0 | 100.0 | 323                         |
|                  | 24 | 4.2        | 1.5                     | 0.0             | 0.0    | 0.0 | 100.0 | 286                         |

Table DQ.15: Sex ratio at birth among children ever born and living
Sex ratio (number of males per 100 females) among children ever born (at birth), children living, and deceased children, by age of women, Belize, 2011

|     |       | Chi                      | dren Ever Born                |              | CI                    | hildren Living             |              | Child                        | Iren Deceased                      |              |                    |
|-----|-------|--------------------------|-------------------------------|--------------|-----------------------|----------------------------|--------------|------------------------------|------------------------------------|--------------|--------------------|
|     |       | Number of sons ever born | Number of daughters ever born | Sex<br>ratio | Number of sons living | Number of daughters living | Sex<br>ratio | Number of de-<br>ceased sons | Number of<br>deceased<br>daughters | Sex<br>ratio | Number of<br>women |
| Age | 15-19 | 53                       | 59                            | 0.90         | 53                    | 59                         | 0.90         | 0                            | 0                                  | na.          | 852                |
|     | 20-24 | 330                      | 360                           | 0.92         | 326                   | 355                        | 0.92         | 4                            | 5                                  | 0.80         | 729                |
|     | 25-29 | 642                      | 632                           | 1.02         | 625                   | 618                        | 1.01         | 17                           | 14                                 | 1.21         | 655                |
|     | 30-34 | 830                      | 793                           | 1.05         | 796                   | 769                        | 1.04         | 34                           | 24                                 | 1.42         | 554                |
|     | 35-39 | 890                      | 897                           | 0.99         | 846                   | 876                        | 0.97         | 44                           | 21                                 | 2.10         | 516                |
|     | 40-44 | 916                      | 910                           | 1.01         | 865                   | 876                        | 0.99         | 51                           | 34                                 | 1.50         | 431                |
|     | 45-49 | 817                      | 764                           | 1.07         | 746                   | 729                        | 1.02         | 71                           | 35                                 | 2.03         | 359                |
|     | Total | 4478                     | 4415                          | 0.99         | 4257                  | 4282                       | 0.98         | 221                          | 133                                | 1.51         | 4096               |

na Not applicable

# Appendix G. MICS4 Indicators: Numerators and Denominators

| MICS4        | INDICATOR   | Module <sup>1</sup> | Numerator  | Denominator   | MDG <sup>2</sup> |
|--------------|---|---------------------|--|---|------------------|
| 1. MOR       | TALITY  |                     |  |   |                  |
| 1.1          | Under-five mortality rate <sup>3</sup>                    | СМ                  | Probability of dying by exact age 5 year   | ars   | MDG 4.1          |
| 1.2          | Infant mortality rate <sup>4</sup>                        | CM                  | Probability of dying by exact age 1 year   | nr  | MDG 4.2          |
| 2. NUT       | RITION  |                     |  |   |                  |
| 2.1a<br>2.1b | Underweight preva-<br>lence                               | AN                  | Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median weight for age of the WHO standard               | Total number of children under age 5  | MDG 1.8          |
| 2.2a<br>2.2b | Stunting prevalence                                       | AN                  | Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median height for age of the WHO standard               | Total number of children under age 5  |                  |
| 2.3a<br>2.3b | Wasting prevalence  | AN                  | Number of children under age 5 who (a) fall below minus two standard deviations (moderate and severe) (b) fall below minus three standard deviations (severe) from the median weight for height of the WHO standard            | Total number of children under age 5  |                  |
| 2.4          | Children ever breastfed                                   | MN                  | Number of women with a live birth<br>in the 2 years preceding the survey<br>who breastfed the child at any time  | Total number of women with a live birth in the 2 years preceding the survey |                  |
| 2.5          | Early initiation of breastfeeding                         | MN                  | Number of women with a live birth in<br>the 2 years preceding the survey who<br>put the newborn infant to the breast<br>within 1 hour of birth   | Total number of women with a live birth in the 2 years preceding the survey |                  |
| 2.6          | Exclusive breastfeed-<br>ing under 6 months               | BF                  | Number of infants under 6 months of age who are exclusively breastfed <sup>5</sup>   | Total number of infants under 6 months of age                               |                  |
| 2.7          | Continued breastfeed-<br>ing at 1 year                    | BF                  | Number of children age 12-15<br>months who are currently breast-<br>feeding  | Total number of children age 12-15 months                                   |                  |
| 2.8          | Continued breastfeed-<br>ing at 2 years                   | BF                  | Number of children age 20-23<br>months who are currently breast-<br>feeding  | Total number of children age 20-23 months                                   |                  |
| 2.9          | Predominant breast-<br>feeding under 6<br>months          | BF                  | Number of infants under 6 months of<br>age who received breast milk as the<br>predominant source of nourishment <sup>6</sup><br>during the previous day  | Total number of infants under 6 months of age                               |                  |
| 2.10         | Duration of breast-<br>feeding                            | BF                  | The age in months when 50 percent of milk during the previous day  | children age 0-35 months did not receive breast                             |                  |
| 2.11         | Bottle feeding  | BF                  | Number of children age 0-23 months<br>who were fed with a bottle during<br>the previous day  | Total number of children age 0-23 months                                    |                  |
| 2.12         | Introduction of solid,<br>semi-solid or soft<br>foods     | BF                  | Number of infants age 6-8 months<br>who received solid, semi-solid or soft<br>foods during the previous day  | Total number of infants age 6-8 months                                      |                  |
| 2.13         | Minimum meal frequency                                    | BF                  | Number of children age 6-23 months receiving solid, semi-solid and soft foods (plus milk feeds for non-breast-fed children) the minimum times <sup>7</sup> or more, according to breastfeeding status, during the previous day | Total number of children age 6-23 months                                    |                  |
| 2.14         | Age-appropriate breastfeeding                             | BF                  | Number of children age 0-23 months appropriately fed <sup>s</sup> during the previous day  | Total number of children age 0-23 months                                    |                  |
| 2.15         | Milk feeding frequen-<br>cy for non-breastfed<br>children | BF                  | Number of non-breastfed children<br>age 6-23 months who received at<br>least 2 milk feedings during the pre-<br>vious day  | Total number of non-breastfed children age 6-23 months                      |                  |

| MICS4 II | NDICATOR  | Module <sup>1</sup> | Numerator  | Denominator   | MDG <sup>2</sup> |
|----------|---|---------------------|--|---|------------------|
| 2.17     | Vitamin A supplemen-<br>tation (children under<br>age 5)          | IM                  | Number of children age 6-59 months<br>who received at least one high-<br>dose vitamin A supplement in the 6<br>months preceding the survey   | Total number of children age 6-59 months  |                  |
| 2.18     | Low-birthweight in-<br>fants                                      | MN                  | Number of last live births in the 2<br>years preceding the survey weighing<br>below 2,500 grams at birth   | Total number of last live births in the 2 years preceding the survey                        |                  |
| 2.19     | Infants weighed at birth  | MN                  | Number of last live births in the 2<br>years preceding the survey who<br>were weighed at birth   | Total number of last live births in the 2 years preceding the survey                        |                  |
| 3. CHILD | HEALTH  |                     |  |   |                  |
| 3.1      | Tuberculosis immuni-<br>zation coverage                           | IM                  | Number of children age 18-29<br>months who received BCG vaccine<br>before their first birthday   | Total number of children age 12-23 months   |                  |
| 3.2      | Polio immunization coverage                                       | IM                  | Number of children age 18-29<br>months who received OPV3 vaccine<br>before their first birthday  | Total number of children age 12-23 months   |                  |
| 3.3      | Immunization coverage for diphtheria, pertussis and tetanus (DPT) | IM                  | Number of children age 18-29<br>months who received DPT3 vaccine<br>before their first birthday  | Total number of children age 12-23 months   |                  |
| 3.4      | Measles immunization coverage                                     | IM                  | Number of children age 18-29<br>months who received measles vac-<br>cine before their first birthday   | Total number of children age 12-23 months   | MDG 4.3          |
| 3.5      | Hepatitis B immuniza-<br>tion coverage                            | IM                  | Number of children age 18-29<br>months who received the third dose<br>of Hepatitis B vaccine before their<br>first birthday  | Total number of children age 12-23 months   |                  |
| 3.7      | Neonatal tetanus pro-<br>tection                                  | MN                  | Number of women age 15-49 years with a live birth in the 2 years preceding the survey who were given at least two doses of tetanus toxoid vaccine within the appropriate interval <sup>9</sup> prior to giving birth         | Total number of women age 15-49 years with a live birth in the 2 years preceding the survey |                  |
| 3.8      | Oral rehydration therapy with continued feeding                   | CA                  | Number of children under age 5 with<br>diarrhoea in the previous 2 weeks<br>who received ORT (ORS packet or<br>recommended homemade fluid or<br>increased fluids) and continued feed-<br>ing during the episode of diarrhoea | Total number of children under age 5 with diar-<br>rhoea in the previous 2 weeks            |                  |
| 3.9      | Care-seeking for suspected pneumonia                              | CA                  | Number of children under age 5 with<br>suspected pneumonia in the previ-<br>ous 2 weeks who were taken to an<br>appropriate health provider  | Total number of children under age 5 with suspected pneumonia in the previous 2 weeks       |                  |
| 3.10     | Antibiotic treatment of suspected pneumonia                       | CA                  | Number of children under age 5 with<br>suspected pneumonia in the previ-<br>ous 2 weeks who received antibiotics   | Total number of children under age 5 with suspected pneumonia in the previous 2 weeks       |                  |
| 3.11     | Solid fuels   | НС                  | Number of household members in<br>households that use solid fuels as<br>the primary source of domestic ener-<br>gy to cook   | Total number of household members   |                  |
| 3.21     | Child at increased risk of disability                             | DA                  | Number of children age 2-9 years<br>reported by mothers/caretakers to<br>have at least one of the specified<br>impairments or activity limitations <sup>10</sup>   | Total number of children age 2-9 years  |                  |
| 4. WATE  | R AND SANITATION  |                     |  |   |                  |
| 4.1      | Use of improved drink-<br>ing water sources                       | WS                  | Number of household members using improved sources of drinking water   | Total number of household members   | MDG 7.8          |
| 4.2      | Water treatment   | WS                  | Number of household members<br>using unimproved drinking water<br>who use an appropriate treatment<br>method   | Total number of household members in households using unimproved drinking water sources     |                  |
| 4.3      | Use of improved san-<br>itation                                   | WS                  | Number of household members using improved sanitation facilities which are not shared  | Total number of household members   | MDG 7.9          |
| 4.4      | Safe disposal of child's faeces                                   | CA                  | Number of children age 0-2 years<br>whose last stools were disposed of<br>safely   | Total number of children age 0-2 years  |                  |

| MICS4 I      | NDICATOR                                   | Module <sup>1</sup> | Numerator   | Denominator   | MDG <sup>2</sup> |
|--------------|--|---------------------|---|---|------------------|
| 4.5          | Place for hand washing                     | HW                  | Number of households with a spe-<br>cific place for hand washing where<br>water and soap are present  | Total number of households  |                  |
| 4.6          | Availability of soap                       | HW                  | Number of households with soap anywhere in the dwelling   | Total number of households  |                  |
| 5. REPR      | ODUCTIVE HEALTH                            |                     |   |   |                  |
| 5.1          | Adolescent birth rate <sup>11</sup>        | CM - BH             | Age-specific fertility rate for women ag the survey   | ge 15-19 years for the one year period preceding  | MDG 5.4          |
| 5.2          | Early childbearing                         | CM - BH             | Number of women age 20-24 years<br>who had at least one live birth before<br>age 18   | Total number of women age 20-24 years   |                  |
| 5.3          | Contraceptive preva-<br>lence rate         | СР                  | Number of women age 15-49 years<br>currently married or in union who<br>are using (or whose partner is using)<br>a (modern or traditional) contracep-<br>tive method  | Total number of women age 15-49 years who are currently married or in union                 | MDG 5.3          |
| 5.4          | Unmet need <sup>12</sup>                   | UN                  | Number of women age 15-49 years who are currently married or in union who are fecund and want to space their births or limit the number of children they have and who are not currently using contraception | Total number of women age 15-49 years who are currently married or in union                 | MDG 5.6          |
| 5.5a<br>5.5b | Antenatal care cov-<br>erage               | MN                  | Number of women age 15-49 years who were attended during pregnancy in the 2 years preceding the survey (a) at least once by skilled personnel (b) at least four times by any provider                       | Total number of women age 15-49 years with a live birth in the 2 years preceding the survey | MDG 5.5          |
| 5.6          | Content of antenatal care                  | MN                  | Number of women age 15-49 years with a live birth in the 2 years preceding the survey who had their blood pressure measured and gave urine and blood samples during the last pregnancy                      | Total number of women age 15-49 years with a live birth in the 2 years preceding the survey |                  |
| 5.7          | Skilled attendant at delivery              | MN                  | Number of women age 15-49 years with a live birth in the 2 years preceding the survey who were attended during childbirth by skilled health personnel   | Total number of women age 15-49 years with a live birth in the 2 years preceding the survey | MDG 5.2          |
| 5.8          | Institutional deliveries                   | MN                  | Number of women age 15-49 years<br>with a live birth in the 2 years<br>preceding the survey who delivered<br>in a health facility   | Total number of women age 15-49 years with a live birth in the 2 years preceding the survey |                  |
| 5.9          | Caesarean section                          | MN                  | Number of last live births in the 2<br>years preceding the survey who<br>were delivered by caesarean section  | Total number of last live births in the 2 years preceding the survey                        |                  |
| 5.10         | Post-partum stay in<br>health facility     | PN                  | Number of women age 15-49 years<br>who stayed in the health facility for<br>12 hours or more after the delivery<br>of their last live birth in the 2 years<br>preceding the survey                          | Total number of women age 15-49 years with a live birth in the 2 years preceding the survey |                  |
| 5.11         | Post-natal health check<br>for the newborn | PN                  | Number of last live births in the last<br>2 years who received a health check<br>while in facility or at home following<br>delivery, or a post-natal care visit<br>within 2 days after birth                | Total number of last live births in the last 2 years  |                  |
| 5.12         | Post-natal health check<br>for the mother  | PN                  | Number of women age 15-49 years<br>who received a health check while in<br>facility or at home following delivery,<br>or a post-natal care visit within 2<br>days after delivery                            | Total number of women age 15-49 years with a live birth in the 2 years preceding the survey |                  |
| 6. CHILE     | DEVELOPMENT                                |                     |   |   |                  |
| 6.1          | Support for learning                       | EC                  | Number of children age 36-59<br>months with whom an adult has<br>engaged in four or more activities to<br>promote learning and school readi-<br>ness in the past 3 days                                     | Total number of children age 36-59 months   |                  |

| MICS4    | INDICATOR  | Module <sup>1</sup> | Numerator   | Denominator  | MDG <sup>2</sup> |
|----------|--|---------------------|---|--|------------------|
| 6.2      | Father's support for<br>learning                 | EC                  | Number of children age 36-59<br>months whose father has engaged<br>in one or more activities to promote<br>learning and school readiness in the<br>past 3 days                            | Total number of children age 36-59 months  |                  |
| 6.3      | Learning materials:<br>children's books          | EC                  | Number of children under age 5 who have three or more children's books  | Total number of children under age 5   |                  |
| 6.4      | Learning materials: playthings                   | EC                  | Number of children under age 5 with two or more playthings  | Total number of children under age 5   |                  |
| 6.5      | Inadequate care                                  | EC                  | Number of children under age 5 left<br>alone or in the care of another child<br>younger than 10 years of age for<br>more than one hour at least once in<br>the past week                  | Total number of children under age 5   |                  |
| 6.6      | Early child develop-<br>ment index               | EC                  | Number of children age 36-59<br>months who are developmentally<br>on track in literacy-numeracy, phys-<br>ical, social-emotional, and learning<br>domains                                 | Total number of children age 36-59 months  |                  |
| 6.7      | Attendance to early childhood education          | EC                  | Number of children age 36-59<br>months who are attending an early<br>childhood education programme  | Total number of children age 36-59 months  |                  |
| 7. LITEF | ACY AND EDUCATION                                |                     |   |  |                  |
| 7.1      | Literacy rate among young women                  | WB                  | Number of women age 15-24 years<br>who are able to read a short simple<br>statement about everyday life or<br>who attended secondary or higher<br>education                               | Total number of women age 15-24 years  | MDG 2.3          |
| 7.2      | School readiness                                 | ED                  | Number of children in first grade of<br>primary school who attended pre-<br>school during the previous school<br>year   | Total number of children attending the first grade of primary school   |                  |
| 7.3      | Net intake rate in pri-<br>mary education        | ED                  | Number of children of school-entry age who enter the first grade of primary school  | Total number of children of school-entry age   |                  |
| 7.4      | Primary school net attendance ratio (adjusted)   | ED                  | Number of children of primary<br>school age currently attending prima-<br>ry or secondary school  | Total number of children of primary school age   | MDG 2.1          |
| 7.5      | Secondary school net attendance ratio (adjusted) | ED                  | Number of children of secondary<br>school age currently attending sec-<br>ondary school or higher   | Total number of children of secondary school age   |                  |
| 7.6      | Children reaching last grade of primary          | ED                  | Proportion of children entering the firs last grade   | t grade of primary school who eventually reach   | MDG 2.2          |
| 7.7      | Primary completion rate                          | ED                  | Number of children attending the last grade of primary school (excluding repeaters)   | Total number of children of primary school com-<br>pletion age (age appropriate to final grade of<br>primary school) |                  |
| 7.8      | Transition rate to sec-<br>ondary school         | ED                  | Number of children attending the last<br>grade of primary school during the<br>previous school year who are in the<br>first grade of secondary school dur-<br>ing the current school year | Total number of children attending the last grade of primary school during the previous school year                  |                  |
| 7.9      | Gender parity index (primary school)             | ED                  | Primary school net attendance ratio (adjusted) for girls  | Primary school net attendance ratio (adjusted) for boys  | MDG 3.1          |
| 7.10     | Gender parity index (secondary school)           | ED                  | Secondary school net attendance ratio (adjusted) for girls  | Secondary school net attendance ratio (adjusted) for boys  | MDG 3.1          |
| 8. CHIL  | PROTECTION                                       |                     |   |  |                  |
| 8.1      | Birth registration                               | BR                  | Number of children under age 5 whose births are reported registered   | Total number of children under age 5   |                  |
| 8.2      | Child labour                                     | CL                  | Number of children age 5-14 years who are involved in child labour  | Total number of children age 5-14 years  |                  |
| 8.3      | School attendance among child labourers          | ED - CL             | Number of children age 5-14 years<br>who are involved in child labour and<br>are currently attending school   | Total number of children age 5-14 years involved in child labour   |                  |
| 8.4      | Child labour among students                      | ED - CL             | Number of children age 5-14 years<br>who are involved in child labour and<br>are currently attending school   | Total number of children age 5-14 years attending school   |                  |
|          |  |                     |   |  |                  |

