

MICS

**BELIZE**  
**MULTIPLE INDICATOR CLUSTER SURVEY**  
**2011**

**FINAL REPORT**



unicef   
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).

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 [www.childinfo.org](http://www.childinfo.org).

**Belize**  
**Multiple Indicator Cluster Survey**  
**2011**

**The Statistical Institute of Belize**

**UNICEF**  
**United Nations Children's Fund**

November, 2012

# SUMMARY TABLE OF FINDINGS

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

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
<b>CHILD MORTALITY</b>					
Child mortality	1.1	4.1	Under-five mortality rate	17 per 1,000	
	1.2	4.2	Infant mortality rate	14 per 1,000	
<b>NUTRITION</b>					
Nutritional status	2.1a	1.8	Underweight prevalence	Moderate and Severe (- 2 SD)	6.2 percent
				Severe (- 3 SD)	1.3 percent
	2.2a	2.2b	Stunting prevalence	Moderate and Severe (- 2 SD)	19.3 percent
				Severe (- 3 SD)	5.4 percent
	2.3a	2.3b	Wasting prevalence	Moderate and Severe (- 2 SD)	3.3 percent
				Severe (- 3 SD)	1.2 percent
	Breastfeeding and infant feeding	2.4		Children ever breastfed	91.9 percent
		2.5		Early initiation of breastfeeding	61.5 percent
		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		Duration of breastfeeding	16.1 months
		2.11		Bottle feeding	57.8 percent
		2.12		Introduction of solid, semi-solid or soft foods	67.4 percent
2.13			Minimum meal frequency	67.6 percent	
Vitamin A	2.14		Age-appropriate breastfeeding	38.2 percent	
	2.15		At least 2 milk feeds	84.4 percent	
	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	
<b>CHILD HEALTH</b>					
Vaccinations	3.1		Tuberculosis immunization coverage	97.5 percent	
	3.2		Polio immunization coverage	75.2 percent	
	3.3		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	
	3.10		Antibiotic treatment of suspected pneumonia	70.7 percent	
Solid fuel use	3.11		Solid fuels	17.7 percent	
Child Disability	3.21		Child disability	36.4 percent	
<b>WATER AND SANITATION</b>					
Water and sanitation	4.1	7.8	Use of improved drinking water sources	97.7 percent	
	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	
	4.6		Soap anywhere in dwelling	93.2 percent	
<b>REPRODUCTIVE HEALTH</b>					
Contraception and unmet need	5.1	5.4	Adolescent fertility rate	64 per 1,000	
	5.2		Early childbearing	16.9 percent	
	5.3	5.3	Contraceptive prevalence rate	55.2 percent	
	5.4	5.6	Unmet need	15.9 percent	
Maternal and newborn health	5.5a	5.5	Antenatal care coverage	At least once by skilled personnel	96.2 percent
				At least four times by any provider	83.1 percent
				5.6	Content of antenatal care
	5.7	5.2	Skilled attendant at delivery	96.2 percent	
	5.8		Institutional deliveries	93.8 percent	
	5.9		Caesarean section	28.1 percent	

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value
Post-natal health checks	5.10		Post-partum stay in health facility	92.3 percent
	5.11		Post-natal health check for the newborn	97.3 percent
	5.12		Post-natal health check for the mother	94.6 percent
<b>CHILD DEVELOPMENT</b>				
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		Early child development index	87.5 percent
	6.7		Attendance to early childhood education	31.7 percent
<b>EDUCATION</b>				
Literacy and education	7.1	2.3	Literacy rate among young women	91.1 percent
	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		Secondary school net attendance rate (adjusted)	55.4 percent
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	7.9		Gender parity index (primary school)	1.00 ratio
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Birth registration	8.1		Birth registration	95.2 percent
Child labour	8.2		Child labour	10.0 percent
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	8.4		Child labour among students	9.7 percent
	8.5		Violent discipline	70.5 percent
Child discipline	8.6		Marriage before age 15	4.8 percent
	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
Early marriage and polygyny	8.10b		Spousal age difference - 10+ years older (women age 20 – 24)	15.4 percent
	8.14		Attitudes towards domestic violence	8.6 percent
Domestic violence				
<b>HIV/AIDS, SEXUAL BEHAVIOUR, AND ORPHANED AND VULNERABLE CHILDREN</b>				
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Sexual behaviour	9.8		HIV counselling during antenatal care	59.4 percent
	9.9		HIV testing during antenatal care	71.8 percent
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	9.11		Sex before age 15 among young women	5.3 percent
	9.12		Age-mixing among sexual partners	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
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## LIST OF ABBREVIATIONS

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

<b>FHS</b>	Family Health Survey
<b>GPI</b>	Gender Parity Index
<b>HepB</b>	Hepatitis
<b>HIB</b>	Haemophilus Influenzae B
<b>HIV</b>	Human Immunodeficiency Virus
<b>IMR</b>	Infant Mortality Rate
<b>ISCED</b>	International Standard Classification of Education
<b>IUD</b>	Intrauterine Device
<b>JMP</b>	Joint Monitoring Programme
<b>LAM</b>	Lactational Amenorrhea Method
<b>MDG</b>	Millennium Development Goals
<b>MICS</b>	Multiple Indicator Cluster Survey
<b>MICS4</b>	Fourth global round of Multiple Indicator Cluster Survey Programme
<b>MoH</b>	Ministry of Health
<b>NAR</b>	Net Attendance Rate
<b>NCFC</b>	National Committee for Families and Children
<b>NCHS</b>	National Centre for Health Statistics
<b>PNHC</b>	Post Natal Health Check
<b>NPA</b>	National Plan of Action
<b>nq0</b>	Probability of Dying Before Year n
<b>ORS</b>	Oral Rehydration Solution
<b>ORT</b>	Oral Rehydration Treatment
<b>PNC</b>	Post Natal Care
<b>pps</b>	Probability Proportional to Size
<b>PSU</b>	Primary Sampling Unit
<b>RHF</b>	Recommended Home Fluid
<b>SIB</b>	Statistical Institute of Belize
<b>STIs</b>	Sexually Transmitted Infections
<b>SPSS</b>	Statistical Package for Social Sciences
<b>TSFB</b>	Time Since First Birth
<b>U5MR</b>	Under-5 Mortality Rate
<b>UN</b>	United Nations
<b>UNAIDS</b>	United Nations Programme on HIV/AIDS
<b>UNCT</b>	United Nations Country Team
<b>UNDAF</b>	United Nations Development Framework
<b>UNFPA</b>	United Nations Population Fund
<b>UNGASS</b>	United Nations General Assembly Special Session on HIV/AIDS
<b>UNICEF</b>	United Nations Children's Fund
<b>WFFC</b>	World Fit For Children
<b>WHO</b>	World Health Organization

## FOREWORD

The Belize Multiple Indicator Cluster Survey (MICS 4) 2011 conducted is part of the UNICEF- GOB 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.

## ACKNOWLEDGEMENT

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 its 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 initiative and to the men who provided the support when requested.

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## EXECUTIVE SUMMARY

**M**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.

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### 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.
- Diphtheria, 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 19.5 percent.
- 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

This 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.



## II. SAMPLE AND SURVEY METHODOLOGY

### Sample Design

The 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
- 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
- HIV/AIDS
- Life Satisfaction

The Questionnaire for Children Under-Five was administered to mothers or caretakers of children under 5 years of age<sup>1</sup> 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
- Age
- Birth Registration
- Early Childhood Development
- Breastfeeding
- Care of Illness
- 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.

- 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 26<sup>th</sup> January 2011 and Thursday 27<sup>th</sup> 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.

1 The terms “children under 5”, “children age 0-4 years”, and “children aged 0-59 months” are used interchangeably in this report.

2 The model MICS4 questionnaires can be found at [www.childinfo.org](http://www.childinfo.org)

## 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.

### III. SAMPLE COVERAGE AND THE CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS

#### Sample Coverage

Of 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, women and 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

	AREA		REGION								Total
	Urban	Rural	Corozal	Orange Walk	Belize (Excluding Belize City South Side)	Cayo	Stann Creek	Toledo	Belize City South Side	Belize District	
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 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 Questionnaire	1147	2140	494	528	293	481	438	647	406	699	3287
Children aged 2-9 Mother/Caretaker 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

		MALES		FEMALES		TOTAL	
		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 groups	0-14	2979	34.7	2995	34.4	5974	34.6
	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 adult populations	Children age 0-17 years	3532	41.2	3561	40.9	7094	41.0
	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.

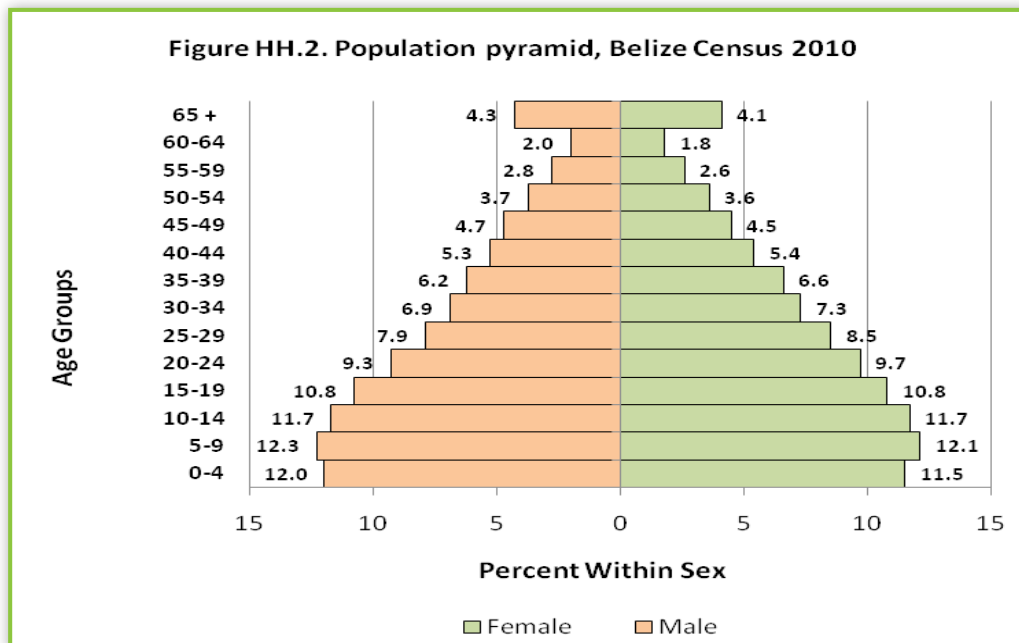
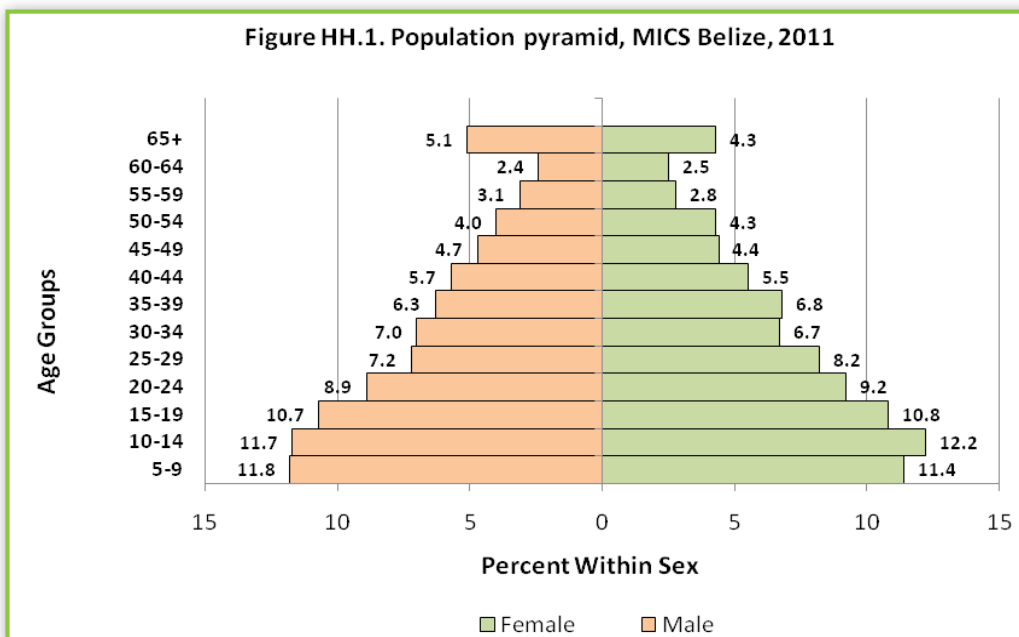