| MICS4 I        | NDICATOR   | Module <sup>1</sup> | Numerator   | Denominator  | MDG <sup>2</sup> |
|----------------|--|---------------------|---|--|------------------|
| 8.5            | Violent discipline   | CD                  | Number of children age 2-14 years<br>who experienced psychological<br>aggression or physical punishment<br>during the past month  | Total number of children age 2-14 years  |                  |
| 8.6            | Marriage before age 15   | MA                  | Number of women age 15-49 years<br>who were first married or in union by<br>the exact age of 15   | Total number of women age 15-49 years  |                  |
| 8.7            | Marriage before age 18   | MA                  | Number of women age 20-49 years<br>who were first married or in union by<br>the exact age of 18   | Total number of women age 20-49 years  |                  |
| 8.8            | Young women age<br>15-19 years currently<br>married or in union                        | MA                  | Number of women age 15-19 years who are currently married or in union   | Total number of women age 15-19 years  |                  |
| 8.9            | Polygyny   | MA                  | Number of women age 15-49 years who are in a polygynous union   | Total number of women age 15-49 years who are currently married or in union                  |                  |
| 8.10a<br>8.10b | Spousal age difference   | MA                  | Number of women currently married<br>or in union whose spouse is 10 or<br>more years older,<br>(a) for women age 15-19 years,<br>(b) for women age 20-24 years  | Total number of women currently married or in union (a) age 15-19 years, (b) age 20-24 years |                  |
| 8.14           | Attitudes towards do-<br>mestic violence   | DV                  | Number of women who state that a husband/partner is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food | Total number of women age 15-49 years  |                  |
| 9. HIV/A       | IDS, SEXUAL BEHAVIOUR  | AND ORPHAN          | NS .  |  |                  |
| 9.1            | Comprehensive knowledge about HIV prevention   | НА                  | Number of women age 15-49 years who correctly identify two ways of preventing HIV infection <sup>13</sup> , know that a healthy looking person can have HIV, and reject the two most common misconceptions about HIV transmission   | Total number of women age 15-49 years  |                  |
| 9.2            | Comprehensive knowl-<br>edge about HIV pre-<br>vention among young<br>people           | НА                  | Number of women age 15-24 years who correctly identify two ways of preventing HIV infection <sup>12</sup> , know that a healthy looking person can have HIV, and reject the two most common misconceptions about HIV transmission   | Total number of women age 15-24 years  | MDG 6.3          |
| 9.3            | Knowledge of mother-<br>to-child transmission<br>of HIV                                | НА                  | Number of women age 15-49 years<br>who correctly identify all three<br>means <sup>14</sup> of mother-to-child transmis-<br>sion of HIV  | Total number of women age 15-49 years  |                  |
| 9.4            | Accepting attitudes towards people living with HIV                                     | НА                  | Number of women age 15-49 years<br>expressing accepting attitudes on all<br>four questions <sup>15</sup> toward people living<br>with HIV   | Total number of women age 15-49 years who have heard of HIV                                  |                  |
| 9.5            | Women who know<br>where to be tested<br>for HIV  | НА                  | Number of women age 15-49 years who state knowledge of a place to be tested for HIV   | Total number of women age 15-49 years  |                  |
| 9.6            | Women who have<br>been tested for HIV<br>and know the results                          | НА                  | Number of women age 15-49 years<br>who have been tested for HIV in the<br>12 months preceding the survey and<br>who know their results  | Total number of women age 15-49 years  |                  |
| 9.7            | Sexually active young<br>women who have been<br>tested for HIV and<br>know the results | НА                  | Number of women age 15-24 years who have had sex in the 12 months preceding the survey, who have been tested for HIV in the 12 months preceding the survey and who know their results   | Total number of women age 15-24 years who have had sex in the 12 months preceding the survey |                  |
| 9.8            | HIV counselling during antenatal care  | НА                  | Number of women age 15-49 years who gave birth in the 2 years preceding the survey and received antenatal care, reporting that they received counselling on HIV during antenatal care   | Total number of women age 15-49 years who gave birth in the 2 years preceding the survey     |                  |

| MICS4 I | NDICATOR   | Module <sup>1</sup> | Numerator  | Denominator  | MDG <sup>2</sup> |
|---------|--|---------------------|--|--|------------------|
| 9.9     | HIV testing during antenatal care                    | НА                  | Number of women age 15-49 years who gave birth in the 2 years preceding the survey and received antenatal care, reporting that they were offered and accepted an HIV test during antenatal care and received their results | Total number of women age 15-49 years who gave birth in the 2 years preceding the survey   |                  |
| 9.10    | Young women who have never had sex                   | SB                  | Number of never married women<br>age 15-24 years who have never<br>had sex   | Total number of never married women age 15-24 years  |                  |
| 9.11    | Sex before age 15 among young women                  | SB                  | Number of women age 15-24 years<br>who have had sexual intercourse<br>before age 15  | Total number of women age 15-24 years  |                  |
| 9.12    | Age-mixing among sexual partners                     | SB                  | Number of women age 15-24 years<br>who had sex in the 12 months<br>preceding the survey with a partner<br>who was 10 or more years older   | Total number of women age 15-24 years who have had sex in the 12 months preceding the survey                                     |                  |
| 9.13    | Sex with multiple partners                           | SB                  | Number of women age 15-49 years<br>who have had sexual intercourse<br>with more than one partner in the 12<br>months preceding the survey  | Total number of women age 15-49 years  |                  |
| 9.14    | Condom use during<br>sex with multiple<br>partners   | SB                  | Number of women age 15-49 years who report having had more than one sexual partner in the 12 months preceding the survey who also reported that a condom was used the last time they had sex                               | Total number of women age 15-49 years who reported having had more than one sexual partner in the 12 months preceding the survey |                  |
| 9.15    | Sex with non-regular partners                        | SB                  | Number of sexually active women age 15-24 years who have had sex with a non-marital, non-cohabitating partner in the 12 months preceding the survey  | Total number of women age 15-24 years who have had sex in the 12 months preceding the survey                                     |                  |
| 9.16    | Condom use with non-regular partners                 | SB                  | Number of women age 15-24 years reporting the use of a condom during sexual intercourse with their last non-marital, non-cohabiting sex partner in the 12 months preceding the survey                                      | Total number of women age 15-24 years who had a non-marital, non-cohabiting partner in the 12 months preceding the survey        | MDG 6.2          |
| 9.17    | Children's living ar-<br>rangements                  | HL                  | Number of children age 0-17 years not living with a biological parent  | Total number of children age 0-17 years  |                  |
| 9.18    | Prevalence of children with one or both parents dead | HL                  | Number of children age 0-17 years with one or both parents dead  | Total number of children age 0-17 years  |                  |
| 9.19    | School attendance of orphans                         | HL - ED             | Number of children age 10-14 years<br>who have lost both parents and are<br>attending school   | Total number of children age 10-14 years who have lost both parents  | MDG 6.4          |
| 9.20    | School attendance of non-orphans                     | HL - ED             | Number of children age 10-14 years,<br>whose parents are alive, who are<br>living with one or both parents, and<br>who are attending school  | Total number of children age 10-14 years, whose parents are alive, and who are living with one or both parents                   | MDG 6.4          |
| 11. SUB | JECTIVE WELL-BEING                                   |                     |  |  |                  |
| SW.1    | Life satisfaction                                    | LS                  | Number of women age 15-24 years who are very or somewhat satisfied with their family life, friendships, school, current job, health, where they live, how they are treated by others, and how they look                    | Total number of women age 15-24 years  |                  |
| SW.2    | Happiness  | LS                  | Number of women age 15-24 years who are very or somewhat happy   | Total number of women age 15-24 years  |                  |
| SW.3    | Perception of a better<br>life                       | LS                  | Number of women age 15-24 years whose life improved during the last one year, and who expect that their life will be better after one year   | Total number of women age 15-24 years  |                  |

#### (Footnotes)

- Some indicators are constructed by using questions in several modules. In such cases, only the module(s) which contains most of the necessary information is indicated.
- 2 MDG indicators as of February 2010
- Indicator is defined as "Probability of dying between birth and fifth birthday, during the 5-year period preceding the survey" when estimated from the birth history
- 4 Indicator is defined as "Probability of dying between birth and the first birthday, during the 5-year period preceding the survey" when estimated from the birth history
- Infants receiving breast milk, and not receiving any other fluids or foods, with the exception of oral rehydration solution, vitamins, mineral supplements and medicines
- Infants who receive breast milk and certain fluids (water and water-based drinks, fruit juice, ritual fluids, oral rehydration solution, drops, vitamins, minerals, and medicines), but do not receive anything else (in particular, non-human milk and food-based fluids)
- 7 Breastfeeding children: Solid, semi-solid, or soft foods, two times for infants age 6-8 months, 3 times for children 9-23 months; Non-breastfeeding children: Solid, semi-solid, or soft foods, or milk feeds, four times for children age 6-23 months
- 8 Infants age 0-5 who are exclusively breastfed, and children age 6-23 months who are breastfed and ate solid, semi-solid or soft foods
- 9 See MICS4 manual for a detailed description
- Impairments/activity limitations specified in the questionnaire are: (1) delay in sitting, standing or walking, (2) difficulty seeing, either in the daytime or at night, (3) appearing to have difficulty hearing, (4) difficulty in understanding instructions, (5) difficulty walking or moving arms or weakness or stiffness of limbs, (6) has fits, becomes rigid, loses consciousness, (7) does not learn to do things like other children of the same age, (8) cannot speak or cannot be understood in words, (9) appearing mentally backward, dull or slow, (10) cannot name at least an object (for children age 2 years) or whose speech is not normal (age 3-9 years)
- 11 Indicator is defined as "Age-specific fertility rate for women age 15-19 years, for the 3-year period preceding the survey" when estimated from the birth history
- 12 See MICS4 manual for a detailed description
- 13 Using condoms and limiting sex to one faithful, uninfected partner
- 14 Transmission during pregnancy, during delivery, and by breastfeeding
- Women (1) who think that a female teacher with the AIDS virus should be allowed to teach in school, (2) who would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus, (3) who would not want to keep it as a secret if a family member became infected with the AIDS virus, and (4) who would be willing to care for a family member who became sick with the AIDS virus



### HOUSEHOLD QUESTIONNAIRE

BELIZE

| HOUSEHOLD INFORMATION PANEL       | нн  |
|-----------------------------------|---|
| HH1. Cluster number               | HH2. Household number:                                  |
| HH3. Interviewer name and number: | HH4. Supervisor name and number:                        |
| Name                              | Name  |
| HH5. Day/Month/Year of interview: | /   |
| HH6. Area:                        | HH7. Region:  |
| Urban 1                           | Corozal 1   |
| Rural 2                           | Orange Walk2 Belize (Excluding Belize City South Side)3 |
|                                   | Cayo4   |
|                                   | Stann Creek5  |
|                                   | Toledo6   |
|                                   | Belize City South Side 7                                |

WE ARE FROM THE STATISTICAL INSTITUTE OF BELIZE. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION WITH UNICEF. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE IDENTIFIED.

#### MAY I START NOW?

- $\square$  Yes, permission is given  $\Rightarrow$  Go to HH18 to record the time and then begin the interview.
- $\square$ *No, permission is not given* $\Rightarrow$ *Complete HH9.Discuss this result with your supervisor.*

| After all questionnaires for the household have been comp  | pleted, fill in the following information:                      |
|--|---|
| HH8. Name of head of household:  |   |
| HH9. Result of household interview  Completed01  No household member or no competent respondent at home at time of visit02  Entire household absent for extended | HH10. Respondent to household questionnaire:                    |
| period of time   | Line Number:  |
| Dwelling destroyed   | HH11. Total number of household members:                        |
| HH12. Number of women age 15-49 years:   | HH13. Number of women's questionnaires completed:               |
| HH14. Number of children under age 5:  | HH15. Number of under-5 questionnaires completed:               |
| HH15A. Number of children age 2-9 years:   | HH15B. Number of questionnaires completed for children age 2-9: |
| HH16. Field edited by (Name and number):   | HH17. Data entry clerk (Name and number):                       |
| Name   | Name  |

| HH18.<br>Record the time. | HOU<br>FIRS'  | HOUSEHOLD LISTING FORM FIRST, PLEASE TELL ME THE NAME OF List the head of the household in HL2                             | STING FO<br>ME THE NAM<br>household in | JRM ME OF EACH PE n HL2, line 01                    | ERSON WHO L                           | JSUALLY LI                   | IVES HERE ANI                          | D SHARES A M<br>HL2), their re        | EAL IN THE HO<br>lationship to t      | HOUSEHOLD LISTING FORM FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES HERE AND SHARES A MEAL IN THE HOUSEHOLD, STARTING WITH THE HEAD OF HOUSEHOLD List the head of the household in HL2, line 01. List all other household members (HL2), their relationship to the household head (HL3), and their sex (HL4)                       | TING WITH THE I                                 | HEAD OF HOUS   | SEHOLD (1)                                      |
|---------------------------|---|--|--|---|---------------------------------------|------------------------------|--|---------------------------------------|---------------------------------------|---|---|--|---|
| Hour                      | Then If yes in the  | Then ask: ARE THERE ANY OTHERS WHC<br>If yes, complete listing for questions HL<br>in the household listing form have been | RE ANY OTHI                            | ERS WHO LIVE<br>tions HL2-HL4<br>tve been used.     | HERE, EVEN  <br>4. <i>Then, ask</i> α | IF THEY AR<br>questions 1    | RE NOT AT HON<br>Starting with F       | AE NOW? THE<br>HL5 for each p         | SE MAY INCLUI                         | Then ask: ARE THERE ANY OTHERS WHO LIVE HERE, EVEN IF THEY ARE NOT AT HOME NOW? THESE MAY INCLUDE CHILDREN IN SCHOOL OR ADULTS AT WORK.<br>If yes, complete listing for questions HL2-HL4. Then, ask questions starting with HL5 for each person at a time. Use an additional questionnaire if all rows in the household listing form have been used. | SCHOOL OR ADI<br>ional questionn                | JLTS AT WORK<br>aire if all row                          | .; s  |
| am/pm n                   | ε   |  |  |   |                                       | For<br>women<br>age<br>15-49 | For<br>children<br>age<br>5-14         | For<br>children<br>under age <b>5</b> | For<br>children<br>age 2-9            | F   | For children age <b>0-17</b> years              | ge <b>0-17</b> year.                                     | [6]   |
| HL1. HL2. Line Name       |   |  | H<br>WHAT I<br>DATE C                  | HL5.<br>WHAT IS ( <i>name</i> )'S<br>DATE OF BIRTH? | HL6.<br>HOW OLD<br>IS                 | HL7.                         | H. K                                   | HL9.<br>Who is the<br>MOTHER OR       | . 뽀 兴                                 | 1.<br>.)'s  | HL12.<br>Does<br>(name)'s                       | HL13.<br>Is<br>(name)'s                                  | HL14.<br>Does<br>(name)'s                       |
|                           | RELATION -SHIP OF $(name)$ TO THE HEAD  | ON FEMALE? TO AD   |  |   | (name) :<br>Record in<br>completed    | Circle<br>line               | PRIMARY CARETAKER OF THIS CHILD?       | PRIMARY CARETAKER OF THIS CHILD?      | PRIMARY CARETAKER OF THIS CHILD?      | MOTHER<br>ALIVE?  | NATURAL<br>MOTHER LIVE<br>IN THIS<br>HOUSEHOLD? | NATURAL<br>FATHER<br>ALIVE?                              | NATURAL<br>FATHER LIVE<br>IN THIS<br>HOUSEHOLD? |
|                           | OF<br>HOUSE-  |  |  |   | years. If age is 95                   |                              |  |                                       |                                       | 1 Yes<br>2 No⊗  |   | 1 Yes<br>2 No⊗   | Record  |
|                           | HOLD THE STATE OF | 2 Female   | 98 DK                                  | 9998 DK   | or above,<br>record<br>'95'           | woman<br>is age<br>15-49     | tine number<br>of mother/<br>caretaker | une number<br>of mother/<br>caretaker | une number<br>of mother/<br>caretaker | 8 DK & HL 13  | of mother or<br>00 for "No"                     | Next<br>Line<br>8 DK \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | of father or<br>00 for "No"                     |
| Line Name                 | e Relation*   | on* M F  | Month                                  | Year  | Age                                   | 15-49                        | Mother                                 | Mother                                | Mother                                | Y N DK  | Mother  | Y N DK   | Father  |
| 01                        | , 0   | 1 1 2  |  |   |                                       | 01                           |  |                                       |                                       | 1 2 8   |   | 1 2 8  |   |
| 02                        |   | 1 2  |  |   |                                       | 02                           |  |                                       |                                       | 1 2 8   |   | 1 2 8  |   |
| 03                        |   | 1 2  |  |   |                                       | 03                           |  |                                       |                                       | 1 2 8   |   | 1 2 8  |   |
| 04                        |   | 1 2  |  |   |                                       | 04                           |  |                                       |                                       | 1 2 8   |   | 1 2 8  |   |
| 90                        |   | 1 2  |  |   |                                       | 05                           |  |                                       |                                       | 1 2 8   |   | 1 2 8  |   |
| 90                        |   | 1 2  |  |   |                                       | 90                           |  |                                       |                                       | 1 2 8   |   | 1 2 8  |   |
| 07                        |   | 1 2  |  |   |                                       | 07                           |  |                                       |                                       | 1 2 8   |   | 1 2 8  |   |
| 80                        |   | 1 2  |  |   |                                       | 08                           |  |                                       |                                       | 1 2 8   |   | 1 2 8  |   |
| 60                        |   | 1  |  |   |                                       | 60                           |  |                                       |                                       | 1 2 8   |   | 1 2 8  |   |
|                           |   |  |  |   |                                       |                              |  |                                       |                                       |   |   |  |   |

| HL14.<br>Does   | (name)'S<br>NATURAL               | FATHER LIVE | IN THIS          |                  | Record           | line number                             | of father or                |              | Father             |        |        |       |        |        |        |
|---|-----------------------------------|-------------|------------------|------------------|------------------|---|-----------------------------|--------------|--------------------|--------|--------|-------|--------|--------|--------|
| HL13.   | (name)'S<br>NATURAL               | FATHER      | ALIVE?           | 1 Yes            | 2 No 🕾           | Next                                    | Line                        | Next<br>Line | Y N DK             | 1 2 8  | 1 2 8  | 1 2 8 | 1 2 8  | 1 2 8  | 1 2 8  |
| HL12.<br>Does   | (name)'S<br>NATURAL               | MOTHER LIVE | IN THIS          |                  | Record           | line number                             | of mother or                |              | Mother             |        |        |       |        |        | ——     |
| HL11.<br>Is ( <i>name</i> )'s   | NATURAL<br>MOTHER                 | ALIVE?      |                  | 1 Yes            | 2 No⊘            | HL13                                    | 8 DK☆<br>HI 13              | <u>.</u>     | Y N DK             | 1 2 8  | 1 2 8  | 1 2 8 | 1 2 8  | 1 2 8  | 1 2 8  |
|   | MOTHER OR NATURAL PRIMARY MOTHER  |             | OF THIS          |                  | Record           | line number                             | of mother/                  | 13,000       | Mother             |        |        |       |        |        |        |
|   | MOTHER OR<br>PRIMARY              |             | OF THIS          |                  | Record           | line number   line number   line number | of mother/                  | i cana       | Mother             |        |        |       |        |        |        |
| HL8.<br>WHO IS THE  | MOTHER OR<br>PRIMARY              | CARETAKER   | OF THIS          |                  | Record           | line number                             | of mother/                  |              | Mother             |        |        |       |        |        |        |
|   |                                   |             |                  | _                |                  |   |                             |              |                    |        |        |       |        |        |        |
| HL7.  |                                   |             | Circle (         | her              |                  | woman                                   | is age                      |              | 15-49              | 10     | 11     | 12    | 13     | 14     | 15     |
| HL6. HL7.   | IS<br>(name)?                     |             |                  | number           | if               | woman                                   |                             | }            | Age 15-49          | 10     | 11     | 12    | 13     | 14     | 15     |
| HL6. HL7. How old   | BIRTH? IS (name)?                 |             | Circle<br>ling   | number           | if               | woman                                   | is age                      | }            |                    | 10     | 11     | 12    | 13     | 14     | 15     |
| 5. HL6. HL7. пате)'s Howold   | IS<br>(name)?                     |             | Circle<br>ling   | number           | if               | woman                                   | record is age               | }            | Age                |        |        | 12    | 13     |        |        |
| HL5. HL6. HL7. WHAT IS (name)'S HOW OLD   | MALE OR DATE OF BIRTH? IS (name)? |             | Record in Circle | vears. If number | age is 95 if     | woman                                   | 98 DK 9998 DK record is age | }            | Year Age           | 1 2 10 | 1 2 11 | 1 2   | 1 2 13 | 1 2 14 | 1 2 15 |
| 3.         HL4.         HL5.         HL6.         HL7.           F1S         IS (name)         WHAT IS (name)         HOW OLD | MALE OR DATE OF BIRTH? IS (name)? |             | Circle<br>ling   | vears. If number | SE- age is 95 if | 1 Male or above, woman                  | 98 DK 9998 DK record is age | }            | F Month Year Age   |        | 1 2    |       |        |        |        |
| 3.         HL4.         HL5.         HL6.         HL7.           F1S         IS (name)         WHAT IS (name)         HOW OLD | MALE OR DATE OF BIRTH? IS (name)? |             | Record in Circle | vears. If number | age is 95 if     | 1 Male or above, woman                  | 98 DK 9998 DK record is age | }            | M F Month Year Age |        | 1 2    |       |        |        |        |

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| 13 Adopted/Foster/Stepchild   | 14 Not related    | 98 Don't know                   |  |
|-------------------------------|-------------------|---------------------------------|--|
| 10 Uncle/Aunt                 | 11 Niece/Nephew   | 12 Other relative               |  |
| 07 Parent-in-Law              | 08 Brother/Sister | 09 Brother-in-Law/Sister-in-Law |  |
| 04 Son-in-Law/Daughter-in-Law | 05 Grandchild     | 06 Parent                       |  |
| 01 Head                       | 02 Wife / Husband | 03 Son / Daughter               |  |

Tick here if additional questionnaire is used  $\ \square$ 

For each child under5 years, write his/her name and line number AND the line number of his/her mother or caretaker in the information panel of a separate Under-5 Questionnaire. For each child age 2 – 9 years, write his/her name and line number AND the name and line number of his/her mother or caretaker in the information panel of a separate Child Disability Now for each woman age 15-49 years, write her name and line number and other identifying information in the information panel of a separate Individual Women's Questionnaire. Questionnaire.

You should now have a separate questionnaire for each eligible woman, each child under five and each child age 2-9 years in the household.

| ED               |  | Ř  |   | <u> </u>          |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|------------------|--|--|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| _                |  | CHOOL YEAR,<br>RD /FORM/YEA  | Standard<br>/Form<br>/Year:<br>98 DK  | Std/Form/<br>Year |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|                  | 4 years                                      | ED8.  DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND STANDARD /FORM/YEAR DID (name) ATTEND? | Level: 0 Preschool 7 Infant 1 Primany 2 Secondary 4 Associates 5 Bachelors & Higher 6 CET/ITVET/NOTEC 8 DK 9 Other If level=0, go to next line. | Level             | 012456789         | 012456789         | 012456789         | 012456789         | 012456789         | 012456789         | 0 1 2 4 5 6 7 8 9 | 012456789         | 012456789         | 012456789         | 0 1 2 4 5 6 7 8 9 | 012456789         | 0 1 2 4 5 6 7 8 9 | 012456789         | 0 1 2 4 5 6 7 8 9 |
|                  | For household members age <b>5-24</b> years  | ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS 2009-  | 2010, DID (name) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No S Next Line 8 DK S Next Line  | Y N DK            | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             | 1 2 8             |
|                  | household n                                  | AR, WHICH<br>DRM/YEAR  | Standard<br>/Form<br>/Year:<br>98 DK  | Std/Form / Year   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|                  | For  | ED6. DURING THIS SCHOOL YEAR, WHICH LEVEL AND STANDARD /FORM/YEAR IS (name) ATTENDING?         | Level: 0 Preschool 7 Infant 7 Infant 2 Primary 4 Associates 5 Bachelors & Higher 6 ET/ITVET/NOTEC 8 DK 9 Other If level=0, skip to ED7          | Level             | 0 1 2 4 5 6 7 8 9 | 012456789         | 0 1 2 4 5 6 7 8 9 | 012456789         | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 012456789         | 0 1 2 4 5 6 7 8 9 |
|                  |  | ED5. DURING THE 2010-2011 SCHOOL YEAR, DID (name)  | ATTEND SCHOOL OR PRE-SCHOOL AT ANY TIME? 1 Yes 2 No & ED7   | Yes No            | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               |
|                  |  | ED4B. WHAT IS THE HIGHEST STANDARD   | (name) COMPLETED AT THIS LEVEL? LEVEL?  98 DK If less than I year, enter 00.  | Std/Form/<br>Year |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|                  | For household members age <b>5 and above</b> | ED4A. WHAT IS THE HIGHEST LEVEL OF SCHOOL (name) ATTENDED?                                     | Level: 0 Preschool 7 Infant 7 Infant 6 Secondary 4 Associates 5 Bachelors & Higher 6 CET/ITVET/VOTEC 8 DK 9 Other If Iervel=0, skip to ED5      | Level             | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 | 0 1 2 4 5 6 7 8 9 |
|                  | embers age                                   | ED3. HAS (name) EVER ATTENDED  | SCHOOL OR<br>PRE-<br>SCHOOL?<br>2 Nos<br>Next<br>Line   | Yes No            | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               | 1 2               |
|                  | ousehold m                                   | e<br>d Listing<br>HL6  |   | Age               |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
|                  | For hc                                       | ED2. Name and age Copy from Household Listing Form, HL2 and HL6                                |   | Name              |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |                   |
| <b>EDUCATION</b> |  | ED1.<br>Line<br>number   |   | Line              | 0                 | 02                | 03                | 04                | 02                | 90                | 07                | 80                | 60                | 10                | 11                | 12                | 13                | 14                | 15                |

| WATER AND SANITATION  |                                 | ws   |
|---|---------------------------------|--|
| WS1. What is the Main source of drinking water for members of your household?                                     | Piped water Piped into dwelling | 11⇒WS6<br>12⇒WS6<br>13⇒WS6<br>14⇒WS3<br>21⇒WS3<br>31⇒WS3<br>32⇒WS3 |
|   | Protected spring                | 41⇒WS3<br>42⇒WS3<br>51⇒WS3<br>61⇒WS3<br>71⇒WS3                     |
|   | Bottled water                   | 96 <b>⇒WS</b> 3  |
| WS2. What is the Main source of water used by your household for other purposes such as cooking and hand washing? | Piped water Piped into dwelling | 11⇔WS6<br>12⇔WS6<br>13⇔WS6   |
| WS3. WHERE IS THAT WATER SOURCE LOCATED?  | In own dwelling                 | 1⇒WS6<br>2⇒WS6   |
| WS4. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?   | Number of minutes         998   |  |

|   | T   | ,       |
|---|---|---------|
| WS5. WHO USUALLY GOES TO THIS SOURCE        | Female (age 15+ years)1                     |         |
| TO FETCH THE WATER FOR YOUR                 | Male (age 15+ years)2                       |         |
| HOUSEHOLD?                                  | Female (under 15)3                          |         |
|   | Male (under 15)4                            |         |
| Probe:                                      | Iviaic (dilder 13)                          |         |
|   | DI  |         |
| IS THIS PERSON UNDER AGE 15?                | DK8   |         |
| WHAT SEX?                                   |   |         |
| WS6. Do you do anything to the water        | Yes1  |         |
| TO MAKE IT SAFER TO DRINK?                  | No2   | 2⇒WS8   |
| TO WAKE IT SAFEK TO DRINK!                  | NO  | 2→ W30  |
|   | DI.   | 0.11400 |
|   | DK8   | 8⇒WS8   |
|   |   |         |
| WS7. WHAT DO YOU USUALLY DO TO MAKE         | Boil A                                      |         |
| THE WATER SAFER TO DRINK?                   | Add bleach / chlorine B                     |         |
| THE WATER SAFER TO DRINK!                   |   |         |
| D 1   | Strain it through a cloth                   |         |
| Probe:                                      | Use water filter (ceramic, sand, composite, |         |
| Anything else?                              | etc.) D                                     |         |
|   | Solar disinfection E                        |         |
| Record all items mentioned.                 | Let it stand and settleF                    |         |
|   |   |         |
|   | Other (specify)X                            |         |
|   | DKZ   |         |
|   |   |         |
| WS8. WHAT KIND OF TOILET FACILITY DO        | Flush / Pour flush                          |         |
| MEMBERS OF YOUR HOUSEHOLD USUALLY           | Flush to piped sewer system11               |         |
| USE?  | Flush to septic tank12                      |         |
|   | Flush to pit (latrine)13                    |         |
| If "flush" or "pour flush", probe:          | Flush to somewhere else14                   |         |
| WHERE DOES IT FLUSH TO?                     | Flush to unknown place / Not sure /         |         |
| WHERE DOES IT FLOSH TO:                     | DK where15                                  |         |
| 16  |   |         |
| If necessary, ask permission to observe the | Pit latrine                                 |         |
| facility.                                   | Ventilated Improved Pit latrine (VIP)21     |         |
|   | Pit latrine with slab22                     |         |
|   | Pit latrine without slab / Open pit23       |         |
|   |   |         |
|   | Composting toilet31                         |         |
|   | Bucket41                                    |         |
|   | Hanging toilet, Hanging latrine51           |         |
|   | Tranging tollet, tranging latine            |         |
|   | No facilities Buch Field 05                 | 95⇒Next |
|   | No facilities, Bush, Field95                |         |
|   |   | Module  |
|   | Other ( <i>specify</i> )96                  |         |
|   |   |         |
| WS9. Do you share this facility with        | Yes1  |         |
| OTHERS WHO ARE NOT MEMBERS OF               | No  | 2⇒Next  |
| YOUR HOUSEHOLD?                             |   | Module  |
|   |   | Module  |
| WS10. Do you share this facility only       | Other households only (not public)1         |         |
| WITH MEMBERS OF OTHER HOUSEHOLDS            | Public facility2                            | 2⇒Next  |
| THAT YOU KNOW, OR IS THE FACILITY           |   | Module  |
| OPEN TO THE USE OF THE GENERAL              |   |         |
| PUBLIC?                                     |   |         |
|   |   |         |
| WS11. How many households in total          |   |         |
| USE THIS TOILET FACILITY, INCLUDING         | Number of households (if less than 10) 0    |         |
| YOUR OWN HOUSEHOLD?                         |   |         |
|   | Ten or more households10                    |         |
|   |   |         |
|   | DK98  |         |
|   |   |         |
|   |   |         |

| HOUSEHOLD CHARACTERISTICS   |   |
|---|---|
| HC1a. What is the religion of the head of this household?   | Anglican       01         Baptist       02         Jehovah's Witness       03         Mennonite       04         Methodist       05         Nazarene       06         Pentecostal       07         Roman Catholic       08         Seventh-Day Adventist       09         None       95 |
| HC1B. WHAT IS THE FIRST LANGUAGE OF THE   | Other (specify)         96           Don't Know         98           English         01   |
| HEAD OF THIS HOUSEHOLD?   | Spanish       .02         Garifuna       .03         Ketchi/Mopan/Yucatecan       .04         German       .05         Indian       .06         Chinese/Taiwanese       .07         Creole       .08  |
|   | Other ( <i>specify</i> ) 96   |
| HC1c. To what ethnic group does the head of this household belong?  | Creole  |
|   | DK/NS98   |
| HC2. HOW MANY ROOMS IN THIS DWELLING UNIT ARE USED FOR SLEEPING BY THE MEMBERS OF THIS HOUSEHOLD?   | Number of rooms   |
| HC3. Main material of the dwelling unit floor.  Record observation.  If there is more than one kind of material, record the main flooring material. | Natural floor       Earth/ Sand       11         Rudimentary floor       Wood planks       21         Plywood       23         Finished floor       Parquet or polished wood       31         Concrete       34         Other (specify)       96  |

| HC4. Main material of the roof.   | Natural roofing   |                                      |
|---|---|--------------------------------------|
| Record observation.   | Thatch/Bay leaf12   |                                      |
| Kecora observation.   | Rudimentary Roofing Rubber rye25  |                                      |
|   | Finished roofing Sheet metal/corrugated zinc  |                                      |
|   | Other (specify)96   |                                      |
| HC5. Main material of the exterior walls.  Record observation.  | Natural walls No walls11 Palmetto/Wildcane/Sticks12   |                                      |
|   | Rudimentary walls Bamboo with mud   |                                      |
|   | Finished walls Concrete   |                                      |
|   | Other(specify)96  |                                      |
| HC6. What type of fuel does your household <u>mainly</u> use for cooking?   | Electricity       01         Butane       02         Biogas       04         Kerosene       05         Charcoal       07         Wood       08         Agricultural crop residue       11 | 01⇒HC8<br>02⇒HC8<br>04⇒HC8<br>05⇒HC8 |
|   | No food cooked in household   | 95⇒HC8                               |
| HC7. IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS?  If 'In the house', probe: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN? | In the house In a separate room used as kitchen1 Elsewhere in the house   |                                      |
| SELVINORE ROOM SOLD NO WINTONIEW:   | Other (specify)6  |                                      |
| HC8. Does your household have:  | Yes No  |                                      |
| [A] ELECTRICITY?  | Electricity1 2  |                                      |
| [B] A RADIO?  | Radio1 2  |                                      |

|   | Yes                      | No |
|---|--------------------------|----|
| [C] A TELEVISION?                           | Television1              | 2  |
| [D] A NON-MOBILE TELEPHONE?                 | Non-mobile telephone 1   | 2  |
| [E] A REFRIGERATOR?                         | Refrigerator1            | 2  |
| [F] A Fan?                                  | Fan1                     | 2  |
| [G] A MICRO WAVE OVEN?                      | Micro Wave Oven1         | 2  |
| [H] A SECURITY ALARM SYSTEM?                | Security Alarm System 1  | 2  |
| [I] A WASHING MACHINE?                      | Washing Machine1         | 2  |
| [J] A DV D PLAYER?                          | DVD Player1              | 2  |
| [K] A Gas Bar-B-Q Grill?                    | Gas Bar-B-Q Grill1       | 2  |
| [L] AN AIR CONDITIONER?                     | Air Conditioner1         | 2  |
| [M] A WATER COOLER?                         | Water Cooler1            | 2  |
| [N] A SOFA?                                 | Sofa1                    | 2  |
| [O] A DINING ROOM TABLE?                    | Dining Room Table1       | 2  |
| [P] A CLOTHES CLOSET?                       | Clothes Closet1          | 2  |
| HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN: |                          |    |
| [A] A WATOU?                                | Yes                      | No |
| [A] A WATCH?                                | Watch1                   | 2  |
| [B] A CELL TELEPHONE?                       | Cell telephone1          | 2  |
| [C] A BICYCLE?                              | Bicycle1                 | 2  |
| [D] A MOTORCYCLE OR SCOOTER?                | Motorcycle/Scooter1      | 2  |
| [F] A CAR OR TRUCK?                         | Car/Truck1               | 2  |
| [G] A BOAT WITH A MOTOR?                    | Boat with motor1         | 2  |
| [H] AN MP3/MP4 PLAYER?                      | Mp3/mp4 player1          | 2  |
| [I] A FISHING ROD?                          | Fishing Rod1             | 2  |
| [J] A WEIGHT TRAINING MACHINE?              | Weight Training Machine1 | 2  |
| [K] A COMPUTER                              | Computer1                | 2  |

| HC10. Do you or someone living in this household own this dwelling?  | Own                          |        |
|--|------------------------------|--------|
| If "No", then ask: DO YOU RENT THIS DWELLING FROM SOMEONE NOT LIVING IN THIS HOUSEHOLD?  | Other (Not owned or rented)6 |        |
| If "Rented from someone else", circle "2".<br>For other responses, circle "6".   |                              |        |
| HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?   | Yes                          | 2⇒HC13 |
| HC12. HOW MANY ACRES OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN?  If less than 1, record "00". If 95 or more, record '95'. If unknown, record '98'. | Acres                        |        |
| HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?  | Yes                          | 2⇒HC15 |
| HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD OWN?   |                              |        |
| [A] CATTLE, MILK COWS, OR BULLS?   | Cattle, milk cows, or bulls  |        |
| [B] HORSES, DONKEYS, OR MULES?   | Horses, donkeys, or mules    |        |
| [C] GOATS?   | Goats                        |        |
| [D] SHEEP?   | Sheep                        |        |
| [E] CHICKENS?  | Chickens                     |        |
| [F] Pigs?  | Pigs                         |        |
| If none, record '00'.<br>If 95 or more, record '95'.<br>If unknown, record '98'.   |                              |        |
| HC15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT, A BANK BOOK OR CREDIT UNION BOOK?   | Yes                          |        |