Table HH.3 provides basic background information on the households. Within households, the sex of the household head, region, area, number of household members, education of household head, religion and ethnicity of the household head are shown in the table. These background characteristics are used 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

		Weighted percent	NUMBER OF HOUSEHOLDS	
			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
Rural		51.0	2254	2420
Number of household members	1	15.1	666	677
	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 head	None	7.0	311	349
	Primary/Infant	47.6	2104	2201
	Secondary +	41.8	1851	1722
	CET/ITVET/VOTEC	1.1	47	41
	Missing/DK	1.3	58	50
Ethnicity of household head	Other	1.2	52	61
	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
<b>Households with at least</b>				
	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 years	72.4	4424	4424
	<b>Mean household size</b>	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 percent	NUMBER OF WOMEN	
			Weighted	Un-weighted
Region	Corozal	13.0	534	648
	Orange Walk	15.1	618	688
	Belize (Excluding Belize City South Side)	16.8	687	448
	Belize City South Side	14.0	573	612
	Belize District	30.8	1260	1060
	Cayo	22.8	933	605
	Stann Creek	9.9	404	493
	Toledo	8.5	347	602
	Area	Urban	47.0	1926
Rural		53.0	2170	2324
Age	15-19	20.6	844	852
	20-24	17.6	720	729
	25-29	15.9	651	655
	30-34	13.3	544	554
	35-39	13.1	537	516
	40-44	10.8	442	431
	45-49	8.8	359	359
Marital/Union status	Currently married/in union	58.3	2386	2394
	Widowed	1.1	44	43
	Divorced	0.8	35	29
	Separated	10.0	410	410
	Never married/in union	29.8	1219	1219
	Missing	0.0	1	1
Motherhood status	Ever gave birth	66.6	2728	2735
	Never gave birth	33.4	1368	1361
Births in last two years	Had a birth in last two years	16.7	685	702
	Had no birth in last two years	83.3	3411	3394
Education	None	3.6	148	156
	Primary/Infant	39.3	1608	1704
	Secondary +	55.2	2259	2148
	CET/ITVET/VOTEC	0.6	26	22
	Other	1.3	55	66
Wealth index quintiles	Poorest	15.7	644	799
	Second	19.9	815	821
	Middle	21.4	877	860
	Fourth	21.0	862	824
	Richest	21.9	898	792
Ethnicity of household head	Creole	24.0	985	900
	Mestizo	50.0	2046	1976
	Garifuna	6.2	253	267
	Maya	9.9	407	550
	Other	8.2	335	335
	Missing/DK	1.7	70	68
Total		100.0	4096	4096



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.

1 Unless otherwise stated, “education” refers to educational level attended by the respondent throughout this report when it is used as a background variable.

2 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:

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

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

		Weighted percent	Number of children		
			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 Belize City South Side)	12.3	240	153	
	Belize City South Side	13.0	252	252	
	Belize District	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 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 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 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	

\* Mother's education refers to educational attainment of mothers and caretakers of children under-5.

## IV. CHILD MORTALITY

One 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  $2q_0$  (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  $15q_0$  (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  $2q_0$ ,  $5q_0$  and  $15q_0$  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 DEAD	NUMBER OF WOMEN
	Mean	Total	Mean	Total		
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

[1] MICS indicator 1.2; MDG indicator 4.2

[2] MICS indicator 1.1; MDG indicator 4.1

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

( ) Figures that are based on less than 250 un-weighted cases

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.

## V. NUTRITION

### Nutritional Status

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 child mortality.

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](http://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.

1 [http://www.who.int/childgrowth/standards/second\\_set/technical\\_report\\_2.pdf](http://www.who.int/childgrowth/standards/second_set/technical_report_2.pdf)



Table NU.1: Nutritional status of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Belize, 2011

	Weight for age				Number of children under age 5	Height for age				Number of children under age 5	Weight for height				Number of children under age 5
	Underweight		Mean Z-Score (SD)	Percent below -2 sd [1]		Stunted		Mean Z-Score (SD)	Percent below -2 sd [5]		Wasted		Mean Z-Score (SD)	Percent above +2 sd	
	Percent below -3 sd [2]	Percent below -2 sd [1]				Percent below -2 sd [3]	Percent below -3 sd [4]				Percent below -3 sd [6]	Percent below -2 sd [5]			
Sex															
	5.7	0.6	-0.3	18.6	914	18.6	5.7	-0.8	3.2	902	0.9	8.6	0.2	896	
	6.6	2.0	-0.4	20.0	895	20.0	5.2	-1.0	3.4	878	1.5	7.1	0.2	872	
Area															
	5.4	0.7	-0.1	15.7	678	15.7	2.8	-0.7	2.8	662	1.2	9.8	0.3	661	
	6.6	1.6	-0.4	21.4	1132	21.4	7.0	-1.0	3.6	1118	1.2	6.7	0.2	1107	
Region															
	7.0	1.6	-0.4	19.7	251	19.7	5.0	-1.0	3.1	249	0.3	5.4	0.2	248	
	4.7	1.0	-0.3	17.2	280	17.2	3.1	-1.0	2.4	278	0.7	7.3	0.4	280	
	5.0	0.0	-0.2	13.9	198	13.9	6.9	-0.7	4.2	186	2.6	14.1	0.3	186	
	5.6	0.8	-0.1	8.1	235	8.1	1.7	-0.3	3.4	235	1.3	8.5	0.2	234	
	5.3	0.4	-0.1	10.7	434	10.7	4.0	-0.5	3.8	421	1.9	11.0	0.2	420	
	5.3	1.6	-0.3	18.6	421	18.6	4.1	-0.8	2.8	413	1.6	6.0	0.1	410	
	9.5	1.6	-0.5	17.5	207	17.5	3.5	-0.7	4.9	206	1.2	4.4	0.0	205	
	7.4	2.0	-0.4	41.6	216	41.6	16.1	-1.6	3.3	214	0.9	12.3	0.5	206	
	7.5	2.7	-0.1	13.6	126	13.6	6.9	-0.4	5.7	123	4.5	12.6	0.2	119	
	3.3	1.8	0.0	10.9	191	10.9	3.0	-0.2	4.1	188	0.8	6.9	0.2	186	
	5.1	0.5	-0.2	22.8	384	22.8	6.3	-1.0	1.7	379	0.3	8.7	0.4	380	
	6.5	0.8	-0.3	19.5	360	19.5	6.8	-1.0	3.4	351	1.4	7.2	0.2	347	
	7.5	1.8	-0.5	20.7	375	20.7	6.3	-1.1	4.1	371	0.9	7.4	0.2	371	
	6.6	1.4	-0.5	20.3	372	20.3	5.1	-1.0	2.8	369	1.4	7.0	0.1	364	
	8.5	.8	-0.4	28.4	94	28.4	9.2	-1.1	1.8	93	0.0	10.9	0.4	93	
	7.0	1.6	-0.5	26.7	907	26.7	7.5	-1.2	2.8	891	1.3	5.7	0.2	884	
	5.2	0.9	-0.1	10.4	757	10.4	2.7	-0.5	4.1	747	1.3	10.6	0.2	740	
	(2.3)	(2.3)	(0.0)	(4.6)	42	(4.6)	(2.4)	(-0.4)	(2.1)	41	(2.1)	(0.0)	(0.2)	42	
	8.8	2.1	-0.6	32.9	469	32.9	11.1	-1.3	3.8	464	1.4	4.9	0.2	459	
	7.0	1.7	-0.5	21.5	421	21.5	3.5	-1.1	4.4	415	0.6	7.5	0.2	417	
	5.0	0.5	-0.2	12.3	383	12.3	3.7	-0.6	2.2	373	1.1	8.9	0.2	369	
	4.7	0.6	-0.2	11.8	305	11.8	2.9	-0.6	3.5	302	2.3	8.8	0.2	300	
	3.0	1.1	0.1	9.0	230	9.0	3.5	-0.5	1.8	226	0.7	11.7	0.4	224	
	4.3	1.0	-0.2	9.9	332	9.9	3.5	-0.5	4.0	333	2.1	7.5	0.1	326	
	5.9	1.2	-0.3	19.1	895	19.1	4.7	-1.0	3.1	875	0.7	7.6	0.3	874	
	8.4	0.8	-0.4	8.5	98	8.5	0.6	-0.5	5.1	96	0.8	5.2	0.0	96	
	9.1	2.7	-0.7	44.3	278	44.3	14.0	-1.7	2.5	275	1.8	9.9	0.4	271	
	4.5	0.6	-0.1	6.0	176	6.0	1.9	-0.4	3.7	172	1.4	6.8	0.1	171	
	(10.9)	(0.0)	(0.1)	(11.7)	29	(11.7)	(5.2)	(-0.4)	(0.0)	29	(0.0)	(13.7)	(0.4)	29	
Total	6.2	1.3	-0.3	19.3	1809	19.3	5.4	-0.9	3.3	1780	1.2	7.9	0.2	1768	

[1] MICS indicator 2.1a and MDG indicator 1.8;

[2] MICS indicator 2.1b;

[3] MICS indicator 2.2a;

[4] MICS indicator 2.2b;

[5] MICS indicator 2.3a;

[6] MICS indicator 2.3b;