**CHILD LABOUR** To be administered for children in the household age 5-14 years. For household members below age5 or above age 14, leave rows blank. NOW I WOULD LIKE TO ASK ABOUT ANY WORK CHILDREN AGE 5-14 IN THIS HOUSEHOLD MAY DO CL1. CL2. CL3. CL4. CL5. CL6. CL7. CL8 CL9 CL10. CL11. CL12. Line Name and Age **DURING THE** SINCE LAST DURING THE SINCE LAST **DURING THE** SINCE LAST **DURING THE** SINCE LAST **DURING THE** DURING THE PAST WEEK, PAST WEEK, number PAST WEEK, DID (day of the PAST WEEK, (day of the PAST WEEK, (day of the PAST WEEK, (day of the WHICH HOUSEHOLD CHORES (name) DO ANY week), DID (name) week), DID (name) week), DID (name) week), WHEN DID WAS (name) MAINLY Copy from KIND OF WORK ABOUT HOW FETCH ABOUT HOW DO ANY PAID ABOUT HOW HELP WITH ABOUT HOW (name) CARRY CARRYING OUT? Household FOR SOMEONE MANY HOURS WATER OR MANY HOURS OR UNPAID MANY HOUSEHOLD MANY HOURS OUT THESE Listing Form, WHO IS NOT A DID HE/SHE COLLECT DID HE/SHE WORK FOR A HOURS DID CHORES DID HE/SHE HOUSEHOLD HL2 and HL6 MEMBER OF THIS DO THIS WORK FIREWOOD FETCH HOUSEHOLD HE/SHE DO SUCH AS SPEND CHORES? HOUSEHOLD? FOR FOR WATER OR MEMBER ON THIS WORK SHOPPING. DOING If yes: FOR PAY SOMEONE HOUSEHOLD COLLECT A FAMILY FOR CLEANING. THESE IN CASH OR WHO IS NOT A USE? FIREWOOD FARM OR IN A HIS/HER WASHING CHORES? Circle all that apply KIND? MEMBER OF FOR FAMILY FAMILY OR CLOTHES, Circle all that THIS HOUSEHOLD BUSINESS OR HIMSELF/ COOKING; OR apply HOUSEHOLD? USE? SELLING HERSELF? CARING FOR GOODS IN CHILDREN. Times: Chores: A .Morning 1 Yes, for pay If more than THE OLD OR SICK A. Cooking/Serving Food B. Afternoon (cash or kind) one job, 1 Yes STREET? PEOPLE? B. Shopping for H. hold C. Cleaning Utensils/ house include all 2 No ∿ C. Evening D. Night CL7 D .Washing clothes 1 Yes 2 Yes, unpaid hours at all Include work E. Minor household repairs 2 No∾ iobs. for a F. Caring for children 3 No № Next business run G. Caring for elderly or sick H. Other CL5 by the child. Line alone or with one or more partners. 1 Yes 2 No ∿ CL9 Number Number No Yes Number Number of hours Times Unpaid Age No of hours Chores Line Name of hours Yes of hours Yes No Yes No 01 2 2 2 2 ABCDEFGH 1 3 1 ABCD 02 2 3 2 2 2 ABCDEFGH 1 1 1 1 A B C D 03 2 3 1 2 1 2 1 2 ABCDEFGH A B C D 04 2 2 3 2 1 2 1 1 1 ABCDEFGH A B C D 05 2 2 2 2 1 3 1 1 ABCDEFGH ABCD 06 2 2 2 1 2 3 1 1 ABCDEFGH A B C D 07 2 2 2 2 ABCDEFGH 1 3 A B C D 80 2 2 2 2 ABCDEFGH 1 3 1 1 1 A B C D 09 1 2 3 1 2 1 2 1 2 ABCDEFGH ABCD 10 2 3 1 2 1 2 1 2 ABCDEFGH 1 A B C D 11 1 2 3 2 2 1 2 ABCDEFGH A B C D 12 2 3 2 2 2 ABCDEFGH 1 1 1 1 A B C D 13 2 2 2 2 1 3 1 1 1 ABCDEFGH ABCD 14 2 3 2 2 2 ABCDEFGH 1 1 1 1 A B C D 15 2 1 2 2 1 2 3 1 1 ABCDEFGH A B C D

CHILD DISCIPLINE CD

#### Table 1: Children Aged 2-14 Years Eligible for Child Discipline Questions

o List each of the children aged 2-14 years below in the order they appear in the Household Listing Form. Do not include other household members outside of the age range 2-14 years.

- o Record the line number, name, sex, and age for each child.
- o Then record the total number of children aged 2-14 in the box provided (CD6).

| CD1.   | CD2.      | CD3.                 | CI   | D4.  | CD5.     |  |
|--------|-----------|----------------------|------|------|----------|--|
| Rank   | Line      | Name from HL2        | Sex. | from | Age from |  |
| number | number    |                      | H    | L4   | HL6      |  |
|        | from      |                      |      |      |          |  |
|        | HL1       |                      |      |      |          |  |
| Rank   | Line      | Name                 | M    | F    | Age      |  |
| 1      |           |                      | 1    | 2    |          |  |
| 2      |           |                      | 1    | 2    |          |  |
| 3      |           |                      | 1    | 2    |          |  |
| 4      |           |                      | 1    | 2    |          |  |
| 5      |           |                      | 1    | 2    |          |  |
| 6      |           |                      | 1    | 2    |          |  |
| 7      |           |                      | 1    | 2    |          |  |
| 8      |           |                      | 1    | 2    |          |  |
| CD6.   | Total chi | ldren age 2-14 years | -    | -    |          |  |

o If there is only one child age 2-14 years in the household, then skip **Table 2** and go to CD8; write down'1' and continue with CD9

#### Table 2: Selection of Random Child for Child Discipline Questions

- Use Table 2 to select one child between the ages of 2 and 14 years, if there is more than one child in that age range in the household.
- Check the last digit of the household number (HH2) from the cover page. This is the number of the row you should go to in the table below.
- o Check the total number of eligible children (2-14) in CD6 above. This is the number of the column you should go to.
- o Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number of the child (CD1) about whom the questions will be asked.

| CD7.                                 | Total Number of Eligible Children in the Household (CD6) |   |   |   |   |   |   |    |
|--------------------------------------|--|---|---|---|---|---|---|----|
| Last digit of household number (HH2) | 1  | 2 | 3 | 4 | 5 | 6 | 7 | 8+ |
| 0                                    | 1  | 2 | 2 | 4 | 3 | 6 | 5 | 4  |
| 1                                    | 1  | 1 | 3 | 1 | 4 | 1 | 6 | 5  |
| 2                                    | 1  | 2 | 1 | 2 | 5 | 2 | 7 | 6  |
| 3                                    | 1  | 1 | 2 | 3 | 1 | 3 | 1 | 7  |
| 4                                    | 1  | 2 | 3 | 4 | 2 | 4 | 2 | 8  |
| 5                                    | 1  | 1 | 1 | 1 | 3 | 5 | 3 | 1  |
| 6                                    | 1  | 2 | 2 | 2 | 4 | 6 | 4 | 2  |
| 7                                    | 1  | 1 | 3 | 3 | 5 | 1 | 5 | 3  |
| 8                                    | 1  | 2 | 1 | 4 | 1 | 2 | 6 | 4  |
| 9                                    | 1  | 1 | 2 | 1 | 2 | 3 | 7 | 5  |

| CD8.Record the rank number of the selected child |  |
|--|--|
|  |  |

| CDO Waite the manua and II.  |                        |
|--|------------------------|
| CD9.Write the name and line number of the child selected for the module from CD3 and | Name                   |
| CD2, based on the rank number in CD8.  | Name                   |
| ,  | Line number            |
|  |                        |
| CD10. Adults use certain ways to teach CHILDREN THE RIGHT BEHAVIOUR OR TO            |                        |
| ADDRESS A BEHAVIOUR PROBLEM.   WILL  |                        |
| READ VARIOUS METHODS THAT ARE USED   |                        |
| AND I WANT YOU TO TELL ME IF <u>YOU OR</u>   |                        |
| ANYONE ELSE IN YOUR HOUSEHOLD HAS  |                        |
| USED THIS METHOD WITH (name) <u>IN THE</u> PAST MONTH.                               |                        |
| TACT MONTH.  |                        |
| CD11. TOOK AWAY PRIVILEGES, FORBADE  |                        |
| SOMETHING (name) LIKED OR DID NOT ALLOW HIM/HER TO LEAVE HOUSE.                      | Yes1<br>No2            |
| ALLOW HIMMHER TO LEAVE HOUSE.  | 1402                   |
| CD12. EXPLAINED WHY (name)'S BEHAVIOUR   | Yes1                   |
| WAS WRONG.   | No2                    |
| CD13. SHOOK HIM/HER.   | Yes1                   |
|  | No2                    |
| CD14. SHOUTED, YELLED AT OR SCREAMED AT  | Yes1                   |
| HIM/HER.   | No2                    |
| CD15. GAVE HIM/HER SOMETHING ELSE TO   | Yes1                   |
| DO.  | No2                    |
| CD16. Spanked, hit or slapped him/her on   | Yes1                   |
| THE BOTTOM WITH BARE HAND.   | No2                    |
| CD17. HIT HIM/HER ON THE BOTTOM OR   | Yes1                   |
| ELSEWHERE ON THE BODY WITH   | No2                    |
| SOMETHING LIKE A BELT, HAIRBRUSH,<br>STICK OR OTHER HARD OBJECT.                     |                        |
| CD18. CALLED HIM/HER STUPID, LAZY, OR  | Yes1                   |
| ANOTHER NAME LIKE THAT.  | No2                    |
| CD19. HIT OR SLAPPED HIM/HER ON THE FACE,  | Yes1                   |
| HEAD OR EARS.  | No2                    |
| CD20. HIT OR SLAPPED HIM/HER ON THE  | Yes1                   |
| HAND, ARM, OR LEG.   | No2                    |
| CD21. BEAT HIM/HER UP, THAT IS HIT HIM/HER   | Yes1                   |
| OVER AND OVER AS HARD AS ONE COULD.  | No2                    |
| CD22. DO YOU BELIEVE THAT IN ORDER TO  | Yes1                   |
| BRING UP, RAISE, OR EDUCATE A CHILD  | No2                    |
| PROPERLY, THE CHILD NEEDS TO BE PHYSICALLY PUNISHED?                                 | Don't know/No opinion8 |
|  | ·                      |

| HANDWASHING   |                    | HW                                   |
|---|--------------------|--------------------------------------|
| HW1. PLEASE SHOW ME WHERE MEMBERS OF YOUR HOUSEHOLD MOST OFTEN WASH THEIR HANDS.  | Observed           | 2 ⇔HW4<br>3 ⇔HW4<br>6 ⇔HW4           |
| HW2. Observe presence of water at the specific place for hand washing.  Verify by checking the tap/pump, or basin, bucket, water container or similar objects for presence of water.  | Water is available |                                      |
| HW3. Record if soap or detergent is present at the specific place for hand washing.  Circle all that apply.  Skip to HH19 if any soap or detergent code (A, B, C or D) is circled. If "None" (Y) is circled, continue with HW4. | Bar soap           | A⇒HH19<br>B⇒HH19<br>C⇒HH19<br>D⇒HH19 |
| HW4. Do you have any bar soap, soap powder or liquid soap in your household for washing hands?  | Yes                | 2⇒HH19                               |
| HW5. CAN YOU PLEASE SHOW IT TO ME?  Record observation. Circle all that apply.  | Bar soap           |                                      |

| HH19. Record the time.  | Hour, minutes and am/pm : m   |  |
|---|---|--|
|   |   |  |
| HH20. Does any eligible woman age 15-49 reside in a Check Household Listing Form, column HL7 for any You should have a questionnaire with the Information  □ Yes ⇔ Go to QUESTIONNAIRE FOR IN to administer the questionnaire to the first el  □ No ⇔ Continue.   | eligible woman.<br>Panel filled in for each eligible woman.<br>DIVIDUAL WOMEN                                 |  |
| HH21. Does any child under the age of 5 reside in the Check Household Listing Form, columnHL9 for any e You should have a questionnaire with the Information  □Yes ⇒ Go to QUESTIONNAIRE FOR CHE to administer the questionnaire to mother or □No ⇒ Continue.   | ligible child under age 5.<br>Panel filled in for each eligible child.<br>ILDREN UNDER FIVE                   |  |
| HH22. Does any child age 2-9 reside in the household Check Household Listing Form, column HL9A for any You should have a questionnaire with the Information.  ☐ Yes 	⇒ Go to QUESTIONNAIRE FOR CHE to administer the questionnaire for the first each of the interview by thanking the residue of Gather together all questionnaires in the cover page. | y eligible child.<br>n Panel filled in for each eligible child age 2-9.<br>HILD DISABILITY<br>eligible child. |  |

| Interviewer's Observations  |
|-----------------------------|
|                             |
|                             |
|                             |
|                             |
|                             |
|                             |
| Field Editor's Observations |
|                             |
|                             |
|                             |
|                             |
|                             |
|                             |
| Supervisor's Observations   |
|                             |
|                             |
|                             |
|                             |
|                             |



## QUESTIONNAIRE FOR INDIVIDUAL WOMEN

BELIZE

| WOMAN'S INFORMATION PANEL   | WM   |
|---|--|
|   | 15 through 49 (see Household Listing Form, column HL7).  |
| WM1. Cluster number   | WM2. Household number  |
| WM3. Woman's name: Name   | WM4. Woman's line number:  |
| WM5.Interviewer name and number:  | WM6. Day/Month/Year of interview:  |
| Name  | //   |
| Repeat greeting if not already read to this woman:  WE ARE FROM THE STATISTICAL INSTITUTE OF BELIZE.  WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION WITH UNICEF. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 20MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE IDENTIFIED.  MAY I START NOW?  □ Yes, permission is given ⇔ Go to WM10 to n □ No, permission is not given ⇔ Complete WM |  |
| WM7. Result of woman's interview  | Completed         .01           Not at home         .02           Refused         .03           Partly completed         .04           Incapacitated         .05           Other (specify)         .96 |
| WM8. Field edited by (Name and number):   | WM9. Data entry clerk (Name and number):  Name   |
| Name  |  |

| WM10. Record the time. | Hour, minutes and am/pm | :/ m |
|------------------------|-------------------------|------|
|                        |                         |      |

| WOMAN'S BACKGROUND  |   | WB    |
|---|---|-------|
| WB1. IN WHAT MONTH AND YEAR WERE YOU BORN?  | Date of birth         Month          98         Year  |       |
|   | DK year   |       |
| WB2. HOW OLD ARE YOU?  Probe: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?  Compare and correct WB1 and/or WB2 if inconsistent   | Age (in completed years)  |       |
| WB3. Have you ever attended school or preschool?  | Yes   | 2⇔WB7 |
| WB4. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?  | Preschool       0         Infant       7         Primary       1         Secondary       2         Associates       4         Bachelors and higher       5         CET/ITVET       6         Other       9         DK       8 | 0⇔WB7 |
| WB5. WHAT IS THE HIGHEST STANDARD/FORM/YEARYOU COMPLETED AT THAT LEVEL?  If less than Standard 1, Form 1 or Year 1, enter "00"  | Standard/Form/Year<br>DK98  |       |
| WB6. Check WB4:  ☐ Secondary or higher.  ☐ Go toNext Mod ☐ Infant, Primary, other or DK  ☐ Continu  |   |       |
| WB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME.  Show sentence on the card to the respondent. If respondent cannot read whole sentence, probe:  CAN YOU READ PART OF THE SENTENCE TO ME? | Cannot read at all  |       |

| CHILD MORTALITY   |  | CM     |
|---|--|--------|
| All of the following questions refer only to LIVE births  |  |        |
| CM1. Now I Would LIKE TO ASK ABOUT ALL THE LIVE BIRTHS YOU HAVE HAD DURING YOUR LIFE.  HAVE YOU EVER GIVEN BIRTH?   | Yes1<br>No2  | 2⇔CM8  |
| CM2. What was the date of your first birth?  I mean the very first time you gave birth, even if the child is no longer living or whose father is not your current partner.  Skip to CM4 only if year of first birth is given. Otherwise, continue with CM3. | Date of first birth Day DK day98  Month DK month98  Year DK year9998 | ⇔CM4   |
| CM3. How many years ago did you have your first birth?  | Completed years since first birth                                    |        |
| CM4. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?  | Yes1<br>No2  | 2⇔CM6  |
| CM5. HOW MANY SONS LIVE WITH YOU?  HOW MANY DAUGHTERS LIVE WITH YOU?  If none, record '00'.   | Sons at home   |        |
| CM6. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?   | Yes  | 2⇔CM8  |
| CM7. How many sons are alive but do not live with you?  How many daughters are alive but do not live with you?  If none, record '00'.   | Sons elsewhere  Daughters elsewhere                                  |        |
| CM8. HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED?  If "No" probe by asking:  I MEAN, TO A CHILD WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE — EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?            | Yes  | 2⇔CM10 |
| CM9. HOW MANY BOYS HAVE DIED?  HOW MANY GIRLS HAVE DIED?  If none, record '00'.   | Boys dead  |        |
| CM10.Sum answers to CM5, CM7, and CM9.  | Sum  |        |

| CM11. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL (total number in CM10) LIVE BIRTH/S DURING YOUR LIFE. IS THIS CORRECT? |  |  |  |
|--|--|--|--|
| ☐ Yes. Check below:  |  |  |  |
| $\square$ No live births $\Rightarrow$ Go to ILLNESS SYMPTOMS Module.  |  |  |  |
| $\square$ One or more live births $\Rightarrow$ Continue with CM12   |  |  |  |
| $\square$ No $\Rightarrow$ Check responses to CM1-CM10 and make corrections as necessary before proceeding.                                  |  |  |  |
| CM12. OF THESE (total number in CM10) BIRTHS   | Date of last birth   |  |  |
| YOU HAVE HAD, WHEN DID YOU DELIVER THE LAST  | Day  |  |  |
| ONE (EVEN IF HE OR SHE HAS DIED)?  | Day98  |  |  |
| Month and year must be recorded.   | Month  |  |  |
|  | Year   |  |  |
| CM13. Check CM12: Last birth occurred within the last 2 years.   | ears, that is, since (day and month of interview) in <b>2009</b> |  |  |
| <b>No</b> $\square$ <i>No live birth in last 2 years.</i> $\Rightarrow$ <i>Go to ILLNESS SYMPTOMS Module</i>                                 |  |  |  |
| <b>Yes</b> $\square$ <i>One or more live births in last 2 years.</i> $\Rightarrow$ <i>Ask for the name of the child</i>                      |  |  |  |
| Name of child  |  |  |  |
| If child has died, take special care when referring to this child by name in the following modules.  |  |  |  |
| If more than one live birth in last 2 years record the number here   |  |  |  |
| Go to the next module DESIRE FOR LAST BIRTH.   |  |  |  |

| DESIRE FOR LAST BIRTH   |                        | DB               |
|---|------------------------|------------------|
| This module is to be administered to all women with a live birth in the 2 years preceding date of interview.  Check child mortality module CM13 and record name of last-born child here  Use this child's name in the following questions, where indicated. |                        |                  |
| DB1. WHEN YOU GOT PREGNANT WITH (name), DID YOU WANT TO GET PREGNANT AT THAT TIME?  | Yes                    | 1⇔Next<br>Module |
| DB2. DID YOU WANT TO HAVE A BABY LATER ON, OR IS IT THAT YOU DID NOT WANT ANY (MORE) CHILDREN?  | Later                  | 2⇔Next<br>Module |
| DB3. How much longer did you want to wait?  | Months1  Years2  DK998 |                  |

| MATERNAL AND NEWBORN HEALTH   |  | MN             |
|---|--|----------------|
| This module is to be administered to all women with a live birth in the 2 years preceding date of interview.  Check child mortality module CM13 and record name of last-born child here  Use this child's name in the following questions, where indicated. |  |                |
| MN1. DID YOU SEE ANYONE FOR PRENATAL CARE DURING YOUR PREGNANCY WITH (name)?  | Yes  | 2⇒MN5          |
| MN2. WHOM DID YOU SEE?  Probe: ANYONE ELSE?  Probe for the type of person seen and circle all answers given.  | Health professional:  Doctor   |                |
| MN3. How many times did you receive prenatal care during this pregnancy?  | Number of times98  |                |
| MN4. AS PART OF YOUR PRENATAL CARE DURING<br>THIS PREGNANCY, WERE ANY OF THE<br>FOLLOWING DONE AT LEAST ONCE:   | Yes No   |                |
| [A] WAS YOUR BLOOD PRESSURE MEASURED?   | Blood pressure 1 2   |                |
| [B] DID YOU GIVE A URINE SAMPLE?  | Urine sample 2   |                |
| [C] DID YOU GIVE A BLOOD SAMPLE?  | Blood sample 2   |                |
| MN5. DO YOU HAVE A PRENATAL CLINIC CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED?   | Yes (card seen)       1         Yes (card not seen)       2         No       3 |                |
| MAY I SEE IT PLEASE?  | DK8  |                |
| If a card is presented, use it to assist with answers to the following questions.   |  |                |
| MN6. WHEN YOU WERE PREGNANT WITH (name), DID YOU RECEIVE ANY INJECTION IN THE ARM OR SHOULDER TO PREVENT THE BABY FROM GETTING TETANUS, THAT IS CONVULSIONS AFTER BIRTH?  | Yes  | 2⇔MN9<br>8⇔MN9 |
| MN7. How many times did you receive this tetanus injection during your pregnancy with (name)?   | Number of times  | 8⇒MN9          |
| If 7 or more times, record '7'.   |  | 3 7 IVII 43    |
| MN8. How many tetanus injections during last pregnancy were reported in MN7?  □ Two or more tetanus injections during last pregnancy.  □ Go to MN17  □ Fewer than two tetanus injections during last pregnancy.  □ Continue with MN9                        |  |                |

|  | •  |                    |
|--|--|--------------------|
| MN9. DID YOU RECEIVE ANY TETANUS INJECTION AT ANY TIME BEFORE YOUR PREGNANCY   | Yes1   |                    |
| WITH (name), EITHER TO PROTECT YOURSELF OR ANOTHER BABY?   | No2  | 2⇒MN17             |
| roonder on men by by .   | DK8  | 8⇒MN17             |
| MN10. How many times did you receive a tetanus injection before your pregnancy with (name)?                              | Number of times  |                    |
| If 7 or more times, record '7'.  | DK8  | 8⇒MN17             |
| MN11. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST TETANUS INJECTION BEFORE   | Years ago  |                    |
| YOUR PREGNANCY WITH (name)?  |  |                    |
| MN17. WHO ASSISTED WITH THE DELIVERY OF (name)?  | Health professional: DoctorA Nurse/ MidwifeB   |                    |
| Probe: ANYONE ELSE?  | Auxiliary midwife  |                    |
| Probe for the type of person assisting and circle all answers given.   | Community health worker  |                    |
| If respondent says no one assisted, probe to<br>determine whether any adults were present at<br>the delivery.            | Other (specify) X No one   |                    |
| MN18. WHERE DID YOU GIVE BIRTH TO(name)?   | Home Your home11 Other home12  | 11⇔MN20<br>12⇔MN20 |
| Probe to identify the type of source.  |  | 12 / 10111120      |
| Write the name or description of the place below.  | Public sector Govt. hospital   |                    |
|  | Other public (specify) 26  |                    |
| (Name of place)  | Private Medical Sector Private hospital  |                    |
|  | Other private medical (specify) 36   |                    |
|  | Other (specify) 96   | 96⇒MN20            |
| MN19. WAS (name) DELIVERED BY CAESAREAN SECTION (C-SECTION)? THAT IS, DID THEY CUT YOUR BELLY OPEN TO TAKE THE BABY OUT? | Yes  |                    |
| MN20. WHEN (name) WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?    | Very large       1         Larger than average       2         Average       3         Smaller than average       4         Very small       5 |                    |
|  | DK8  |                    |
| MN21. WAS (name) WEIGHED AT BIRTH?   | Yes  | 2⇒MN23             |
|  | DK8  | 8 <b>⇒MN2</b> 3    |

| MN22. HOW MUCH DID (name) WEIGH?   |   |                  |
|--|---|------------------|
| Record weight from health card, if available.  | From card1 (lbs)                            |                  |
|  | From recall 2 (lbs)                         |                  |
| Write the weight: LbsOz  | DK99998                                     |                  |
| MN23. HAS YOUR MENSTRUAL PERIOD RETURNED SINCE THE BIRTH OF (name)?  | Yes1  |                  |
|  | No2   |                  |
| MN24. DID YOU EVER BREASTFEED (name)?  | Yes   | 2⇒Next<br>Module |
| MN25. HOW LONG AFTER BIRTH DID YOU FIRST PUT (name) TO THE BREAST?   | Immediately000                              |                  |
| 100.1  | Hours 1                                     |                  |
| If less than 1 hour, record '00' hours.<br>If less than 24 hours, record hours.<br>Otherwise, record days. | Days2                                       |                  |
| Omerwise, record days.   | Don't know/remember 998                     |                  |
| MN26. INTHE FIRST THREE DAYS AFTER DELIVERY, WAS (name) GIVEN ANYTHING TO DRINK OTHER THAN BREAST MILK??   | Yes   | 2⇒Next<br>Module |
| MN27. WHAT WAS (name) GIVEN TO DRINK?  | Milk (other than breast milk)A Plain waterB |                  |
| (Circle all responses given)   | Sugar or glucose water C Gripe water D      |                  |
| Probe:   | Sugar-salt-water solutionE                  |                  |
| ANYTHING ELSE?   | Fruit juiceF<br>Infant formulaG             |                  |
|  | Tea / Infusions                             |                  |
|  | HoneyI                                      |                  |
|  | Other (specify)X                            |                  |

| POST-NATAL HEALTH CHECKS  |   | PN             |  |
|---|---|----------------|--|
| This module is to be administered to all women with a live birth in the 2 years preceding the date of interview.  Check child mortality module CM13 and record name of last-born child here  Use this child's name in the following questions, where indicated. |   |                |  |
| PN1. Check MN18: Was the child delivered in a health facility?  |   |                |  |
| _   | $\square$ Yes, the child was delivered in a health facility (MN18=21-26 or 31-36) $\Rightarrow$ Continue with PN2 |                |  |
| ☐ No, the child was not delivered in a health   | a facility (MN18=11-12 or 96)   |                |  |
| PN2. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT WHAT HAPPENED IN THE HOURS AND DAYS AFTER THE BIRTH OF (name).  |   |                |  |
|   | Hours11   |                |  |
| YOU HAVE SAID THAT YOU GAVE BIRTH IN (name or type of facility in MN18). HOW LONG DID YOU STAY THERE AFTER THE DELIVERY?  | Days2   |                |  |
|   | Weeks 3   |                |  |
| If less than one day, record hours.<br>If less than one week, record days.<br>Otherwise, record weeks.  | Don't know / remember998  |                |  |
| PN3. I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (name)'S HEALTH AFTER DELIVERY – FOR EXAMPLE, SOMEONE EXAMINING (name), CHECKING THE CORD, OR SEEING IF (name) IS OK.  | Yes1  |                |  |
| BEFORE YOU LEFT THE (name or type of facility in MN18), DID ANYONE CHECK ON (name)'S HEALTH?  | No2   |                |  |
| PN4. AND WHAT ABOUT CHECKS ON YOUR HEALTH  — I MEAN, SOMEONE ASSESSING YOUR  HEALTH, FOR EXAMPLE ASKING QUESTIONS  ABOUT YOUR HEALTH OR EXAMINING YOU.  | Yes1  |                |  |
| DID ANYONE CHECK ON <u>YOUR</u> HEALTH BEFORE YOU LEFT (name or type or facility in MN18)?  | No2   |                |  |
| PN5. NOW I WOULD LIKE TO TALK TO YOU ABOUT WHAT HAPPENED AFTER YOU GAVE BIRTH AT (name or type of facility in MN18).  |   |                |  |
|   | Yes1  | 1 <b>⇒PN11</b> |  |
| DID ANYONE CHECK ON (name)'S HEALTH AFTER YOU LEFT (name or type of facility in MN18)?  | No2   | 2⇒PN16         |  |
| PN6. Check MN17: Did a health professional, traditional birth attendant, or community health worker assist with the delivery?   |   |                |  |
| ☐ Yes, delivery assisted by a health professional or other health worker (MN17 = A-G) $\Rightarrow$ Continue with PN7   |   |                |  |
| $\square$ No, delivery not assisted by a health professional or other health worker (A-G not circled in MN17) $\Rightarrow$ Go to PN10  |   |                |  |

| PN7. YOU HAVE ALREADY SAID THAT (person or persons in MN17) ASSISTED WITH THE BIRTH. NOW I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (name)'S HEALTH AFTER DELIVERY, FOR EXAMPLE EXAMINING (name), CHECKING THE CORD, OR SEEING IF (name) IS OK.  AFTER THE DELIVERY WAS OVER AND BEFORE (person or persons in MN17) LEFT YOU, DID (person or persons in MN17) CHECK ON (name)'S HEALTH? | Yes1 No2                   |                    |
|--|----------------------------|--------------------|
| PN8. AND DID (person or persons in MN17) CHECK ON YOUR HEALTH BEFORE LEAVING?  |                            |                    |
| BY CHECK ON YOUR HEALTH, I MEAN ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.  | Yes                        |                    |
| PN9. AFTER THE (person or persons in MN17) LEFT YOU, DID ANYONE CHECK ON THE HEALTH OF (name)?   | Yes                        | 1⇔PN11<br>2⇔PN18   |
| PN10. I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (name)'S HEALTH AFTER DELIVERY – FOR EXAMPLE, SOMEONE EXAMINING (name), CHECKING THE CORD, OR SEEING IF THE BABY IS OK.  |                            |                    |
| AFTER ( <i>name</i> ) WAS DELIVERED, DID ANYONE CHECK ON HIS/HER HEALTH?   | Yes                        | 2⇒PN19             |
| PN11. DID SUCH A CHECK HAPPEN ONLY ONCE, OR MORE THAN ONCE?  | Once                       | 1⇒PN12A<br>2⇒PN12B |
| PN12A. How long after delivery did that check happen?  | Hours1                     |                    |
| PN12B. HOW LONG AFTER DELIVERY DID THE FIRST OF THESE CHECKS HAPPEN?  If less than one day, record hours.  If less than one week, record days.  Otherwise, record weeks.   | Days                       |                    |
| PN13. WHO CHECKED ON (name)'S HEALTH AT THAT TIME?   | Health professional Doctor |                    |

| PN14. WHERE DID THIS CHECK TAKE PLACE?                  | Home Your home11 Other home12                        |                    |
|---|--|--------------------|
| Probe to identify the type of source.                   | 34101 110110   |                    |
| Tree to tuently the type of source.                     | Public sector  |                    |
| Write the name of the place below.                      | Govt. hospital21                                     |                    |
| Write the name of the prace below.                      | Govt. clinic/health centre22                         |                    |
|   | Govt. health post23                                  |                    |
|   | Other public (specify)26                             |                    |
| (Name of place)   | =======================================              |                    |
| (Figure 2)  | Private medical sector                               |                    |
|   | Private hospital31                                   |                    |
|   | Private clinic32                                     |                    |
|   | Private maternity home33                             |                    |
|   | Other private  |                    |
|   | medical (specify) 36                                 |                    |
|   | modical (speedy)                                     |                    |
|   | Other (specify)96                                    |                    |
| PN15. Check MN18: Was the child delivered in a hear     | lth facility?  |                    |
|   |  |                    |
| lacksquare Yes, the child was delivered in a health fac | cility (MN18=21-26 or 31-36)                         | 5                  |
|   |  |                    |
| $\square$ No, the child was not delivered in a health   | a facility (MN18=11-12 or 96)   Go to PN17           |                    |
|   |  |                    |
| PN16. AFTER YOU LEFT (name or type of facility in       | Yes1   | 1⇒PN20             |
| MN18), DID ANYONE CHECK ON YOUR HEALTH?                 | No   | 1⇒1 N20<br>2⇒Next  |
| MINTO, DID ANTONE CHECK ON TOOK HEALTH!                 | 1402   | Module             |
| DNIA CLASSIC DISTRICT                                   |  |                    |
| PN17. Check MN17: Did a health professional, tradit     | ional birth attendant, or community health worker as | sist with the      |
| delivery?   |  |                    |
|   |  |                    |
| ☐ Yes, delivery assisted by a health                    |  |                    |
| professional or other health worker (MN)                | 17=A-G) ⇔Continue with PN18                          |                    |
| _   |  |                    |
| $\square$ No, delivery not assisted by a health profe   |  |                    |
| other health worker (A-G not circled in M               | $MN17) \Rightarrow Go \text{ to } PN19$              |                    |
|   |  |                    |
| PN18. AFTER THE DELIVERY WAS OVER AND                   | Yes1   | 1⇒PN20             |
| (person or persons in MN17) LEFT, DID ANYONE            | No2  | 2⇒Next             |
| CHECK ON YOUR HEALTH?                                   |  | Module             |
| DN140 AFTER THE RIPTH OF (1, 1, 1, 1) RIP ANYONE        |  |                    |
| PN19. AFTER THE BIRTH OF (name), DID ANYONE             |  |                    |
| CHECK ON <u>YOUR</u> HEALTH?                            |  |                    |
| I MEAN COMEONE ACCESSING VOUR LIEAUTU                   | Yes1   |                    |
| MEAN SOMEONE ASSESSING YOUR HEALTH,                     | No   | 2⇒Next             |
| FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR                 | INU  |                    |
| HEALTH OR EXAMINING YOU.                                |  | Module             |
|   |  |                    |
| PN20. DID SUCH A CHECK HAPPEN ONLY ONCE, OR             |  |                    |
|   | Once1  | 1⇒PN21A            |
| MORE THAN ONCE?   | Once   | 1⇒PN21A<br>2⇒PN21B |

| ILLNESS SYMPTOMS  |   | IS |
|---|---|----|
| IS1. Check Household Listing, column HL9  Is the respondent the mother or caretaker of any child  ☐ Yes  ☐ Continue with IS2.  ☐ No  ☐ Go to Next Module.   | l under age 5?  |    |
| IS2. SOMETIMES CHILDREN HAVE SEVERE ILLNESSES AND SHOULD BE TAKEN IMMEDIATELY TO A HEALTH FACILITY. WHAT TYPES OF SYMPTOMS WOULD CAUSE YOU TO TAKE YOUR CHILD TO A HEALTH FACILITY RIGHT AWAY?  Probe: ANY OTHER SYMPTOMS?  Keep asking for more signs or symptoms until the mother/caretaker cannot recall any additional symptoms.  Circle all symptoms mentioned, but do NOT prompt with any suggestions | Child not able to drink or breastfeed A Child becomes sicker B Child develops a fever C Child has fast breathing D Child has difficult breathing E Child has blood in stool F Child is drinking poorly G Child has diarrhoea H Child has vomiting I Other (specify) X Other (specify) Y Other (specify) Z |    |

| CONTRACEPTION  |  | СР               |
|--|--|------------------|
| CP1. I WOULD LIKE TO TALK WITH YOU ABOUT             |  |                  |
| ANOTHER SUBJECT — FAMILY PLANNING.                   | Yes, currently pregnant1                               | 1⇒Next<br>Module |
| ARE YOU PREGNANT NOW?                                | No2  |                  |
|  | Unsure or DK 8   |                  |
| CP2. SOME PEOPLEUSE VARIOUS WAYS OR                  |  |                  |
| METHODS TO DELAY OR AVOID A PREGNANCY.               | Yes1   |                  |
| ARE YOU CURRENTLY DOING SOMETHING OR                 |  | 0.11             |
| USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT? | No2  | 2⇒Next<br>Module |
| CP3. WHICH METHOD ARE YOUUSING?                      | Female sterilization (tie-off)A                        |                  |
| Do not prompt  | Male sterilization (vasectomy)B                        |                  |
| Do not prompt.                                       | InjectionsD  |                  |
| Do not read methods.                                 | Implants E   |                  |
| If more than one method is mentioned, circle         | Male condom G  |                  |
| each one.  | Female condomH   |                  |
|  | DiaphragmI   |                  |
|  | Foam/ Jelly J  |                  |
|  | Lactational amenorrhoea                                |                  |
|  | method (LAM)K<br>Periodic abstinence/Rhythm/Calendar L |                  |
|  | Withdrawal   |                  |
|  | Other (specify) X                                      |                  |