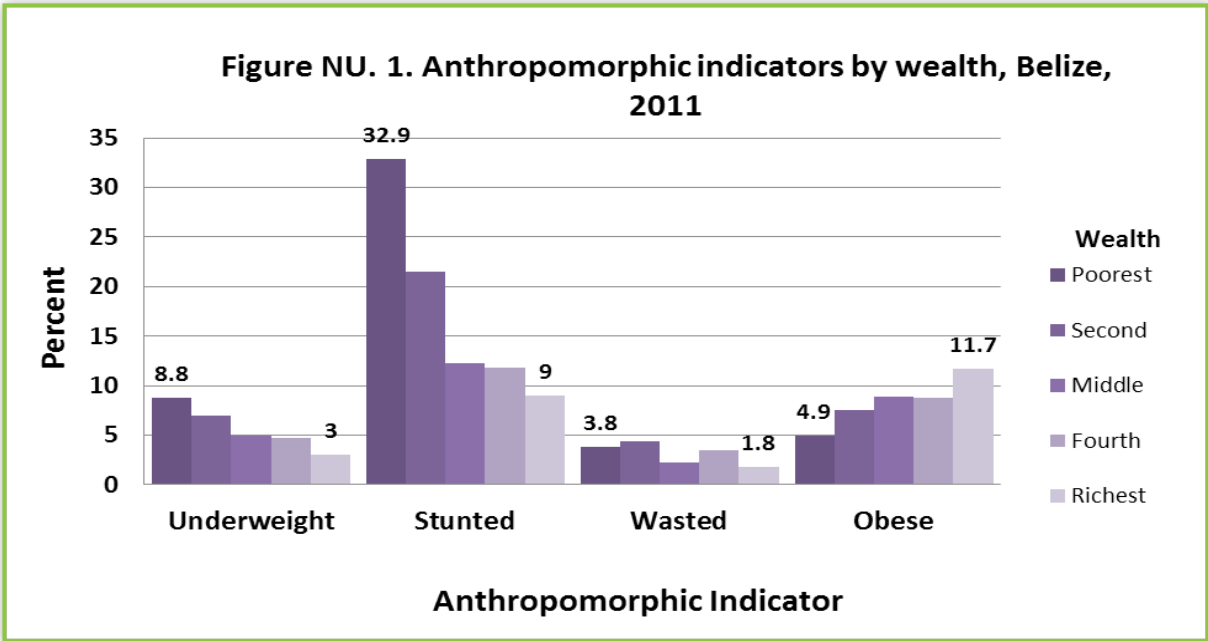
( ) Figures that are based on 25-49 un-weighted cases; 7 un-weighted cases in "CET/ITVETOTEC" and "Missing/DK" on the Mother's Education are not shown

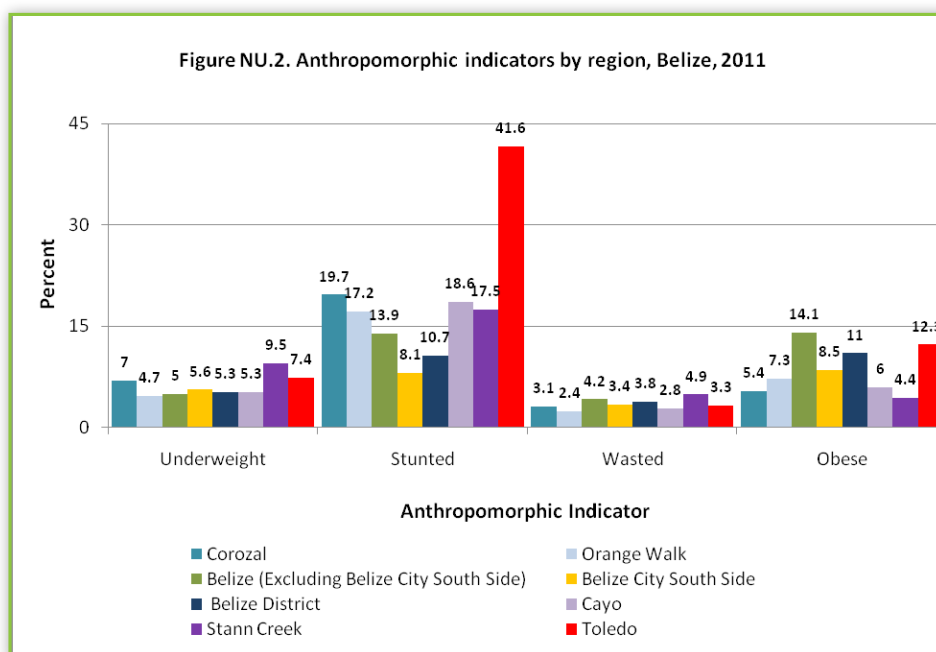
Children whose full birth date (month and year) were not obtained, and children whose measurements are outside a plausible range are excluded from Table NU.1. Children are excluded from one or more of the anthropometric indicators when their weights and heights have not been measured, whichever applicable. 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.

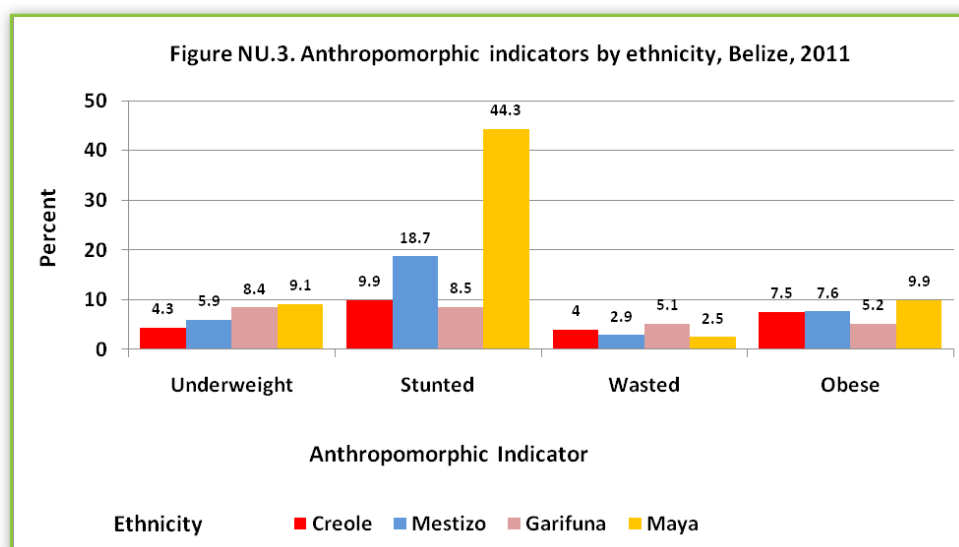




Children from poor households are more likely to be underweight and stunted than other children from wealthier households (Figure NU.1). A clear distinction can not be made between children in different wealth categories with respect to wasting. In contrast, a trend for higher percentages for wealthier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

- Early initiation of breastfeeding (within 1 hour of birth)
- Exclusive breastfeeding rate (< 6 months)
- Predominant breastfeeding (< 6 months)
- 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)
- 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.

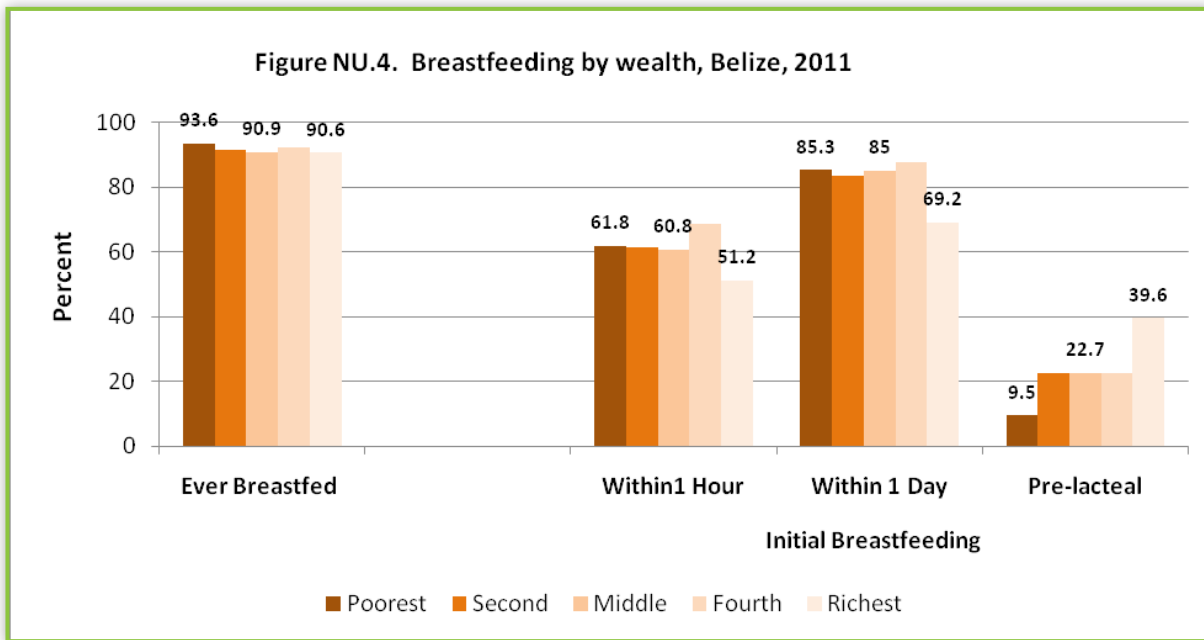
Mother's education does not seem to impact rates of early breastfeeding. However, pre-lacteal feeding increases significantly with increasing level of education (none at 9.8 percent to Secondary + at 16.6 percent). Rates of breastfeeding within one hour of birth for urban and rural children do not appear 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 breastfed [1]	Percentage who were first breastfed: Within one hour of birth [2]	Percentage who were first breastfed: Within one day of birth	Percentage who received a pre-lacteal feed	Number of last-born children in the two years preceding the 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 last birth	0-11 months	91.4	59.6	82.2	19.8	313
	12-23 months	92.5	63.0	83.9	23.7	357
Assistance at delivery	Skilled attendant	92.1	61.4	83.2	22.0	659
	Traditional birth attendant	(*)	(*)	(*)	(*)	12
	Other	(*)	(*)	(*)	(*)	8
	Missing	(*)	(*)	(*)	(*)	6
Place of delivery	Public sector health facility	93.7	65.2	86.8	17.8	526
	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 education	None	92.0	54.4	80.7	9.8	41
	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 quintiles	Poorest	93.6	61.8	85.3	9.5	173
	Second	91.5	61.5	83.5	22.6	156
	Middle	90.9	60.8	85.0	22.7	134
	Fourth	92.2	68.8	87.6	22.4	132
	Richest	90.6	51.2	69.2	39.6	91
Ethnicity of household head	Creole	89.4	63.5	82.6	28.3	113
	Mestizo	91.2	59.9	81.5	21.6	355
	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