| UNMET NEED  |                               | UN              |
|---|-------------------------------|-----------------|
| UN1. Check CP1. Currently pregnant?   |                               |                 |
| ☐ Yes, currently pregnant ⇒ Continue with   | UN2                           |                 |
| $\square$ No, unsure or DK $\Rightarrow$ Go to UN5                                  |                               |                 |
| UN2. Now I would like to talk to you about your current pregnancy. When you got     | Yes1                          | 1 <b>⇒UN</b> 4  |
| PREGNANT, DID YOU WANT TO GET PREGNANT AT THAT TIME?                                | No2                           |                 |
| UN3. DID YOU WANT TO HAVE A BABY LATER ON OR IS IT THAT YOU DID NOT WANT ANY (MORE) | Later1                        |                 |
| CHILDREN?   | No more2                      |                 |
| UN4. NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE. AFTER THE CHILD YOU   | Have another child1           | 1⇒UN7           |
| ARE NOW EXPECTING, WOULD YOU LIKE TO HAVE ANOTHER CHILD, OR WOULD YOU               | No more / No2                 | 2 <b>⇒UN1</b> 3 |
| PREFER NOT TO HAVE ANY MORE CHILDREN?   | Undecided / Don't know8       | 8 <b>⇒UN13</b>  |
| UN5. Check CP3. Currently using "Female sterilization                               | ion"?                         |                 |
| ☐ Yes   Go to UN13  |                               |                 |
| $\square$ No $\Rightarrow$ Continue with UN6  |                               |                 |
| The vicentimae with cive  |                               |                 |
| UN6. Now I Would like to ask you some Questions about the future. Would you         | Have (a/another) child1       |                 |
| LIKE TO HAVE (A/ANOTHER) CHILD, OR WOULD<br>YOU PREFER NOT TO HAVE ANY (MORE)       | No more / None2               | 2⇒UN9           |
| CHILDREN?   | Says she cannot get pregnant3 | 3 <b>⇒UN11</b>  |
|   | Undecided / Don't know8       | 8⇒UN9           |
| UN7. HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (A/ANOTHER) CHILD?         | Months1                       |                 |
|   | Years2                        |                 |
|   | Soon / Now993                 |                 |
|   | Says she cannot get pregnant  | 994⇒UN11        |
|   | Other996                      |                 |
|   | Don't know998                 |                 |
| UN8. Check CP1. Currently pregnant?   |                               |                 |
| ☐ Yes, currently pregnant ⇔ Go to UN13  |                               |                 |
| $\square$ No, unsure or DK $\Rightarrow$ Continue with UN9                          |                               |                 |

| UN9. Check CP2. Currently using a method?  |   |                                    |
|--|---|------------------------------------|
| ☐ Yes   Go to UN13   |   |                                    |
| ☐ No ➡ Continue with UN10  |   |                                    |
| UN10. DO YOU THINK YOU ARE PHYSICALLY ABLE TO GET PREGNANT AT THIS TIME?   | Yes   | 1 <b>⇒</b> UN13<br>8 <b>⇒</b> UN13 |
| UN11. WHY DO YOU THINK YOU ARE NOT PHYSICALLY ABLE TO GET PREGNANT?  Circle all codes that apply.                      | Infrequent sex / No sex   | 0.40113                            |
| UN12. Check UN11. "Never menstruated" mentioned  ☐ Mentioned ⇒ Go to Next Module  ☐ Not mentioned ⇒ Continue with UN13 | d?  |                                    |
| UN13. WHEN DID YOUR LAST MENSTRUAL PERIOD START?   | Days ago       1          Weeks ago       2          Months ago       3          Years ago       4          In menopause /           Has had hysterectomy           Before last birth           Never menstruated |                                    |

| ATTITUDES TOWARD DOMESTIC VIOLENCE  |                           |    |    | DV |
|---|---------------------------|----|----|----|
| DV1. SOMETIMES A HUSBAND IS ANNOYED OR ANGERED BY THINGS THAT HIS WIFE DOES.IN YOUR OPINION, IS A HUSBAND JUSTIFIED IN HITTING OR BEATING HIS WIFE IN THE FOLLOWING SITUATIONS: | Yes                       | No | DK |    |
| [A] IF SHE GOES OUT WITHOUT TELLING HIM?  | Goes out without telling1 | 2  | 8  |    |
| [B] IF SHE NEGLECTS THE CHILDREN?   | Neglects children 1       | 2  | 8  |    |
| [C] IF SHE QUARRELS WITH HIM?   | Quarrels with him1        | 2  | 8  |    |
| [D] IF SHE REFUSES TO HAVE SEX WITH HIM?  | Refuses sex1              | 2  | 8  |    |
| [E] IF SHE BURNS THE FOOD?  | Burns food1               | 2  | 8  |    |
| [F] IF SHE HAS SEX WITH ANOTHER MAN?  | Sex with another man 1    | 2  | 8  |    |
| [G] IF SHE WASTES THE MONEY?  | Wastes the money1         | 2  | 8  |    |

| MARRIAGE/UNION   |                                    | MA                |
|--|------------------------------------|-------------------|
| MA1. ARE YOU CURRENTLY MARRIED OR LIVING WITH A MAN AS IF MARRIED?   | Yes, currently married             | 3⇒MA5             |
| MA2. How old is your current husband/<br>PARTNER?  | Age in years                       |                   |
| Probe: HOW OLD WAS YOUR HUSBAND / PARTNER ON HIS LAST BIRTHDAY?  | DK98                               |                   |
| MA3. BESIDES YOURSELF, DOES YOUR HUSBAND/PARTNER HAVE ANY OTHER WIVES OR PARTNERS OR DOES HE LIVE WITH OTHER | Yes                                | 2⇔MA7             |
| WOMEN AS IF MARRIED?   | DK98                               | 98⇒MA7            |
| MA4. How many other wives or partners does he have?  | Number                             | ⇒MA7              |
|  | DK98                               | 98⇒MA7            |
| MA5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN AS IF MARRIED?                                  | Yes, formerly married              | 3 ⇒Next<br>Module |
| MA6. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?                                | Widowed                            |                   |
| MA7. HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?                                  | Only once                          |                   |
| MA8. IN WHAT MONTH AND YEAR DID YOU FIRST MARRY OR START LIVING WITH A MAN AS IF MARRIED?                    | Date of first marriage/union Month |                   |
|  | Year       9998                    | ⇒Next<br>Module   |
| MA9. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND/PARTNER?                               | Age in years                       |                   |

| SEXUAL BEHAVIOUR  |  | SB                |  |
|---|--|-------------------|--|
| Check for the presence of others. Before contin   | nuing, ensure privacy.   |                   |  |
| SB1. Now I Would LIKE TO ASK YOU SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME | Never had intercourse00  | 00⇔Next<br>Module |  |
| IMPORTANT LIFE ISSUES.  | Age in years   | Module            |  |
| THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL.   | First time when started living with (first) husband/partner95      |                   |  |
| HOW OLD WERE YOU WHEN YOU HAD SEXUAL INTERCOURSE FOR THE VERY FIRST TIME?   | DK/Don't remember98  |                   |  |
| SB2. THE FIRST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?  | Yes1<br>No2  |                   |  |
|   | DK / Don't remember8   |                   |  |
| SB3. WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE?   | Days ago1  |                   |  |
| Record 'years ago' only if last intercourse was one or more years ago. If 12 months or more                           | Weeks ago2   |                   |  |
| the answer must be recorded in years.   | Months ago3  |                   |  |
|   | Years ago4   | 4⇒SB15            |  |
| SB4. THE LAST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?   | Yes       1         No       2         DK / Don't remember       8 |                   |  |
| SB5. What was your relationship to thisperson with whom you last had sexual intercourse?                              | Husband  | 3⇔SB7<br>4⇒SB7    |  |
| Probe to ensure that the response refersto the relationship at the time of sexual intercourse                         | Other (specify)6   | 6⇒SB7             |  |
| If 'boyfriend', then ask: WERE YOU LIVING TOGETHER AS IF MARRIED? If 'yes', circle '2'.If 'no', circle'3'.            |  |                   |  |
| SB6. Check MA1:   |  |                   |  |
| ☐ Currently married or living with a man (1   | $MA1 = 1 \text{ or } 2) \Leftrightarrow Go \text{ to } SB8$        |                   |  |
| $\square$ Not married / Not in union (MA1 = 3) $\Rightarrow$ Continue with SB7  |  |                   |  |
| SB7. How old is this person?  | Age of sexual partner  |                   |  |
| If response is DK, probe: ABOUT HOW OLD IS THIS PERSON?   | DK   |                   |  |
| SB8. HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?                                     | Yes1<br>No2  | 2⇔SB15            |  |
| SB9. THE LAST TIME YOU HAD SEXUAL INTERCOURSE WITH THIS OTHER PERSON, WAS A CONDOM USED?                              | Yes  |                   |  |

| SB10. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON?  Probe to ensure that the response refers to the relationship at the time of sexual intercourse  If 'boyfriend' then ask:  WERE YOU LIVING TOGETHER AS IF MARRIED?  If 'yes', circle '2'.If 'no', circle'3'. | Husband       1         Cohabiting partner       2         Boyfriend       3         Casual acquaintance       4         Other (specify)       6 | 3⇒SB12<br>4⇒SB12<br>6⇒SB12 |
|---|--|----------------------------|
| SB11. Check MA1 and MA7:  □ Currently married or living with a man (NAND)  Married only once or lived with a man or  □ Else ⇒ Continue with SB12  |  |                            |
| SB12. HOW OLD IS THIS PERSON?  If response is DK, probe: ABOUT HOW OLD IS THIS PERSON?  | Age of sexual partner98  |                            |
| SB13. OTHER THAN THESE TWO PERSONS, HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?  | Yes  | 2⇒SB15                     |
| SB14. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN THE LAST 12 MONTHS?   | Number of partners   |                            |
| SB15. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN YOUR LIFETIME?  If a non-numeric answer is given, probe to get an estimate.  If number of partners is 95 or more, write '95'.   | Number of lifetime partners98  |                            |

| HIV/AIDS   |  | НА                |
|--|--|-------------------|
| HA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE.   | Yes1   |                   |
| HAVE YOU EVER HEARD OF AN ILLNESS<br>CALLED AIDS?  | No2  | 2⇒ NEXT<br>MODULE |
| HA2. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY HAVING JUST ONE UNINFECTED SEX PARTNER WHO HAS NO OTHER SEX PARTNERS?       | Yes  |                   |
| HA3. CAN PEOPLE GET THE AIDS VIRUS BECAUSE OF OBEAH OR OTHER SUPERNATURAL MEANS?   | Yes  |                   |
| HA4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?                                    | DK       8         Yes       1         No       2         DK       8 |                   |
| HA5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?  | Yes  |                   |
| HA6. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS THE AIDS VIRUS?   | Yes  |                   |
| HA7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?   | Yes  |                   |
| HA8. CAN THE VIRUS THAT CAUSES AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY:  |  |                   |
| <ul><li>[A] DURING PREGNANCY?</li><li>[B] DURING DELIVERY?</li><li>[C] BY BREASTFEEDING?</li></ul>   | Yes         No         DK           During pregnancy                 |                   |
| HA9. IN YOUR OPINION, IF A FEMALE TEACHER HAS<br>THE AIDS VIRUS BUT IS NOT SICK, SHOULD<br>SHE BE ALLOWED TO CONTINUE TEACHING IN<br>SCHOOL? | Yes       1         No       2         DK/Not sure/Depends       8   |                   |
| HA10. WOULD YOU BUY FRESH VEGETABLES<br>FROM A SHOPKEEPER OR VENDOR IF YOU<br>KNEW THAT THIS PERSON HAD THE AIDS<br>VIRUS?                   | Yes       1         No       2         DK/Not sure/Depends       8   |                   |
| HA11. IF A MEMBER OF YOUR FAMILY GOT INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?                                     | Yes  |                   |
| HA12. If a MEMBER OF YOUR FAMILY BECAME SICK WITH AIDS, WOULD YOU BE WILLING TO CARE FOR HER OR HIM IN YOUR OWN HOUSEHOLD?                   | Yes  |                   |

| HA13. Check CM13: Any live birth in last 2 years?   |                         |                  |  |
|---|-------------------------|------------------|--|
| $\square$ No live birth in last 2 years $\Rightarrow$ Go to HA24  |                         |                  |  |
| ☐ One or more live births in last 2 years 🕏   | Continue with HA14      |                  |  |
| HA14. Check MN1: Received prenatal care?  |                         |                  |  |
| ☐ Received prenatal care   Continue with  | HA15                    |                  |  |
| ☐ Did not receive prenatal care ⇔ Go to H   | IA24                    |                  |  |
| HA15. DURING ANY OF THE PRENATAL VISITS FOR YOUR PREGNANCY WITH (name),   | Y N DK                  |                  |  |
| WERE YOUGIVEN ANY INFORMATION ABOUT: [A] BABIES GETTING THE AIDS VIRUS FROM   | I N DK                  |                  |  |
| THEIR MOTHER?   | AIDS from mother 1 2 8  |                  |  |
| [B] THINGS THAT YOU CAN DO TO PREVENT GETTING THE AIDS VIRUS?   | Things to do 1 2 8      |                  |  |
| [C] GETTING TESTED FOR THE AIDS VIRUS?  | Tested for AIDS 1 2 8   |                  |  |
| WERE YOU: [D] OFFERED A TEST FOR THE AIDS VIRUS?  | Offered a test 1 2 8    |                  |  |
| HA16. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS AS PART OF YOUR PRENATAL CARE?                                       | Yes                     | 2⇒HA19           |  |
| PART OF TOUR PREINATAL CARE:  | DK8                     | 8⇒HA19           |  |
| HA17. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?  | Yes                     | 2⇒HA22           |  |
|   | DK8                     | 8⇒HA22           |  |
| HA18. REGARDLESS OF THE RESULT, ALL WOMEN WHO ARE TESTED ARE SUPPOSED TO RECEIVE COUNSELING AFTER GETTING THE RESULT.                               | Yes1<br>No 2            | 1⇒HA22<br>2⇒HA22 |  |
| AFTER YOU WERE TESTED, DID YOU RECEIVE COUNSELLING?   | DK8                     | 8⇒HA22           |  |
| HA19. Check MN17: Birth delivered by health profes  | ssional (A, B or C)?    | <u> </u>         |  |
| ☐ Yes, birth delivered by health professiona  | ıl ⇒ Continue with HA20 |                  |  |
| $\square$ No, birth not delivered by health professional $\Rightarrow$ Go to HA24   |                         |                  |  |
| HA20. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS BETWEEN THE TIME YOU WENT FOR DELIVERY BUT BEFORE THE BABY WAS BORN? | Yes                     | 2⇔HA24           |  |
| HA21. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?  | Yes                     |                  |  |
| HA22. HAVE YOU BEEN TESTED FOR THE AIDS VIRUS SINCE THAT TIME YOU WERE TESTED DURING YOUR PREGNANCY?  | Yes                     | 1⇒HA25           |  |

| HA23. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED FOR THE AIDS VIRUS?                                  | Less than 12 months ago | 1, 2 & 3<br>⇒NEXT<br>MODULE |
|--|-------------------------|-----------------------------|
| HA24. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE AIDS VIRUS? | Yes                     | 2⇔HA27                      |
| HA25. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?   | Less than 12 months ago |                             |
| HA26. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?                         | Yes                     | 1, 2 & 8<br>⇒NEXT<br>MODULE |
| HA27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?                       | Yes                     |                             |

| LIFE SATISFACTION  |                             | LS    |
|--|-----------------------------|-------|
| LS1.Check WB2: Age of respondent is between 15 and   | 24?                         |       |
| $\square$ Age 15-24 $\Rightarrow$ Continue with LS2  |                             |       |
| LS2. I WOULD LIKE TO ASK YOU SOME SIMPLE QUESTIONS ON HAPPINESS AND SATISFACTION.  FIRST, TAKING ALL THINGS TOGETHER, WOULD YOU SAY YOU ARE VERY HAPPY, SOMEWHAT   |                             |       |
| HAPPY, NEITHER HAPPY NOR UNHAPPY,<br>SOMEWHAT UNHAPPY OR VERY UNHAPPY?   |                             |       |
| YOU CAN ALSO LOOK AT THESE PICTURES TO HELP YOU WITH YOUR RESPONSE.  | Very happy1 Somewhat happy2 |       |
| Show side 1 of response card and explain what each symbol represents. Circle the response code pointed to by the respondent.   | Neither happy nor unhappy   |       |
| LS3. Now I will ask you questions about your level of satisfaction in different areas.   |                             |       |
| IN EACH CASE, WE HAVE FIVE POSSIBLE RESPONSES: PLEASE TELL ME, FOR EACH QUESTION, WHETHER YOU ARE VERY SATISFIED, SOMEWHAT SATISFIED, NEITHER SATISFIED NOR UNSATISFIED, SOMEWHAT UNSATISFIED OR VERY UNSATISFIED. |                             |       |
| Again, you can look at these pictures to help you with your response.  |                             |       |
| Showside 2 of response card and explain what each symbol represents. Circle the response code shown by the respondent, for questions LS3 to LS13.  | Very satisfied1             |       |
| How satisfied are you with your family life?   | Somewhat satisfied          |       |
| LS4. HOW SATISFIED ARE YOU WITH YOUR FRIENDSHIPS?  | Very satisfied              |       |
| LS5. DURING THE CURRENT (2010-2011) SCHOOL YEAR, DID YOU ATTEND SCHOOL AT ANY TIME?  | Yes                         | 2⇔LS7 |

|  | · · · · · · · · · · · · · · · · · · · |
|--|---------------------------------------|
| LS6. How satisfied are/were you with your school?  | Very satisfied                        |
| LS7. How satisfied are you with your current job?  | Does not have a job                   |
| If the respondent says that he/she does not have a job, circle "0" and continue with the next question. Do not probe to find out how she feels about not having a job, unless she tells you herself.               | Somewhat satisfied                    |
| LS8. How satisfied are you with your health?   | Very satisfied                        |
| LS9. HOW SATISFIED ARE YOU WITH WHERE YOU LIVE?  If necessary, explain that the question refers to the living environment, including the neighbourhood and the dwelling.   | Very satisfied                        |
| LS10. How satisfied are you with how people around you generally treat you?  | Very satisfied                        |
| LS11. How satisfied are you with the way you look?   | Very satisfied                        |
| LS12. How satisfied are you with your life, overall?   | Very satisfied                        |
| LS13. How satisfied are you with your current income?  | Does not have any income              |
| If the respondent responds that he/she does not have any income, circle "0" and continue with the next question. Do not probe to find out how she feels about not having any income, unless she tells you herself. | Somewhat satisfied                    |
| LS14. COMPARED TO THIS TIME LAST YEAR, WOULD YOU SAY THAT YOUR LIFE HAS IMPROVED, STAYED MORE OR LESS THE SAME, OR WORSENED, OVERALL?  | Improved                              |

| LS15. AND IN ONE YEAR FROM NOW, DO YOU EXPECT THAT YOUR LIFE WILL BE BETTER, WILL   | Better                     |  |  |  |
|---|----------------------------|--|--|--|
| BE MORE OR LESS THE SAME, OR WILL BE WORSE, OVERALL?  | Worse3                     |  |  |  |
|   |                            |  |  |  |
|   |                            |  |  |  |
| WM11. Record the time.  | Hour, minutes and am/pm: m |  |  |  |
|   |                            |  |  |  |
| WM12.Check Household Listing Form, columnHL9.  Is the respondent the mother or caretaker of any child age 0-4 living in this household?  ☐ Yes  ☐ Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE for that child and start the interview with this respondent.  ☐ No  ☐ Continue. |                            |  |  |  |
|   |                            |  |  |  |
| WM13. Check Household Listing Form, columnHL9. Is the respondent the mother or caretaker of any child age 2 - 9 living in this household?   |                            |  |  |  |
| ☐ Yes   Go to QUESTIONNAIRE FOR CHILD DISABILITY for that child and start the interview with this respondent.   |                            |  |  |  |
| No ⇒ End the interview with this respondent by thanking her for her cooperation. Check for the presence of any other eligible woman or children under-5 in the household.   |                            |  |  |  |