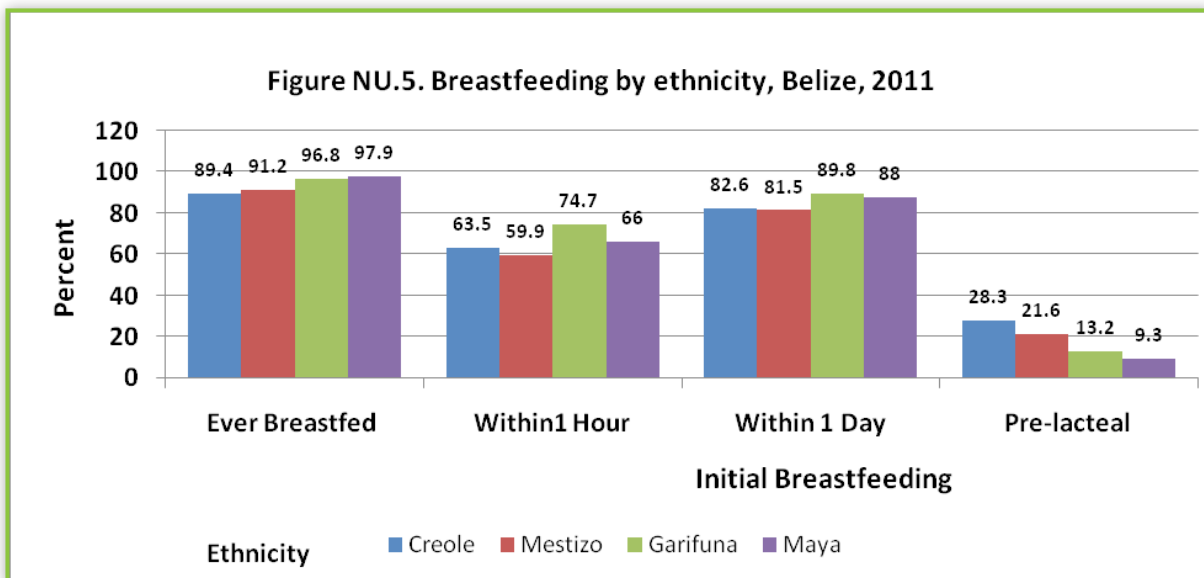
[1] MICS indicator 2.4; [2] MICS indicator 2.5

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

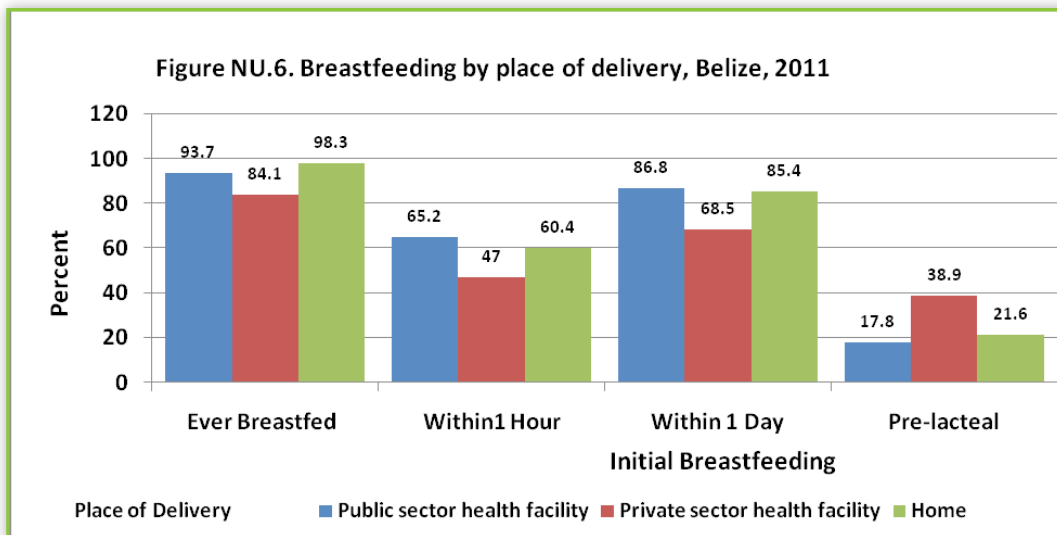


Children from the richest families *ever breastfed* less frequently than children from less wealthy families while *pre-lacteal* feeding is most pronounced in the richest (39.6 percent) families and least evident in the poorest (9.5 percent) (Figure NU.4).

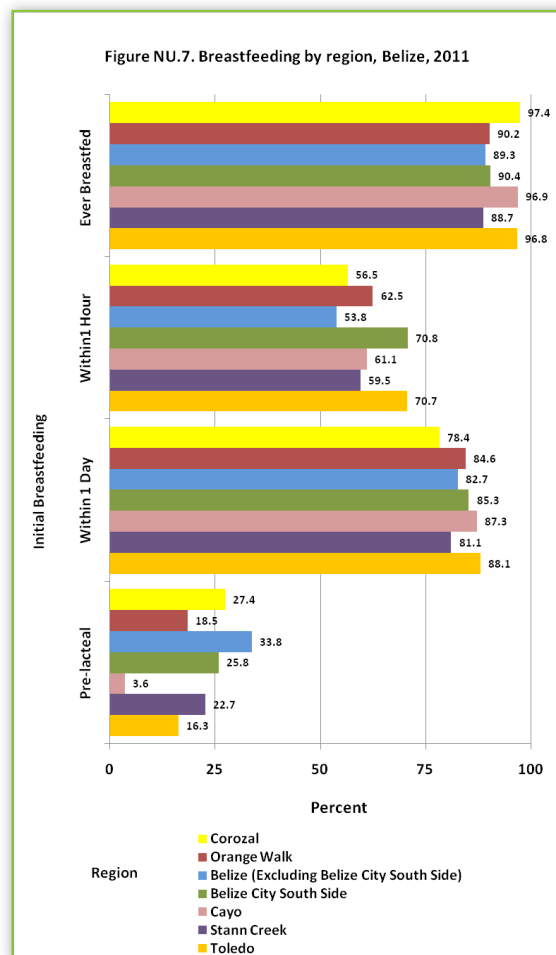
The Maya and Garifuna children seem to be *ever breastfed* at rates slightly higher than the Creole or Mestizo children. *Pre-lacteal* feeding is accordingly least pronounced in the Maya and Garifuna (Figure NU.5).



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

		Children 0-5 months			Children 12-15 months		Children 20-23 months	
		Percent exclusively breastfed [1]	Percent predominantly breastfed [2]	Number of children	Percent breastfed (Continued breastfeeding at 1 year) [3]	Number of children	Percent breastfed (Continued breastfeeding 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 quintiles	Poorest	(23.7)	62.0	29	(71.8)	26	(33.2)	43
	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 household head	Creole	(14.1)	33.8	31	(*)	22	(28.7)	29
	Mestizo	9.0	27.1	71	57.2	53	42.3	87
	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

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

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

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

		Median duration (in months) of			Number of children age 0-35 months
		Any breastfeeding [1]	Exclusive breastfeeding	Predominant breastfeeding	
Sex	Male	15.8	0.4	0.9	591
	Female	16.6	0.7	1.4	563
Region	Corozal	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	711
Mother's education	None	22.9	1.8	1.8	62
	Primary	18.6	0.6	1.6	543
	Secondary+	14.8	0.5	0.7	514
	CET/ITVET/VOTEC	(*)	(*)	(*)	8
Wealth index quintile	Poorest	19.5	0.9	3.5	293
	Second	16.6	0.5	2.1	261
	Middle	11.7	0.7	1.8	241
	Fourth	20.5	0.4	0.4	190
	Richest	6.1	0.4	0.5	169
Ethnicity of household head	Creole	15.0	0.5	1.2	207
	Mestizo	19.0	0.5	0.7	580
	Garifuna	13.2	0.9	2.7	65
	Maya	17.6	0.5	2.4	167
	Other	14.3	0.7	0.7	118
Median		16.1	0.5	1.0	1154
Mean for all children (0-35 months)		16.0	0.9	3.1	1154

[1] MICS indicator 2.10

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

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.

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 fed 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.

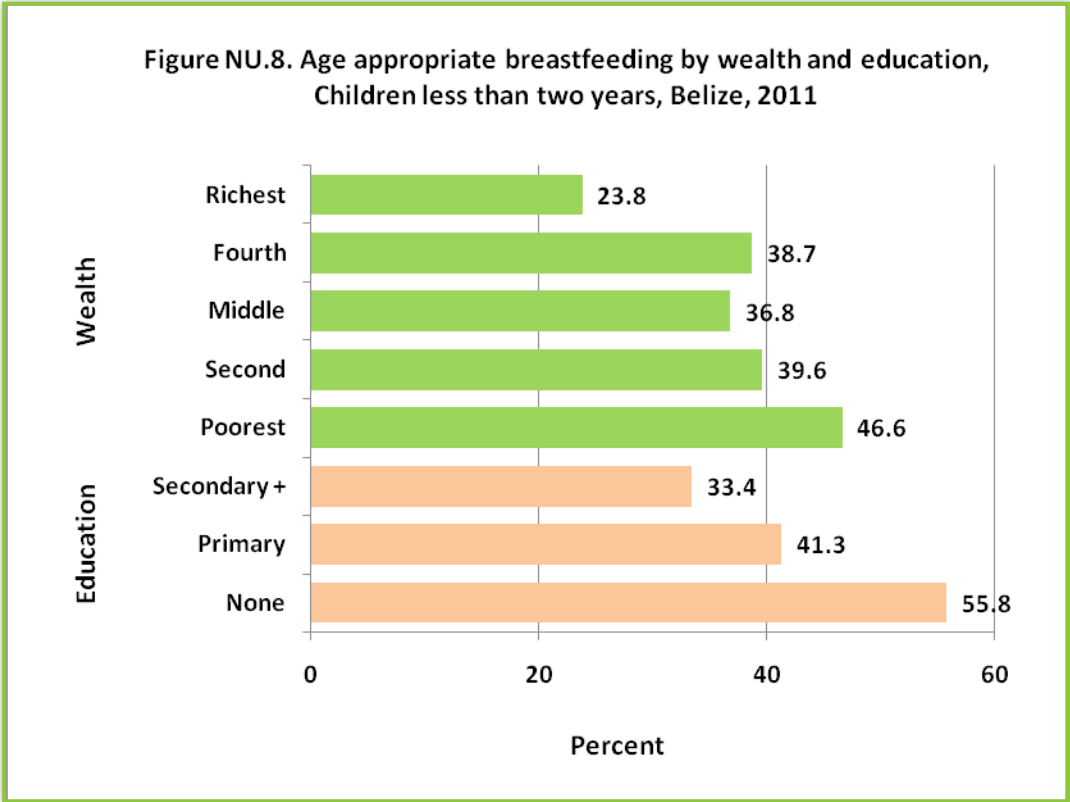


Table NU.5: Age-appropriate breastfeeding Percentage of children age 0-23 months who were appropriately breastfed during the previous day, Belize, 2011							
		Children age 0-5 months		Children age 6-23 months		Children age 0-23 months	
		Percent exclusively breastfed [1]	Number of children	Percent currently breastfeeding and receiving solid, semi-solid or soft foods	Number of children	Percent appropriately breastfed [2]	Number of 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 education	None	(*)	7	(59.8)	38	(53.4)	45
	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 quintiles	Poorest	(23.7)	29	50.7	160	46.6	189
	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 household head	Creole	(14.1)	31	36.1	97	30.7	129
	Mestizo	9.0	71	46.6	323	39.9	394
	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

[1] MICS indicator 2.6; [2] MICS indicator 2.14

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

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.