Final: June, 2011

| Supervisor's Observations   |
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| Interviewer's Observations  |
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| Field Editor's Observations |
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## QUESTIONNAIRE FOR CHILDREN UNDER FIVE

BELIZE

| UNDER-FIVE CHILD INFORMATION PANEL   | UF   |
|--|--|
| This questionnaire is to be administered to all mothers  | or caretakers (see Household Listing Form, column HL9) who te of 5 years (see Household Listing Form, column HL6). the child.  |
| UF1. Cluster number:   | UF2. Household number:   |
| UF3. Child's name: Name  | UF4. Child's line number:  |
| UF5. Mother's / Caretaker's name: Name   | UF6. Mother's / Caretaker's line number:   |
| UF7. Interviewer name and number:  | UF8. Day / Month / Year of interview:  |
| Name   | //   |
| Repeat greeting if not already read to this respondent:  VE ARE FROM THE STATISTICAL INSTITUTE OF BELIZE.  WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION WITH UNICEF. I WOULD LIKE TO TALK TO YOU ABOUT THIS. THE INTERVIEW WILL TAKE ABOUT 20 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE IDENTIFIED.  MAY I START NOW?  □ Yes, permission is given ⇒ Go to UF12 to read the property of the property of the permission is not given ⇒ Complete UF |  |
| JF9. Result of interview for children under 5  Codes refer to mother/caretaker.  | Completed         .01           Not at home         .02           Refused         .03           Partly completed         .04           Incapacitated         .05           Other (specify)         .96 |
| JF10. Field edited by (Name and number):   | UF11. Data entry clerk (Name and number):  Name  |

| UF12. Record the time. | Hour, minutes and am/pm : : : | m |
|------------------------|-------------------------------|---|
|                        |                               |   |

| AGE  |                          | AG |
|--|--------------------------|----|
| AG1. Now I Would like to ask you about the AGE OF (name).  |                          |    |
| IN WHAT MONTH AND YEAR WAS (name) BORN?  |                          |    |
| Probe: What is his / her birthday?   | Date of birth            |    |
|  | Day                      |    |
| If the mother/caretaker knows the exact birth<br>date, also enter the day; otherwise, circle 98 for<br>day | DK day98                 |    |
| Month and year must be recorded.   | Month                    |    |
| Month and year must be recorded.   | Year                     |    |
| AG2. How old is (name)?  | Age (in completed years) |    |
| Probe:   | Age (in completed years) |    |
| HOW OLD WAS ( <i>name</i> ) AT HIS / HER LAST BIRTHDAY?  |                          |    |
| Record age in completed years.   |                          |    |
| Record '0' if less than 1 year.  |                          |    |
| Compare and correct AG1 and/or AG2 if inconsistent.  |                          |    |

| BIRTH REGISTRATION   |                | BR                         |
|--|----------------|----------------------------|
| BR1. DOES (name) HAVE A BIRTH CERTIFICATE?   | Yes, seen1     | 1⇒Next                     |
| If yes, ask: MAY   SEE IT?   | Yes, not seen2 | Module<br>2⇒Next<br>Module |
| ,  | No3            |                            |
|  | DK8            |                            |
| BR2. HAS (name)'S BIRTH BEEN REGISTERED WITH THE VITAL STATISTICS UNIT (REGISTRY), | Yes1           | 1⇒Next<br>Module           |
| MAGISTRATE'S COURT, VILLAGE REGISTRAR OR HOSPITAL?                                 | No2            |                            |
|  | DK8            |                            |
| BR3. Do you know how to register your child's birth?                               | Yes            |                            |

| EARLY CHILDHOOD DEVELOPMENT  |  | EC    |
|--|--|-------|
| EC1. HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR (name)?  | None   |       |
|  | Number of children's books0                                |       |
|  | Ten or more books10  |       |
| EC2. I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT (name) PLAYS WITH WHEN HE/SHE IS AT HOME.   |  |       |
| WHAT DOES (name) PLAY WITH?  |  |       |
| DOES HE/SHE PLAY WITH:   | Y N DK   |       |
| [A] HOMEMADE TOYS (SUCH AS DOLLS, CARS, OR OTHER TOYS MADE AT HOME)?   | Homemade toys 1 2 8  |       |
| [B] TOYS FROM A SHOP OR MANUFACTURED TOYS?   | Toys from a shop 1 2 8                                     |       |
| [C] HOUSEHOLD OBJECTS (SUCH AS BOWLS OR POTS) OR OBJECTS FOUND OUTSIDE (SUCH AS STICKS, ROCKS, ANIMAL SHELLS OR LEAVES)?                                   | Household objects or outside objects 1 2 8                 |       |
| If the respondent says "YES" to the categories above, then probe to learn specifically what the child plays with to confirm the response                   |  |       |
| EC3. SOMETIMES ADULTS TAKING CARE OF CHILDREN HAVE TO LEAVE THE HOUSE TO GO SHOPPING, WASH CLOTHES, OR FOR OTHER REASONS AND HAVE TO LEAVE YOUNG CHILDREN. |  |       |
| ON HOW MANY DAYS IN THE PAST WEEK WAS $(name)$ :   |  |       |
| [A] LEFT ALONE FOR MORE THAN AN HOUR?  | Number of days left alone for more than an hour            |       |
| [B] LEFT IN THE CARE OF ANOTHER CHILD,<br>THAT IS, SOMEONE LESS THAN 10 YEARS<br>OLD, FOR MORE THAN AN HOUR?   | Number of days left with other child for more than an hour |       |
| If 'none' enter' 0'. If 'don't know' enter'8'  |  |       |
| EC4. Check AG2: Age of child   |  |       |
| $\square$ Child age 3 or 4 $\Rightarrow$ Continue with EC5   |  |       |
| $\square$ Child age 0, 1 or 2 $\Rightarrow$ Go to Next Modu  | le   |       |
| EC5. DOES (name) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION  | Yes1   |       |
| PROGRAMME, SUCH AS A PRIVATE OR  | No2  | 2⇔EC7 |
| GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?   | DK8  | 8⇒EC7 |

| EC6. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (name) ATTEND?  | Number of hours | s       |         |         |           |  |
|---|-----------------|---------|---------|---------|-----------|--|
| EC7. IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER OVER 15 YEARS OF AGE ENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (name):  |                 |         |         |         |           |  |
| If yes, ask: WHO ENGAGED IN THIS ACTIVITY WITH (name)? — THE MOTHER, THE CHILD'S FATHER OR ANOTHER ADULT MEMBER OF THE HOUSEHOLD (INCLUDING THE CARETAKER/RESPONDENT).  |                 | Mother  | Father  | Other   | No<br>one |  |
| Circle all that apply.  |                 |         |         |         | Onc       |  |
| [A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH (name)?   | Read books      | Α       | В       | Χ       | Υ         |  |
| [B] TOLD STORIES TO (name)?   | Told stories    | Α       | В       | Χ       | Υ         |  |
| [C] SANG SONGS TO (name) OR WITH (name),<br>INCLUDING LULLABIES?  | Sang songs      | Α       | В       | Χ       | Υ         |  |
| [D] TOOK (name) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?  | Took outside    | Α       | В       | Χ       | Υ         |  |
| [E] PLAYED WITH (name)?   | Played with     | Α       | В       | Χ       | Υ         |  |
| [F] NAMED, COUNTED, OR DREW THINGS<br>TO OR WITH (name)?  | Named/counted   | Α       | В       | Χ       | Υ         |  |
| EC8. I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH AND DEVELOPMENT OF YOUR CHILD. CHILDREN DO NOT ALL DEVELOP AND LEARN AT THE SAME RATE. FOR EXAMPLE, SOME WALK EARLIER THAN OTHERS. THESE QUESTIONS ARE RELATED TO SEVERAL ASPECTS OF YOUR CHILD'S DEVELOPMENT. |                 |         |         |         |           |  |
| CAN ( <i>name</i> ) IDENTIFY OR NAME AT LEAST TEN LETTERS OF THE ALPHABET?  | Yes             |         |         |         |           |  |
|   | DK              |         |         |         | 8         |  |
| EC9. CAN (name) READ AT LEAST FOUR SIMPLE, POPULAR WORDS?   | Yes<br>No       |         |         |         |           |  |
|   | DK              |         |         |         | 8         |  |
| EC10. DOES (name) KNOW THE NAME AND RECOGNIZE THE SYMBOL OF ALL NUMBERS FROM 1 TO 10?   | Yes             |         |         |         | 2         |  |
| 5044 0004   | DK              |         |         |         |           |  |
| EC11. CAN (name) PICK UP A SMALL OBJECT WITH TWO FINGERS, LIKE A STICK OR A ROCK FROM THE GROUND?   | No              |         |         |         |           |  |
|   | DK              |         |         |         | 8         |  |
| EC12. IS (name) SOMETIMES TOO SICK TO PLAY?   | Yes<br>No       |         |         |         |           |  |
|   | DK              | <u></u> | <u></u> | <u></u> | 8         |  |

| EC13. DOES (name) FOLLOW SIMPLE DIRECTIONS ON HOW TO DO SOMETHING CORRECTLY? | Yes |
|--|-----|
|  | DK8 |
| EC14. WHEN GIVEN SOMETHING TO DO, IS (name) ABLE TO DO IT INDEPENDENTLY?     | Yes |
|  | DK8 |
| EC15. DOES (name) GET ALONG WELL WITH OTHER CHILDREN?                        | Yes |
|  | DK8 |
| EC16. DOES (name) KICK, BITE, OR HIT OTHER CHILDREN OR ADULTS?               | Yes |
|  | DK8 |
| EC17. DOES (name) GET DISTRACTED EASILY?                                     | Yes |
|  | DK8 |

| BREASTFEEDING   |                 | BF    |
|---|-----------------|-------|
| BF1. HAS (name) EVER BEEN BREASTFED?  | Yes             | 2⇒BF3 |
|   | DK8             | 8⇒BF3 |
| BF2. IS HE/SHE STILL BEING BREASTFED?   | Yes             |       |
|   | DK8             |       |
| BF3. I WOULD LIKE TO ASK YOU ABOUT LIQUIDS THAT (name) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. I AM INTERESTED IN WHETHER (name) HAD THE ITEM EVEN IF IT WAS COMBINED WITH OTHER FOODS. |                 |       |
| DID ( <i>name</i> ) DRINK PLAIN WATER YESTERDAY, DURING THE DAY OR NIGHT?   | Yes             |       |
|   | DK8             |       |
| BF4. DID (name) DRINK INFANT FORMULA YESTERDAY, DURING THE DAY OR NIGHT?  | Yes             | 2⇔BF6 |
|   | DK8             | 8⇒BF6 |
| BF5. HOW MANY TIMES DID (name) DRINK INFANT FORMULA?  | Number of times |       |
| BF6. DID (name) DRINK MILK, SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK YESTERDAY, DURING THE DAY OR NIGHT?   | Yes             | 2⇒BF8 |
| TESTERDAT, BORING THE BAT OR MIGHT:   | DK8             | 8⇒BF8 |
| BF7. HOW MANY TIMES DID (name) DRINK TINNED, POWDERED OR FRESH ANIMAL MILK?   | Number of times |       |
| BF8. DID (name) DRINK JUICE OR JUICE DRINKS YESTERDAY, DURING THE DAY OR NIGHT?   | Yes             |       |
|   | DK8             |       |
| BF9. DID (name) DRINK WATERY SOUP YESTERDAY, DURING THE DAY OR NIGHT?   | Yes             |       |
|   | DK8             |       |
| BF10. DID (name) DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES YESTERDAY, DURING THE DAY OR NIGHT?   | Yes             |       |
| TESTEROM, BORING THE DAT OR MIGHT:  | DK8             |       |
| BF11. DID (name) DRINK ORS (ORAL RE-<br>HYDRATION SOLUTION) YESTERDAY, DURING<br>THE DAY OR NIGHT?  | Yes             |       |
| THE DAT OK NIGHT!   | DK8             |       |

| BF12. DID (name) DRINK ANY OTHER LIQUIDS YESTERDAY, DURING THE DAY OR NIGHT?                                   | Yes             |        |
|--|-----------------|--------|
|  | DK8             |        |
| BF13. DID ( <i>name</i> ) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?                              | Yes             | 2⇒BF15 |
|  | DK8             | 8⇔BF15 |
| BF14. HOW MANY TIMES DID (name) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?                        | Number of times |        |
| BF15. DID (name) EAT PORRIDGE/LAB YESTERDAY, DURING THE DAY OR NIGHT?  | Yes             |        |
|  | DK8             |        |
| BF16. DID (name) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT?                | Yes             | 2⇒BF18 |
| THE DAT OR NIGHT:  | DK8             | 8⇒BF18 |
| BF17. HOW MANY TIMES DID (name) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT? | Number of times |        |
| BF18. YESTERDAY, DURING THE DAY OR NIGHT, DID (name) DRINK ANYTHING FROM A BOTTLE WITH A NIPPLE?               | Yes             |        |
|  | DK8             |        |

| CARE OF ILLNESS   |   | CA             |
|---|---|----------------|
| CA1. HAS (name) HAD DIARRHOEA IN THE LAST TWO WEEKS, THAT IS, SINCE (day of the week) OF THE WEEK BEFORE LAST?  Diarrhoea is determined as perceived by mother or caretaker, or as three or more loose or watery stools per day, or blood in stool.   | Yes   | 2⇔CA7<br>8⇔CA7 |
| CA2. I WOULD LIKE TO KNOW HOW MUCH (name) WAS GIVEN TO DRINK DURING THE DIARRHOEA (INCLUDING BREAST MILK).  DURING THE TIME (name) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO DRINK, ABOUT THE SAME AMOUNT, MORE THAN USUAL OR NOTHING TO DRINK?  If less, probe: WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO DRINK, OR SOMEWHAT LESS? | Much less       1         Somewhat less       2         About the same       3         More       4         Nothing to drink       5         DK       8                             |                |
| CA3. DURING THE TIME (name) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO EAT, ABOUT THE SAME AMOUNT, MORE THAN USUAL, OR NOTHING TO EAT?  If "less", probe: WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO EAT OR SOMEWHAT LESS?  | Much less       1         Somewhat less       2         About the same       3         More       4         Stopped food       5         Never gave food       6         DK       8 |                |
| CA4. DURING THE EPISODE OF DIARRHOEA, WAS (name) GIVEN TO DRINK ANY OF THE FOLLOWING:  Read each item aloud and record response before proceeding to the next item.  [A] A FLUID MADE FROM ORAL REHYDRATION SALT?  [B] A PRE-PACKAGED ORS FLUID FOR DIARRHOEA?  [C] PEDIALYTE?  | Y N DK  Fluid from ORS  |                |
| CA5. WAS ANYTHING (ELSE) GIVEN TO TREAT THE DIARRHOEA?  | Yes   | 2⇒CA7<br>8⇒CA7 |

|   | T                                   | 1          |
|---|-------------------------------------|------------|
| CA6. What (else) was given to treat the   | Pill or Syrup                       |            |
| DIARRHOEA?  | AntibioticA                         |            |
|   | Antimotility (anti-diarrhoea)B      |            |
| Probe:  | ZincC                               |            |
| Anything else?  | Other (Not antibiotic, Antimotility |            |
|   | or zinc) G                          |            |
|   | Unknown pill or syrupH              |            |
| Pagard all treatments given Write brand   | Officiowit pill of Syrap            |            |
| Record all treatments given. Write brand  | Injustion                           |            |
| name(s) of all medicines mentioned.   | Injection                           |            |
|   | AntibioticL                         |            |
|   | Non-antibiotic M                    |            |
|   | Unknown injectionN                  |            |
| (Name)  |                                     |            |
|   | Intravenous/drip O                  |            |
|   | ·                                   |            |
|   | Home remedy / Herbal medicineQ      |            |
|   |                                     |            |
|   | Other (specify)                     |            |
|   | Other (specify)X                    | <u> </u>   |
| CA7. AT ANY TIME IN THE LAST TWO WEEKS, HAS   | Yes1                                | <u> </u>   |
| (name) HAD AN ILLNESS WITH A COUGH?   | No 2                                | 2⇒CA14     |
|   |                                     |            |
|   | DK8                                 | 8⇒CA14     |
| <b>1</b>  |                                     | 3 / 3/ (14 |
| CA8. WHEN (name) HAD AN ILLNESS WITH A  | Yes1                                |            |
| COUGH, DID HE/SHE BREATHE FASTER THAN   | No 2                                | 2⇒CA14     |
| USUAL WITH SHORT, RAPID BREATHS OR HAVE   |                                     |            |
| DIFFICULTY BREATHING?   | DK8                                 | 8⇒CA14     |
|   | Dueble of technical                 |            |
| CA9. WAS THE FAST OR DIFFICULT BREATHING  | Problem in chest only1              |            |
| DUE TO A PROBLEM IN THE CHEST OR A  | Blocked or runny nose only2         | 2⇒CA14     |
| BLOCKED OR RUNNY NOSE?  |                                     |            |
|   | Both 3                              |            |
|   |                                     |            |
|   | Other ( <i>specify</i> )6           | 6⇒CA14     |
|   | DK8                                 |            |
| 2.42.5  |                                     |            |
| CA10. DID YOU SEEK ANY ADVICE OR TREATMENT  | Yes1                                | _          |
| FOR THE ILLNESS FROM ANY SOURCE?  | No 2                                | 2⇒CA12     |
|   |                                     |            |
|   | DK8                                 | 8⇒CA12     |
| CA44 Epotential provides on   | Dublic coster                       |            |
| CA11. FROM WHERE DID YOU SEEK ADVICE OR   | Public sector                       |            |
| TREATMENT?  | Govt. hospitalA                     | [          |
|   | Govt. health centreB                | <u> </u>   |
| Probe:  | Govt. health postC                  | ]          |
| ANYWHERE ELSE?  | Village health workerD              |            |
|   | Mobile / Outreach clinic E          | [          |
| Circle all providers mentioned,   | Other public (specify)H             | [          |
| but do NOT prompt with any suggestions.   |                                     | [          |
| out at 1101 prompt went any suggestions.  | Private medical sector              | ]          |
|   |                                     | ]          |
| D. L. et al. et | Private hospital / clinic           | ]          |
| Probe to identify each type of source.  | Private physician J                 |            |
|   | Private pharmacyK                   | [          |
| If source is hospital, health centre, or clinic,  | Mobile clinicL                      | ]          |
| write the name of the place below. If unable to   | Other private medical (specify)O    | ]          |
| determine if public or private sector, write the  |                                     |            |
| name of the place below.  | Other source                        | [          |
| name of the place below.  | Out of occurso                      | i II       |
| name of the place below.  | Relative / FriendP                  |            |
| пате ој те расе веюж.   | Relative / FriendP                  |            |
| name of the place below.  | Relative / FriendP<br>ShopQ         |            |
|   | Relative / FriendP                  |            |
| (Name of place)   | Relative / FriendP<br>ShopQ         |            |

| CA12. WAS (name) GIVEN ANY MEDICINE TO TREAT THIS ILLNESS?   | Yes   | 2⇒CA14          |
|--|---|-----------------|
|  | DK8   | 8 <b>⇒</b> CA14 |
| CA13. What medicine was (name) given?  Probe: Any other medicine?  Circle all medicines given. Write brand name(s) of all medicines mentioned. | Antibiotic Pill / Syrup   |                 |
| (Names of medicines)   | Other ( <i>specify</i> ) X DK   |                 |
| CA14. Check AG2: Child aged under 3?  ☐ Yes ⇒ Continue with CA15  ☐ No ⇒ Go to Next Module   |   |                 |
| CA15. THE LAST TIME (name) PASSED STOOLS, WHAT WAS DONE TO DISPOSE OF THE STOOLS?  | Child used toilet / latrine       01         Put into toilet or latrine       02         Put into drain or ditch       03         Thrown into garbage (solid waste)       04         Buried       05         Left in the open       06         Other (specify)       96         DK       98 |                 |