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 breastfeeding		Currently not breastfeeding		All		
	Percent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Percent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Percent receiving solid, semi-solid 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

[1] MICS indicator 2.12

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

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.

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 breastfeeding		Currently not breastfeeding			All	
		Percent receiving solid, semi-solid and soft foods the minimum number of times	Number of children age 6-23 months	Percent receiving at least 2 milk feeds [1]	Percent receiving solid, semi-solid and soft foods or milk feeds 4 times or more	Number of children age 6-23 months	Percent with minimum meal frequency [2]	Number of children age 6-23 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 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 education	None	(58.6)	28	(*)	(*)	10	(65.4)	38
	Primary	49.7	168	79.8	85.0	117	64.2	285
	Secondary + CET/ITVET/VOTEC	47.9	124	87.3	89.1	151	70.5	275
	Other	(*)	0	(*)	(*)	3	(*)	3
		(*)	5	(*)	(*)	7	(*)	13
Wealth index quintiles	Poorest	53.7	103	58.8	73.5	57	60.8	160
	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 household head	Creole	(42.3)	40	91.4	90.1	58	70.6	97
	Mestizo	52.5	183	87.6	88.5	140	68.1	323
	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

[1] MICS indicator 2.15; [2] MICS indicator 2.13

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

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.

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 children age 0-23 months fed with a bottle with a nipple [1]	Number of children age 0-23 months:
Sex	Male	63.7	396
	Female	51.4	365
Age	0-5 months	54.6	148
	6-11 months	63.5	209
	12-23 months	55.9	404
Region	Corozal	49.0	110
	Orange Walk	44.2	124
	Belize (Excluding Belize City South Side)	71.7	83
	Belize City South Side	75.5	91
	Belize District	73.7	174
	Cayo	64.0	195
	Stann Creek	72.4	77
	Toledo	27.6	82
Area	Urban	69.9	298
	Rural	49.9	463
Mother's education	None	(43.4)	45
	Primary	49.6	347
	Secondary +	68.7	350
	CET/ITVET/VOTEC	(*)	3
	Other	(*)	16
Wealth index quintiles	Poorest	39.0	189
	Second	53.3	172
	Middle	64.2	154
	Fourth	66.5	138
	Richest	77.1	108
Ethnicity of household head	Creole	71.6	129
	Mestizo	56.1	394
	Garifuna	(73.9)	44
	Maya	42.9	105
	Other	53.9	80
	Missing/DK	(*)	10
Total		57.8	761

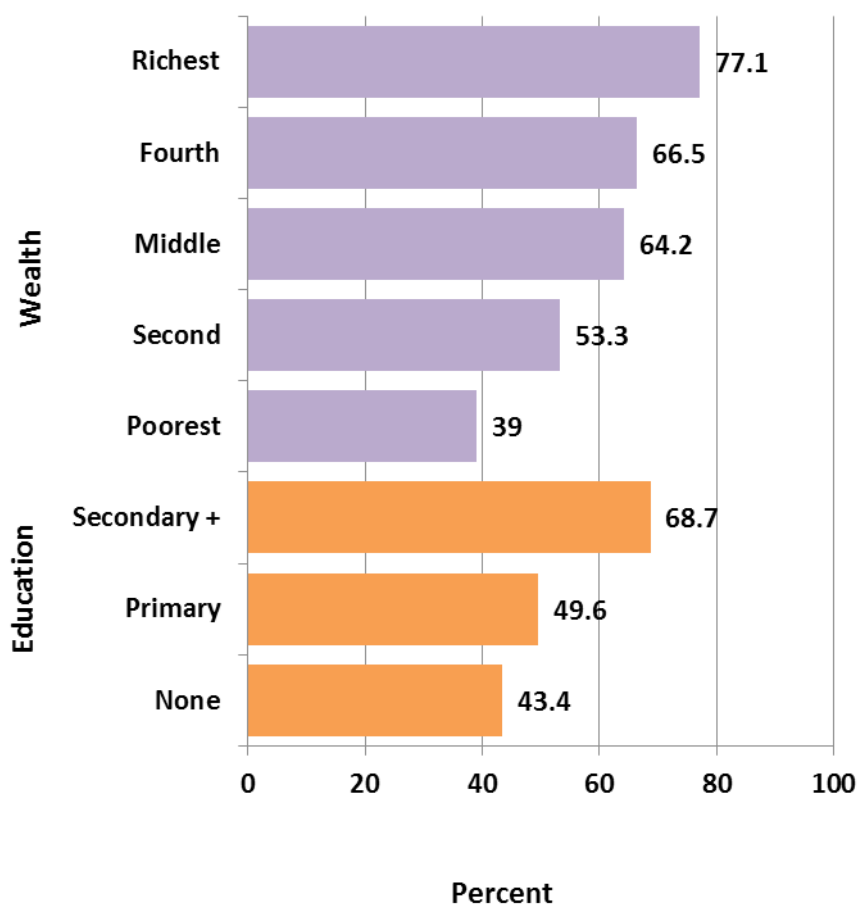
[1] MICS indicator 2.11

( ) Figures that are based on 25-49 un-weighted cases;

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

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.

**Figure NU.9. Fed with a bottle with nipple by wealth and education, Belize 2011**



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

[1] 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>.

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2 For a detailed description of the methodology, see Boerma, Weinstein, Rutstein and Sommerfelt, 1996.

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 live births:		Number of live births in the last 2 years
		Below 2500 grams [1]	Weighed at birth [2]	
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
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

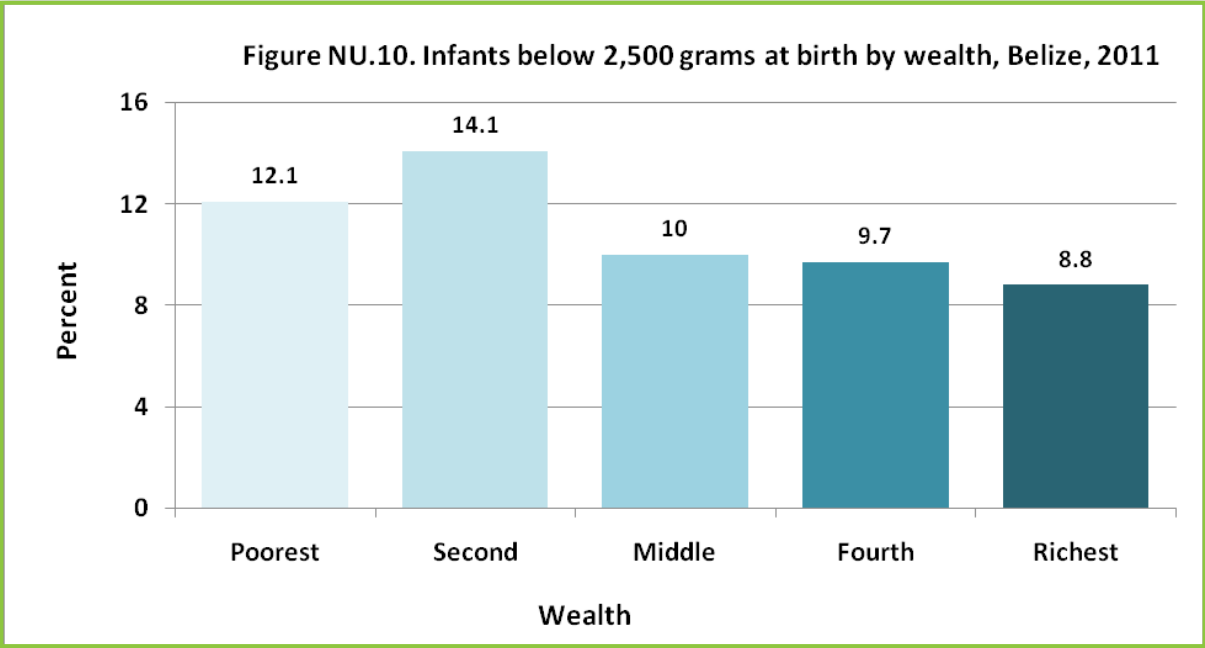
[1] MICS indicator 2.18; [2] MICS indicator 2.19

( ) Figures that are based on 25-49 un-weighted cases;

(\*) 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.





## VI. CHILD HEALTH

### Vaccinations

The 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 questionnaire.

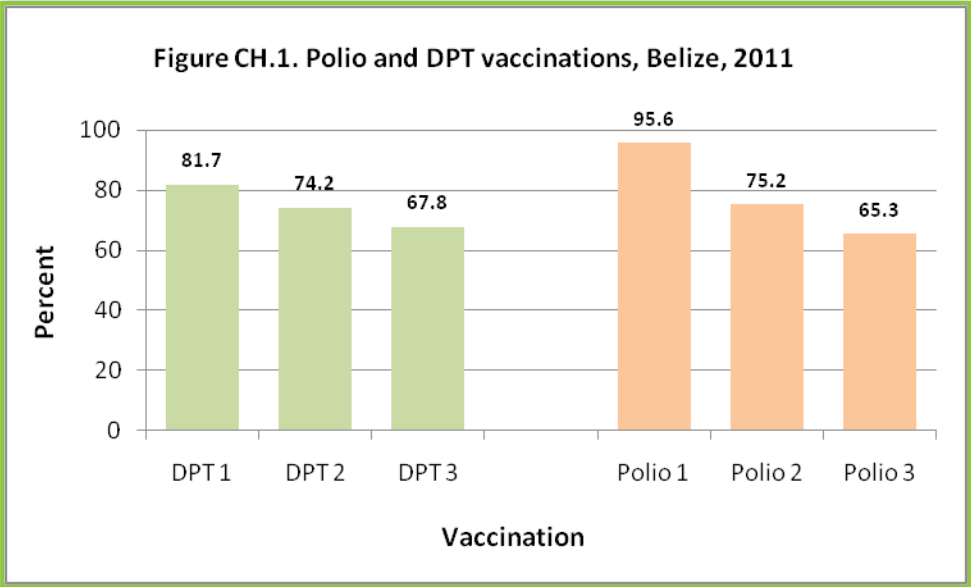
Table CH.1: Vaccinations in first year of life  
Percentage of children age 18-29 months immunized against childhood diseases at any time before the survey and before the first birthday (and by 18 months for measles), Belize, 2011

	Vaccinated at any time before the survey according to: Vaccination card	Vaccinated at any time before the survey according to: Mother's report	Vaccinated at any time before the survey according to: Either	Vaccinated by 12 months of age (18 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 (Diphtheria, 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
HepB 1	77.4	6.1	83.5	83.5
HepB 2	75.3	1.5	76.8	76.8
HepB 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 Hep 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.