**IMMUNIZATION** IM If an immunization card is available, copy the dates in IM3 for each type of immunization recorded on the card. IM6-IM16A are for registering vaccinations that are not recorded on the card. IM6-IM16A will only be asked when a card is not available. IM1. DO YOU HAVE A CARD WHERE (name)'S **VACCINATIONS ARE WRITTEN DOWN?** Yes, not seen ...... 2 2⇒IM6 No card ...... 3 (If yes) MAY I SEE IT PLEASE? IM2. DID YOU EVER HAVE A VACCINATION CARD 1⇒IM6 FOR (name)? 2⇒IM6 No ...... 2 IM3. (a) Copy dates for each vaccination from the card. Date of Immunization (b) Write '44' in day column if card shows that Month Year Day vaccination was given but no date recorded. **BCG BCG** Polio 1 OPV1 OPV2 Polio 2 Polio 3 OPV3 Polio 4 (Booster) OPV4 PENTAVALANT 1 DPT/HEP/HIB 1 PENTAVALANT 2 DPT/HEP/HIB 2 PENTAVALANT 3 DPT/HEP/HIB 3 DPT DIPHTERIA, WHOOPING **BOOSTER** COUGH, TETANUS) DTaP-P1 (DIPHTERIA, WHOOPING COUGH, DTaP-P1 TETANUS, POLIO) DTaP-P2 DTaP-P2 DTaP-P3 DTaP-P3 DTaP-P4 DTaP-P4 HAEMOPHILUS INFLUENZAE B 1 Hib1 (FLU) HAEMOPHILUS INFLUENZAE B 2 Hib2 HAEMOPHILUS INFLUENZAE B 3 Hib3 HAEMOPHILUS INFLUENZAE B 4 Hib4 HBV1 (HEPATITIS B) HBV1 HBV2 (HEPATITIS B) HBV2 HBV3 (HEPATITIS B) HBV3 MEASLES, MUMPS, RUBELLA 1 MMR1

| MEASLES, MUMPS, RUBELLA 2 MMR2   |                     |                              |
|--|---------------------|------------------------------|
| VITAMIN A (MOST RECENT) VITA   |                     |                              |
| IM4. Check IM3. Are all vaccines (BCG to Measles (  □ Yes ⇔ Go to IM18  □ No ⇔ Continue with IM5   | (or MMR)) recorded? |                              |
| IM5. IN ADDITION TO WHAT IS RECORDED ON THIS CARD, DID (name) RECEIVE ANY OTHER VACCINATIONS — INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS?  | Yes                 |                              |
| Record 'Yes' only if respondent mentions vaccines shown in the table above.  |                     | 2⇒IM18<br>8⇒IM18             |
| IM6. HAS (name) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY?  |                     | 2⇒IM18<br>8⇔IM18             |
| IM7. HAS (name) EVER RECEIVED A BCG VACCINATION AGAINST TUBERCULOSIS — THAT IS, AN INJECTION IN THE ARM OR SHOULDER THAT USUALLY CAUSES A SCAR?  | Yes                 |                              |
| IM8. HAS (name) EVER RECEIVED ANY "VACCINATION DROPS IN THE MOUTH" TO PROTECT HIM/HER FROM GETTING DISEASES— THAT IS, POLIO?   |                     | 2⇒IM11A<br>8⇒IM11A           |
| IM10. How many times was he/she given these drops?   | Number of times     |                              |
| IM11A. HAS (name) EVER RECEIVED A PENTAVALENT VACCINATION — THAT IS, AN INJECTION TO PREVENT HIM/HER FROM GETTING DIPHTERIA, WHOOPING COUGH, TETANUS, HEPATITIS B, INFLUENZAE B?  Probe by indicating that Pentavalent vaccination is sometimes given at the same time |                     | 2⇔IM12A<br>8⇔IM12A           |
| as Polio.  IM11B. HOW MANY TIMES WAS A PENTAVALENT VACCINE RECEIVED?   | Number of times     |                              |
| IM11. HAS (NAME) EVER RECEIVED A DPT VACCINATION — THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS — TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, OR DIPHTHERIA?  | No2                 | 1⇔IM16<br>2⇔IM12A<br>8⇔IM12A |
| Probe by indicating that DPT vaccination is sometimes given at the same time as polio  |                     |                              |

| IM12A. HAS (name) EVER RECEIVED A DTaP-P1 VACCINATION – THAT IS, AN INJECTION TO PREVENT HIM/HER FROM GETTING DIPHTERIA, WHOOPING COUGH, TETANUS, POLIO?   | Yes  |                  |
|--|--|------------------|
| IM12B. HOW MANY TIMES WAS A DTaP-P1 VACCINE RECEIVED?  | Number of times  |                  |
| IM12C. HAS (NAME) EVER RECEIVED A HIB1 VACCINATION — THAT IS, AN INJECTION TO PREVENT HIM/HER FROM GETTING HAEMOPHILUS INFLUENZAE TYPE B (FLU)?  | Yes  |                  |
| IM12D. HOW MANY TIMES WAS A HIB1 VACCINE RECEIVED?   | Number of times  |                  |
| IM13. HAS (name) EVER BEEN GIVEN A HEPATITIS B VACCINATION — THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS — TO PREVENT HIM/HER FROM GETTING HEPATITIS B?  Probe by indicating that the hepatitis B vaccine is sometimes given at the same time as polio and DPT vaccines | Yes  | 2⇔IM16<br>8⇔IM16 |
| IM14. WAS THE FIRST HEPATITIS B VACCINE<br>RECEIVED WITHIN 24 HOURS AFTER BIRTH, OR<br>LATER?  | Within 24 hours       1         Later       2         DK       8 |                  |
| IM15. HOW MANY TIMES WAS A HEPATITIS B VACCINE RECEIVED?   | Number of times  |                  |
| IM16. HAS (name) EVER RECEIVED A MEASLES INJECTION OR AN MMR INJECTION — THAT IS, A SHOT IN THE ARM AT THE AGE OF 9 MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING MEASLES?   | Yes  | 2⇔IM18<br>8⇔IM18 |
| IM16A. HOW MANY TIMES WAS A MEASLES INJECTION OR AN MMR INJECTION VACCINE RECEIVED?  | Number of times  |                  |
| IM18. HAS (name) RECEIVED A VITAMIN A DOSE WITHIN THE LAST 6 MONTHS?  Show picture of common types of ampules / capsules / syrups  | Yes  |                  |

| UF13. Record the time.   | Hour, minutes and am/pm:: r  | n |
|--|--|---|
| UF14. Is the respondent the mother or caretaker of another child age 0-4 living in this household?  □ Yes ⇒ Indicate to the respondent that you will need to measure the weight and height of the child later. Go to the next QUESTIONNAIRE FOR CHILDREN UNDER FIVE to be administered to the same respondent and tell her/him that you will need to measure the weight and height of the child  □ No ⇒ Continue |  |   |
| with this respondent.  □ No ➡ End the interview with this respondent.  tell her/him that you will need to me  Check to see if there are other womening this household.   | for any eligible child age 2-9 years.  IILD DISABILITY for that child and start the interview  lent by thanking him/her for his/her cooperation and easure the weight and height of the child  an's or under-5 questionnaires to be administered  -5 questionnaire, or start making arrangements for |   |

| ANTHROPOMETRY   |   |       |
|---|---|-------|
| Record weight and length/height below, taking care to                         | After the household questionnaire is complete the field supervisor weighs and measures each child under 5.  Record weight and length/height below, taking care to record the measurements on the correct questionnaire for each child. Check the child's name and line number on the household listing before recording measurements. |       |
| AN1. Measurer's name and number:  | Name  |       |
| AN2. Result of height / length and weight measurement                         | Either or both measured   | 2⇔AN6 |
|   | Child or caretaker refused3   | 3⇒AN6 |
|   | Other (specify)6  | 6⇒AN6 |
| AN3. Child's weight   | Kilograms (kg)99.9  |       |
| AN4. Child's length or height  Check age of child in AG2:                     |   |       |
| □ Child under 2 years old.   Measure length (lying down).                     | Length (cm) Lying down1   |       |
| ☐ Child age 2 or more years. ⇒ Measure height (standing up).                  | Height (cm) Standing up 2   |       |
|   | Length / Height not measured 9999.9   |       |
|   |   |       |
| AN6. Is there another child in the household who is eligible for measurement? |   |       |
| ☐ Yes ⇒ Record measurements for next child.                                   |   |       |
| $\square$ No $\Rightarrow$ Continue with the interviews.                      |   |       |

| Interviewer's Observations |                             |
|----------------------------|-----------------------------|
|                            |                             |
|                            |                             |
|                            |                             |
|                            |                             |
|                            |                             |
|                            |                             |
|                            | Field Editor's Observations |
|                            |                             |
|                            |                             |
|                            |                             |
|                            |                             |
|                            |                             |
|                            |                             |
|                            | Supervisor's Observations   |
|                            |                             |
|                            |                             |
|                            |                             |
|                            |                             |
|                            |                             |



BELIZE

## QUESTIONNAIRE FORM FOR CHILD DISABILITY

| CHILD DISABILITY QUESTIONNAIRE FORM  | DA  |
|--|---|
| This questionnaire is to be administered to all mothers or c<br>care for a child that lives with them and is age 2 through 9<br>A separate questionnaire should be used for each eligible of | years (see Household Listing Form, column HL6).                                       |
| DA1.Cluster number   | DA2. Household number:  |
|  |   |
| DA3. Child's name:   | DA4. Child's line number:   |
| Name   |   |
| DA5. Mother's / Caretaker's name:  | DA6. Mother's / Caretaker's line number:  |
| Name   |   |
| DA7. Interviewer name and number:  | DA8. Day / Month / Year of interview:   |
| Name   | //  |
| Repeat greeting if not already read to this respondent:  | If greeting at the beginning of the household   |
| WE ARE FROM THE STATISTICAL INSTITUTE OF BELIZE.   | questionnaire has already been read to this respondent, then read the following:      |
| WE ARE WORKING ON A PROJECT CONCERNED  | respondent, then redd the following.  |
| WITH FAMILY HEALTH AND EDUCATION WITH  | NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT  |
| UNICEF. I WOULD LIKE TO TALK TO YOU ABOUT  | (child's name from HL2)'S HEALTH CONDITION.   |
| (name)'S HEALTH CONDITION. THIS WILL TAKE ONLY A FEW MINUTES. ALL THE INFORMATION YOU GIVE   | THIS WILL TAKE ONLY A FEW MINUTES. AGAIN, ALL THE INFORMATION YOU GIVE ME WILL REMAIN |
| ME WILL REMAIN STRICTLY CONFIDENTIAL AND   | STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL   |
| YOUR ANSWERS WILL NEVER BE SHARED WITH   | NEVER BE SHARED WITH ANYONE OUTSIDE OF THE  |
| ANYONE OUTSIDE OF THE TEAM WITHOUT YOUR WRITTEN PERMISSION.  | TEAM WITHOUT YOUR WRITTEN PERMISSION.   |
| MAY I START NOW?   |   |
| $\square$ Yes, permission is given $\Rightarrow$ Go to DA12 to be  | gin the interview.  |
| ☐ No, permission is not given   Complete DAS   | ). Discuss this result with your supervisor   |

| DA9. Result of interview for child disability  Codes refer to mother/caretaker. | Completed                                 |
|---|---|
| DA10. Field edited by (Name and number):  | DA11. Data entry clerk (Name and number): |
| Name  | Name                                      |
| DA11A. Record the time.   | Hour, minutes and am/pm : : m             |

| CHILD DISABILITY   |      | DA     |  |
|--|------|--------|--|
| To be administered to mothers or caretakers of children age 2-9 years.   |      |        |  |
| DA12. Copy child's name and age from HL2 and HL6, from Household Listing Form.   | Name |        |  |
|  | Age  |        |  |
| DA13. COMPARED WITH OTHER CHILDREN, DOES OR DID (name) HAVE ANY SERIOUS DELAY IN SITTING, STANDING, OR WALKING?                          | Yes1 |        |  |
|  | No2  |        |  |
| DA14. COMPARED WITH OTHER CHILDREN, DOES (name) HAVE DIFFICULTY SEEING, EITHER IN THE DAYTIME OR AT NIGHT?                               | Yes1 |        |  |
|  | No   |        |  |
| DA15. DOES (name) APPEAR TO HAVE ANY DIFFICULTY HEARING? (USES HEARING AID, HEARS WITH DIFFICULTY OR COMPLETELY DEAF)?                   | Yes1 |        |  |
|  | No2  |        |  |
| DA16. WHEN YOU TELL (name) TO DO SOMETHING, DOES HE/SHE SEEM TO UNDERSTAND WHAT  | Yes1 |        |  |
| YOU ARE SAYING?  | No   |        |  |
| DA17. DOES (name) HAVE DIFFICULTY IN WALKING OR MOVING HIS/HER ARMS OR DOES HE/SHE HAVE WEAKNESS AND/OR STIFFNESS IN THE ARMS OR LEGS?   | Yes1 |        |  |
|  | No2  |        |  |
| DA18. DOES (name) SOMETIMES HAVE FITS, BECOME RIGID, OR LOSE CONSCIOUSNESS?  | Yes1 |        |  |
| DA19. DOES (name) LEARN TO DO THINGS LIKE  | No   |        |  |
| OTHER CHILDREN HIS/HER AGE?  | No2  |        |  |
| DA20. DOES (name) SPEAK AT ALL (CAN HE/SHE   | 740  |        |  |
| MAKE HIM OR HERSELF UNDERSTOOD IN WORDS; CAN HE/SHE SAY ANY RECOGNIZABLE WORDS)?   | Yes1 |        |  |
|  | No2  |        |  |
| DA21. Check DA12: Age of child   |      |        |  |
| ☐ Child age 3 through 9   Continue with  | DA22 |        |  |
| $\square$ Child age 2 $\Rightarrow$ Go to DA23   |      |        |  |
| DA22. IS (name)'S SPEECH IN ANY WAY DIFFERENT FROM NORMAL (NOT CLEAR ENOUGH TO BE UNDERSTOOD BY PEOPLE OTHER THAN THE IMMEDIATE FAMILY)? | Yes1 | 1⇔DA24 |  |
|  | No2  | 2⇒DA24 |  |
| DA23. CAN (name) NAME AT LEAST ONE OBJECT (FOR EXAMPLE, AN ANIMAL, A TOY, A CUP, A   | Yes1 |        |  |
| SPOON)?  | No2  |        |  |

| DA25. AS PART OF THIS SURVEY, OTHERS IN OUR TEAM MAY VISIT YOU AGAIN TO COLLECT MORE INFORMATION ON SOME OF THE TOPICS WE HAVE JUST TALKED ABOUT, CONCERNING (name).  MAY I PROCEED AND NOTE THAT YOU WOULD BE FINE WITH SUCH A VISIT, IF IT OCCURS AT ALL? AGAIN, YOU MAY CHANGE YOUR MIND AND DECLINE TO SPEAK TO OUR TEAM IF AND WHEN THE VISIT HAPPENS. | Yes   |   |  |
|---|---|---|--|
| DA26. Record the time.  | Hour, minutes and am/pm::::   | m |  |
| DA27. Does any other child age of 2-9 years reside in the household?  Check Household Listing Form, column HL9A for any eligible child age 2-9 years.  □ Yes  Go to QUESTIONNAIRE FOR CHILD DISABILITY for that child and start the interview with this respondent.  □ No  Continue   |   |   |  |
| Check Household Listing Form, column HL9A  ☐ Yes ⇔ Go to QUESTIONNAIRE FOR CH with this respondent.   | for any eligible child age 2-9 years.   |   |  |
| Check Household Listing Form, column HL9A  ☐ Yes ⇔ Go to QUESTIONNAIRE FOR CH with this respondent.   | for any eligible child age 2-9 years.  IILD DISABILITY for that child and start the interview  the household? |   |  |

| Interviewer's Observations    |
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| Field Editor's Observations   |
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| Supervisor's Observations     |
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