## 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 received at least 2 doses during last pregnancy	Percentage of women who did not receive two or more doses during last pregnancy but received:				Protected against tetanus [1]	Number of women with a live birth in the last 2 years
			2 doses, the last within prior 3 years	3 doses, the last within prior 5 years	4 doses, the last within prior 10 years	5 or more doses during lifetime		
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 Belize City South Side)	(26.6)	(30.8)	(0.0)	(0.0)	(0.0)	(57.5)	74
	Belize City South 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)
	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 index quintiles	Poorest	31.6	16.6	0.4	0.0	0.0	48.6	173
	Second	33.2	20.7	0.0	0.0	0.0	53.9	156
	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 household head	Creole	30.6	21.7	0.8	0.0	0.0	53.0	113
	Mestizo	39.2	13.5	0.2	0.0	0.0	52.9	355
	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

[1] MICS indicator 3.7

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

3 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

## 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.

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).

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

		Had diarrhoea in last two weeks	Number of children age 0-59 months	Children with diarrhoea who received:			Number of children aged 0-59 months with diarrhoea
				ORS (Fluid from ORS packet or pre-packaged ORS fluid)	Pedialyte	ORS or any recommended homemade fluid	
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	4.7	492	(*)	(*)	(*)	23
	Cayo	13.6	450	(15.5)	(48.5)	(61.4)	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 education	None	9.5	115	(*)	(*)	(*)	11
	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 quintiles	Poorest	9.6	490	31.9	31.9	54.8	47
	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 household head	Creole	5.2	379	(*)	(*)	(*)	(*)
	Mestizo	9.0	949	19.1	37.8	47.8	86
	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

( ) 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

		Had diarrhoea in last two weeks	Number of children age 0-59 months	Drinking practices during diarrhoea:						Missing/DK	Total
				Given much less to drink	Given somewhat less to drink	Given about the same to drink	Given more to drink	Given nothing to drink			
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 practices during diarrhoea:								Number of children aged 0-59 months with diarrhoea
		Given much less to eat	Given somewhat less to eat	Given about the same to eat	Given more to eat	Stopped food	Had never been given food	Missing/DK	Total	
Sex	Male	16.9	27.7	37.5	3.4	11.0	2.9	0.7	100.0	91
	Female	14.4	41.1	34.8	1.0	6.1	2.5	0.0	100.0	62
Area	Urban	(11.6)	(33.8)	(43.9)	(6.4)	(1.7)	(1.3)	(1.3)	100.0	48
	Rural	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

( ) 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 with diarrhoea who received:			Number of children aged 0-59 months with diarrhoea	Not given any treatment or drug
		ORS or increased fluids	ORT (ORS or recommended home-made fluids or increased fluids)	ORT with continued feeding [1]		
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

Sex	Had suspected pneumonia in the last two weeks	Number of children age 0-59 months	CHILDREN WITH SUSPECTED PNEUMONIA WHO WERE TAKEN TO:										Percentage of children with suspected pneumonia who received antibiotics in the last two weeks [2]	Number of children age 0-59 months with suspected pneumonia in the last two weeks
			Public sector: Government hospital	Public sector: Government health center	Other public	Private hospital / clinic	Private physician	Private pharmacy	Other private medical	Relative / Friend	Other	Any appropriate provider [1]		
Male	3.2	984	(33.7)	(19.6)	(5.1)	(11.3)	(4.9)	(3.1)	(2.6)	(5.0)	(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
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] 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

		Percentage of mothers/caretakers who think that a child should be taken immediately to a health facility if the child:								Mothers/caretakers who recognize the two danger signs of pneumonia	Number of mothers/caretakers of children age 0-59 months
		Is not able to drink or breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficulty breathing	Has blood in stool	Is drinking poorly	Has other symptoms		
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 Belize City South Side)	5.4	24.8	78.5	11.5	20.6	3.9	0.9	12.0	4.3	166
	Belize City South Side	3.6	3.7	67.6	9.9	23.4	5.4	1.5	36.1	5.3	181
	Belize District	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	17.6	28.3	71.6	27.5	33.0	24.5	17.0	46.4	24.5	150
	Toledo	1.5	36.6	79.5	18.4	9.2	6.1	3.1	20.8	4.6	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/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 quintiles	Poorest	1.9	16.3	73.2	13.8	17.5	4.6	3.0	20.3	5.4	306
	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 household head	Creole	4.2	12.0	72.4	15.7	22.3	7.2	3.6	29.4	8.5	288
	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

7 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

		Percentage of household members in households using:							Total	Solid fuels for cooking [1]	Number of household members
		Electricity	Butane	Biogas	Kerosene	Charcoal	Wood	No food cooked in household			
Region	Corozal	0.2	66.3	0.1	0.1	0.1	32.6	0.6	100.0	32.7	2296
	Orange Walk	0.8	81.1	0.0	0.1	0.2	17.3	0.4	100.0	17.4	2584
	Belize (Excluding Belize City South Side)	3.1	92.5	0.0	0.2	0.0	2.9	1.4	100.0	2.9	2799
	Belize City South Side	3.1	94.1	0.1	0.3	0.0	0.5	1.8	100.0	0.5	2177
	Belize District	3.1	93.2	0.1	0.2	0.0	1.8	1.6	100.0	1.8	4976
	Cayo	2.9	83.1	0.0	0.0	0.5	12.8	0.4	100.0	13.3	3865
	Stann Creek	1.1	82.6	0.0	0.0	0.0	15.0	1.4	100.0	15.0	1833
	Toledo	0.6	40.6	0.0	0.1	0.0	56.6	2.0	100.0	56.6	1733
Area	Urban	2.1	92.9	0.0	0.1	0.3	3.0	1.5	100.0	3.3	7536
	Rural	1.6	68.6	0.0	0.1	0.1	28.8	0.7	100.0	28.9	9752
Education of household head	None	1.8	51.1	0.0	0.2	0.2	45.8	0.9	100.0	46.0	1377
	Primary	1.4	73.0	0.1	0.2	0.1	24.1	1.0	100.0	24.2	8782
	Secondary + CET/ITVET/VO-TEC	2.5	92.1	0.0	0.0	0.1	4.0	1.1	100.0	4.1	6412
	Missing/DK	0.0	98.5	0.0	0.0	0.0	0.5	0.9	100.0	0.5	172
	Other	2.3	93.0	0.0	0.0	2.6	1.7	0.4	100.0	4.3	256
	Other	0.0	89.1	0.0	0.0	0.0	10.9	0.0	100.0	10.9	288
Wealth index quintiles	Poorest	1.4	31.6	0.0	0.5	0.2	62.5	3.8	100.0	62.8	3458
	Second	1.6	79.4	0.1	0.0	0.4	17.7	0.7	100.0	18.1	3457
	Middle	1.6	91.5	0.0	0.0	0.1	6.0	0.4	100.0	6.2	3459
	Fourth	1.8	96.5	0.1	0.0	0.0	1.5	0.2	100.0	1.5	3456
	Richest	2.9	96.8	0.0	0.0	0.0	0.1	0.1	100.0	0.1	3457
Ethnicity of household head	Creole	2.8	92.3	0.0	0.2	0.0	3.0	1.7	100.0	3.0	4048
	Mestizo	1.2	78.1	0.1	0.1	0.3	19.2	0.9	100.0	19.5	8498
	Garifuna	1.1	94.0	0.0	0.0	0.0	3.2	1.6	100.0	3.2	959
	Maya	0.7	38.8	0.0	0.0	0.0	60.2	0.4	100.0	60.2	1933
	Other	4.9	89.5	0.0	0.2	0.1	4.7	0.6	100.0	4.8	1552
	Missing/DK	1.6	92.5	0.0	0.0	0.0	5.4	0.5	100.0	5.4	298
Total		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 cooking:							Total	Number of household members in households using solid fuels for cooking
		In a separate room used as kitchen	Elsewhere in the house	In a separate building	Outdoors	Other	Missing			
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 Belize City South Side)	15.1	0.0	63.6	21.2	0.0	0.0	100.0	81	
	Belize City South 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 of household head	None	23.5	16.5	40.7	15.5	2.4	1.3	100.0	633	
	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 index quintiles	Poorest	23.8	13.7	38.7	21.5	1.5	0.8	100.0	2170	
	Second	28.4	4.4	46.0	21.2	0.0	0.0	100.0	625	
	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 household head	Creole	10.8	0.0	43.7	44.7	0.0	0.8	100.0	121	
	Mestizo	23.6	3.1	49.3	23.0	0.5	0.5	100.0	1658	
	Garifuna	(6.2)	(2.0)	(75)	(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		24.1	10.7	41.9	21.7	1.1	0.6	100.0	3064	

( ) 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

Area	Percentage of children age 2-9 reported to have specified impairments or activity limitations										2 years	Num-ber of children aged 3-9 years	Num-ber of children aged 2 years	Percentage of children age 2-9 years with at least one reported impairment [1]	Num-ber of children aged 2-9 years
	3-9 years														
	Delay in sitting, standing or walking	Difficulty seeing, either daytime or at night	Appears to have difficulty hearing	No understanding of instructions	Diffi-culty in walk-ing, moving arms, weak-ness or stiff-ness	Have fits, become rigid, lose consciousness	Not learn-ing to do things like other chil-dren his/her age	No speak-ing cannot be understood in words	Appears mentally backward, dull, or slow	Speech is not normal					
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
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	6.0	2.1	1.3	6.3	8.3	6.5	9.9	416	10.9	59	29.3	475
Belize (Exclud-ing Belize City South Side)	2.9	5.0	5.1	4.5	1.8	2.2	2.2	4.2	6.2	7.8	410	(7.9)	42	24.4	451
Belize City 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
Cayo	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
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
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
Age of child	3.7	3.2	3.3	6.4	2.6	2.2	5.3	12.1	11.2	15.6	792	15.6	387	37.5	1179
5-6	2.9	3.8	4.0	5.9	2.0	1.8	4.9	5.3	12.5	13.8	806	na	na	34.2	806
7-9	3.0	5.8	4.6	6.6	2.6	1.9	5.4	6.8	13.7	15.1	1249	na	na	36.9	1249
Mother's education	7.7	4.6	6.8	8.7	7.7	2.3	7.9	12.9	18.2	20.0	195	(*)	21	40.4	216
Primary	3.1	4.6	4.5	6.6	2.4	1.7	5.6	8.7	14.4	14.7	1483	17.0	188	39.2	1671
Secondary +	2.8	4.0	2.8	5.7	1.5	2.3	4.4	6.9	9.4	14.3	1097	14.1	162	32.2	1259
CET/ITVET/VOTEC	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	14	(*)	4	(*)	19
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2	(*)	0	(*)	2
Other	2.5	1.4	5.0	7.9	3.8	2.5	6.2	14.9	5.0	7.1	56	(*)	11	34.5	67
Wealth index quintiles	4.3	3.9	5.7	8.9	3.3	1.7	6.2	10.8	16.6	15.6	711	15.9	99	40.7	810
Poorest	3.4	5.2	4.2	4.9	2.0	1.9	6.0	9.1	13.7	12.8	647	13.1	88	36.2	735
Second	3.3	4.4	2.8	6.6	2.2	1.4	6.2	7.8	11.1	13.1	571	21.7	87	35.4	658
Middle	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
Fourth	2.1	3.9	2.1	6.6	1.1	2.0	3.1	7.7	7.3	19.8	422	11.6	60	35.8	482
Richest	3.2	4.3	4.0	6.3	2.4	2.0	5.2	8.4	12.5	14.9	2847	15.6	387	36.4	3234
Total															

[1] MICS indicator: 3.21( ) Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted 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
- 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 <http://www.childinfo.org/wes.html>.

### 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

		Main source of drinking water									Number of household members
		Improved sources									
		Piped into dwelling	Piped into compound, yard or plot	Piped to neighbour	Public tap / stand-pipe	Tube well, Bore-hole	Protected well	Protected spring	Rainwater collection	Bottled water*	
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 South Side	27.7	1.3	0.2	1.4	0.0	0.0	0.0	10.1	59.2	2177
	Belize 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
Rural		15.1	19.5	1.0	2.3	1.3	3.0	0.2	19.6	34.1	9752
Education of household head	None	16.9	25.0	1.7	4.9	1.9	4.0	0.0	21.8	20.5	1507
	Primary	19.6	17.1	0.8	2.0	1.0	2.2	0.2	16.1	37.4	8652
	Secondary + CET/ITVET/VOTEC	16.2	4.2	0.8	0.6	0.1	0.7	0.0	8.7	68.2	6412
	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 index quintiles	Poorest	11.9	37.6	3.8	6.0	3.3	4.3	0.2	18.1	8.9
Second		27.8	19.5	0.6	1.2	0.2	2.3	0.4	16.8	29.4	3457
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 of household head	Creole	24.9	5.0	0.5	0.8	0.0	0.6	0.0	15.9	51.9	4048
	Mestizo	14.3	12.6	1.0	0.4	0.0	2.6	0.1	13.6	52.3	8498
	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
	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

		Unimproved sources					Percentage using improved sources of drinking water [1]	Number of household members
		Unprotected well	Unprotected spring	Surface water (river, stream, dam, lake, pond, canal, irrigation channel)	Bottled water*	Other		
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 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 of household head	None	2.0	0.0	1.3	0.0	0.0	96.7	1377
	Primary	1.3	0.3	0.7	1.2	0.1	96.3	8782
	Secondary +	0.1	0.1	0.0	0.3	0.0	99.5	6412
	CET/ITVET/VO-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 index quintiles	Poorest	3.4	0.4	1.4	0.6	0.2	94.0	3458
	Second	0.7	0.0	0.3	0.7	0.1	98.3	3457
	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 of household head	Creole	0.2	0.0	0.0	0.1	0.0	99.6	4048
	Mestizo	1.1	0.2	0.8	1.1	0.0	96.8	8498
	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

[1] MICS indicator 4.1; MDG indicator 7.8

\* 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), *pipied 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 household									Number of household members
		None	Boil	Add bleach / chlorine	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle	Other	Don't know	
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 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 of household head	None	74.2	11.8	12.9	2.2	1.1	0.0	0.0	0.0	0.0	1377
	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 index quintiles	Poorest	76.6	12.3	10.9	0.9	0.5	0.0	0.4	0.1	0.0	3458
	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 household head	Creole	86.0	3.3	8.4	0.3	1.6	0.0	0.1	0.8	0.0	4048
	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 households using unimproved drinking water sources and using an appropriate 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 household head	None	32.5	46
	Primary	28.9	321
	Secondary +	(58.6)	33
	Missing/DK	(*)	6
Wealth index quintiles	Poorest	32.6	207
	Second	43.8	60
	Middle	37.3	61
	Fourth	(17.0)	39
	Richest	(9.0)	38
Ethnicity of household head	Creole	(*)	15
	Mestizo	31.7	273
	Garifuna	(*)	2
	Maya	27.2	82
	Other	(*)	15
	Missing/DK	(*)	19
Total		31.2	406

[1] MICS indicator 4.2

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

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.



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

		Time to source of drinking water								Total	Number of household members
		Users of improved drinking water sources				Users of unimproved drinking water sources					
		Water on premises	Less than 30 minutes	30 minutes or more	Missing/DK	Water on premises	Less than 30 minutes	30 minutes or more	Missing/DK		
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 Belize City South Side)	98.2	1.1	0.4	0.0	0.1	0.2	0.0	0.0	100.0	2799
	Belize City South 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 household head	None	90.9	1.7	3.5	0.5	1.7	0.8	0.9	0.0	100.0	1377
	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 quintiles	Poorest	86.9	4.4	2.1	0.6	3.4	2.5	0.1	0.0	100.0	3458
	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 household head	Creole	97.2	2.1	0.3	0.1	0.2	0.1	0.0	0.0	100.0	4048
	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

		Percentage of households without drinking water on premises	Number of households	Person usually collecting drinking water						Number of households without drinking water on premises
				Adult woman (age 15+ years)	Adult man (age 15+ years)	Female child (under 15)	Male child (under 15)	DK	Missing	
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 Belize City South Side)	1.9	860	(*)	(*)	(*)	(*)	(*)	(*)	16
	Belize City South Side	3.3	614	(*)	(*)	(*)	(*)	(*)	(*)	21
	Belize 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)
Rural		4.8	2254	(44.2)	(40.2)	(5.8)	(8.5)	(0.8)	(0.5)	109
Education of household head	None	7.0	311	(*)	(*)	(*)	(*)	(*)	(*)	22
	Primary	4.5	2104	35.2	42.6	9.0	9.3	3.9	0.0	94
	Secondary + CET/ITVET/VOTEC	1.7	1851	(31.7)	(57.7)	(5.0)	(5.6)	(0.0)	(0.0)	32
	Missing/DK	4.0	58	(*)	(*)	(*)	(*)	(*)	(*)	2
	Other	(0.0)	52	(*)	(*)	(*)	(*)	(*)	(*)	.
Wealth index quintiles	Poorest	9.3	885	42.1	40.0	7.1	5.8	4.4	0.7	82
	Second	4.3	865	(30.5)	(45.6)	(8.6)	(15.3)	(0.0)	(0.0)	37
	Middle	1.9	863	(*)	(*)	(*)	(*)	(*)	(*)	16
	Fourth	1.1	889	(*)	(*)	(*)	(*)	(*)	(*)	9
	Richest	0.6	922	(*)	(*)	(*)	(*)	(*)	(*)	6
Ethnicity of household head	Creole	2.5	1182	(*)	(*)	(*)	(*)	(*)	(*)	30
	Mestizo	3.4	2058	34.7	46.0	2.4	12.3	3.8	0.8	70
	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

( ) 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

		Improved sanitation facility					Total	Number of household members
		Flush to piped sewer system	Flush to septic tank	Flush to pit (latrine)	Ventilated Improved Pit latrine (VIP)	Pit latrine with slab		
Region	Corozal	0.0	48.1	0.0	12.4	37.9	100.0	2296
	Orange Walk	0.0	47.8	0.3	9.9	41.1	100.0	2584
	Belize (Excluding Belize City South Side)	16.4	75.7	0.5	0.1	6.7	100.0	2799
	Belize City South Side	47.4	47.1	0.0	0.0	0.6	100.0	2177
	Belize District	30.0	63.2	0.3	0.1	4.0	100.0	4976
	Cayo	6.7	53.8	0.3	1.9	36.3	100.0	3865
	Stann Creek	0.0	64.6	0.7	0.4	28.1	100.0	1833
	Toledo	0.2	21.7	1.0	17.6	49.5	100.0	1733
Area	Urban	22.7	65.2	0.3	0.8	9.4	100.0	7536
	Rural	0.4	43.2	0.4	8.9	43.1	100.0	9752
Education of household head	None	1.4	27.9	0.1	7.4	53.3	100.0	1377
	Primary	6.4	46.3	0.4	8.0	35.8	100.0	8782
	Secondary +	17.4	67.9	0.3	1.5	11.3	100.0	6412
	CET/ITVET/VOTEC	21.9	63.3	0.0	0.0	12.5	100.0	172
	Missing/DK	6.8	56.1	0.0	2.5	34.6	100.0	256
	Other	0.6	24.2	0.0	7.9	67.2	100.0	288
Wealth index quintiles	Poorest	2.4	11.7	0.8	11.7	62.8	100.0	3458
	Second	7.5	36.8	0.4	6.2	45.6	100.0	3457
	Middle	9.8	61.9	0.1	5.9	22.2	100.0	3459
	Fourth	12.3	75.0	0.0	2.6	9.8	100.0	3456
	Richest	18.7	78.4	0.5	0.5	1.6	100.0	3457
Ethnicity of household head	Creole	21.7	63.6	0.1	0.7	11.5	100.0	4048
	Mestizo	5.7	50.5	0.4	7.0	34.6	100.0	8498
	Garifuna	11.3	76.3	0.5	0.5	9.0	100.0	959
	Maya	1.2	20.5	0.8	12.9	52.7	100.0	1933
	Other	11.9	61.1	0.6	2.7	23.8	100.0	1552
	Missing/DK	25.5	60.3	0.0	3.4	10.8	100.0	298
<b>Total</b>		<b>10.1</b>	<b>52.8</b>	<b>0.4</b>	<b>5.4</b>	<b>28.4</b>	<b>100.0</b>	<b>17288</b>

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

		Unimproved sanitation facility						Number of household members
		Flush to somewhere else	Pit latrine without slab / Open pit	Bucket	Other	Missing	No facility, Bush, Field	
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 Belize City South Side)	0.1	0.0	0.2	0.0	0.0	0.4	2799
	Belize City South 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
Rural		0.0	1.4	0.1	0.0	0.0	2.4	9752
Education of household head	None	0.0	0.9	0.1	0.0	0.0	8.9	1377
	Primary	0.0	1.2	0.5	0.0	0.0	1.4	8782
	Secondary + CET/ITVET/VOTEC	0.0	0.4	0.4	0.1	0.0	0.6	6412
	Missing/DK	0.0	0.0	1.8	0.0	0.0	0.5	172
	Other	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 index quintiles	Poorest	0.0	2.7	0.9	0.0	0.1	6.9	3458
	Second	0.0	0.9	1.3	0.0	0.0	1.2	3457
	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 household head	Creole	0.0	0.2	1.5	0.1	0.0	0.6	4048
	Mestizo	0.0	1.1	0.0	0.0	0.0	0.7	8498
	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

		Users of improved sanitation facilities					Users of unimproved sanitation facilities					Open defecation (no facility, bush field)	Number of household members
		Not shared [1]	Public facility	Shared by: 5 households or less	Shared by: More than 5 households	Missing/DK	Not shared	Shared by: 5 households or less	Shared by: More than 5 households	Missing/DK			
Region	Corozal	85.5	0.4	12.2	0.0	0.2	0.4	0.2	0.0	0.0	0.9	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 Belize City South 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 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	0.8	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 of household head	None	79.5	0.7	5.5	1.6	0.1	0.7	0.1	0.2	0.0	11.7	1577	
	Primary	86.7	0.3	7.3	1.8	0.1	1.5	0.2	0.2	0.0	1.9	9242	
	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	0.5	172	
	Missing/DK	84.2	0.0	9.6	6.2	0.0	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 index quintiles	Poorest	74.2	0.4	11.5	3.1	0.1	3.0	0.5	0.2	0.1	6.9	3458	
	Second	82.6	0.6	10.8	2.4	0.2	1.8	0.2	0.3	0.0	1.2	3457	
	Middle	92.3	0.9	4.9	1.6	0.1	0.0	0.0	0.0	0.0	0.1	3459	
	Fourth	98.4	0.0	1.3	0.0	0.0	0.3	0.0	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 of household head	Creole	91.2	0.3	4.9	1.0	0.2	1.6	0.2	0.0	0.0	0.6	4048	
	Mestizo	88.9	0.4	6.8	1.9	0.1	0.9	0.1	0.1	0.0	0.7	8498	
	Garifuna	91.0	0.1	5.2	1.4	0.0	0.7	0.5	0.2	0.2	0.8	959	
	Maya	79.1	0.5	6.3	1.8	0.2	1.9	0.0	0.4	0.0	9.7	1933	
	Other	96.4	0.9	2.4	0.3	0.0	0.0	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 faeces 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

		Place of disposal of child's faeces								Total	Percentage of children whose last stools were disposed of safely [1]	Number of children age 0-2 years
		Child used toilet / latrine	Put / Rinsed into toilet or latrine	Put / Rinsed into drain or ditch	Thrown into garbage (solid waste)	Buried	Left in the open	Other	DK			
Type of sanitation facility in dwelling	Improved	13.1	12.7	0.7	68.2	1.6	1.1	2.0	0.5	100.0	25.8	1110
	Unimproved	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	15
	Open defecation	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	27
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 Belize City South 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 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
	Rural	12.7	18.0	1.2	59.1	2.5	2.2	3.5	0.9	100.0	30.7	709
Mother's education	None	17.2	16.5	3.5	51.0	2.2	3.9	4.6	1.2	100.0	33.7	62
	Primary	10.6	15.7	0.7	65.8	1.8	1.8	3.0	0.5	100.0	26.4	543
	Secondary + CET/ITVET/VOTEC	15.1	6.2	0.2	75.2	1.3	0.3	1.4	0.3	100.0	21.3	512
		(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	8
	Other	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	27
Wealth index quintiles	Poorest	10.9	20.5	2.5	50.6	2.7	5.0	6.5	1.3	100.0	31.3	292
	Second	12.4	16.6	0.0	66.9	1.9	0.3	1.8	0.0	100.0	29.1	261
	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 head	Creole	15.9	4.4	0.0	77.1	1.3	0.0	0.5	0.8	100.0	20.4	207
	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

[1] MICS indicator 4.4

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

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.

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

		Percentage of household population using:										Number of household members
		Improved drinking water [1]		Unimproved drinking water	Total	Improved sanitation [2]	Unimproved sanitation			Total	Improved drinking water sources and improved sanitation	
		Piped into dwelling, plot or yard	Other improved				Shared improved facilities	Unimproved facilities	Open defecation			
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 Belize City South 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 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 of household head	None	58.2	38.2	3.6	100.0	79.5	7.9	1.0	11.7	100.0	77.0	1577
	Primary	71.5	25.2	3.3	100.0	86.7	9.6	1.9	1.9	100.0	84.2	9242
	Secondary + CET/ITVET/VO-TEC	85.2	14.2	0.5	100.0	93.1	5.4	0.9	0.6	100.0	92.7	6412
	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 index quintiles	Poorest	56.6	37.4	6.0	100.0	74.2	15.1	3.8	6.9	100.0	70.2	3458
	Second	74.1	24.1	1.7	100.0	82.6	13.9	2.3	1.2	100.0	81.2	3457
	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 of household head	Creole	80.4	19.3	0.4	100.0	91.2	6.4	1.8	0.6	100.0	90.9	4048
	Mestizo	75.0	21.8	3.2	100.0	88.9	9.3	1.1	0.7	100.0	86.3	8498
	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

[1] MICS indicator 4.1; MDG indicator 7.8

[2] MICS indicator 4.3; MDG indicator 7.9

## 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.



Table WS.9: Water and soap at place for hand-washing by availability of water and soap at place for hand-washing, Belize, 2011

Region	Percentage of households where place for hand-washing was observed	Percentage of households where place for hand-washing was not observed			Number of households	Percent distribution of households where place for hand-washing was observed, and:				Total	Number of households where place for hand-washing was observed
		Not in dwelling/plot/yard	No permission to see	Other reasons		Water and soap are available [1]	Water is available, soap is not available	Water is not available, soap is available	Water and soap are not available		
Corozal	69.5	9.3	19.6	1.6	519	93.0	3.6	3.2	0.2	100.0	361
Orange Walk	84.5	9.4	4.4	1.8	607	98.5	0.7	0.8	0.0	100.0	513
Belize (Excluding Belize City South Side)	78.6	2.1	13.9	5.4	860	99.4	0.4	0.2	0.0	100.0	676
Belize City South Side	49.7	5.1	18.8	26.5	614	93.7	1.3	5.0	0.0	100.0	305
Belize District	66.5	3.3	15.9	14.2	1474	97.6	0.7	1.7	0.0	100.0	981
Cayo	83.2	8.8	3.0	5.0	918	98.1	0.2	1.3	0.4	100.0	764
Stann Creek	75.5	10.1	9.2	5.2	488	95.3	3.6	0.4	0.7	100.0	368
Toledo	88.9	8.9	0.3	1.9	417	73.2	24.7	1.9			
Urban	72.4	4.6	12.2	10.9	2170	97.5	1.0	1.5	0.0	100.0	1570
Rural	79.3	9.9	7.6	3.1	2254	91.7	6.4	1.5	0.4	100.0	1788
None	81.5	9.8	7.1	1.6	311	87.6	10.5	0.6	1.3	100.0	254
Primary	75.6	9.0	9.6	5.9	2104	92.9	5.1	1.9	0.1	100.0	1590
Secondary + CET/ITVET/OTEC	74.6 (87.0)	5.2 (0.0)	10.9 (8.9)	9.3 (4.1)	1851 47	97.0 (100.0)	1.5 (0.0)	1.4 (0.0)	0.1 (0.0)	100.0 (0.0)	1381 41
Missing/DK	75.9	8.1	9.4	6.6	58	(100.0)	(0.0)	(0.0)	(0.0)	100.0	44
Other	93.7	4.5	1.8	0.0	52	98.5	1.5	0.0	0.0	100.0	49
Poorest	74.5	11.8	7.8	5.9	885	84.0	12.1	2.9	1.0	100.0	659
Second	71.8	9.4	11.6	7.3	865	93.5	3.9	2.5	0.1	100.0	621
Middle	75.6	6.6	11.1	6.7	863	96.6	2.3	1.1	0.0	100.0	652
Fourth	80.0	4.2	8.9	6.9	889	97.8	0.9	1.3	0.0	100.0	711
Richest	77.6	4.6	10.0	7.9	922	99.4	0.6	0.0	0.0	100.0	715
Ethnicity of Creole	69.6	4.9	13.1	12.4	1182	95.6	2.1	2.2	0.0	100.0	822
household	78.3	9.1	8.3	4.3	2058	95.5	2.7	1.5	0.3	100.0	1611
Mestizo	74.8	5.3	9.2	10.8	286	96.2	2.4	1.4	0.0	100.0	214
Garifuna	86.1	7.1	3.1	3.7	399	82.7	16.1	0.6	0.7	100.0	344
Maya	76.2	6.3	12.7	4.8	409	96.5	2.3	1.2	0.0	100.0	312
Other	62.8	8.2	21.0	8.1	91	98.5	1.5	0.0	0.0	100.0	57
Missing/DK	75.9	7.3	9.9	6.9	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 observed				Place for hand washing not observed			Total	Percentage of households with soap anywhere in the dwelling [1]	Number of households
		Soap observed	Soap shown	No soap in household	Not able/ Does not want to show soap	Soap shown	No soap in household	Not able/ Does not want to show soap			
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 South Side	49.0	0.5	0.0	0.2	38.3	1.6	10.4	100.0	87.8	614
	Belize 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 of household head	None	71.9	6.1	3.5	0.0	14.6	2.8	1.1	100.0	92.6	311
	Primary	71.6	3.3	0.6	0.1	19.6	0.6	4.3	100.0	94.5	2104
	Secondary + CET/ITVET/VOTEC	73.4	1.2	0.1	0.0	17.0	0.2	8.2	100.0	91.6	1851
	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 index quintiles	Poorest	64.7	7.4	2.3	0.1	18.3	1.8	5.4	100.0	90.5	885
	Second	68.9	2.4	0.5	0.0	21.2	0.8	6.2	100.0	92.5	865
	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 of household head	Creole	68.1	1.3	0.1	0.1	18.8	0.7	10.9	100.0	88.2	1182
	Mestizo	75.9	1.9	0.4	0.0	18.4	0.5	2.9	100.0	96.2	2058
	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

[1] MICS indicator 4.6;

() 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-specific fertility rate for women age 15-19)	Total Fertility Rate
Region	Corozal	61	2.3
	Orange Walk	79	3.0
	Belize (Excluding Belize City South Side)	45	1.7
	Belize City South Side	59	1.9
	Belize District	51	1.8
	Cayo	56	3.1
	Stann Creek	84	3.1
	Toledo	81	3.4
	Area	Urban	39
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 head	Creole	34	1.4
	Mestizo	83	2.8
	Garifuna	64	3.1
	Maya	74	3.8
	Other	23	3.8
Total		64	2.6

[1] 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 (Table RH.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 of women age 15-19				Number of women age 15-19	Percentage of women age 20-24 who have had a live birth before age 18 [1]	Number of women age 20-24
		Have had a live birth	Are pregnant with first child	Have begun childbearing	Have had a live birth before age 15			
Region	Corozal	13.1	5.3	18.4	1.6	107	15.3	87
	Orange Walk	13.2	6.2	19.4	0.7	137	17.4	121
	Belize (Excluding Belize City South Side)	10.0	2.1	12.1	0.0	139	13.0	116
	Belize City South Side	8.1	0.0	8.1	0.8	106	15.8	110
	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
Rural		15.0	4.5	19.5	0.9	461	19.4	377
Education	None	(*)	(*)	(*)	(*)	9	(*)	13
	Primary	25.5	9.3	34.9	2.0	220	29.4	223
	Secondary +	6.6	2.6	9.1	0.1	598	10.8	466
	CET/ITVET/VOTEC	(*)	(*)	(*)	(*)	4	(*)	6
	Other	(*)	(*)	(*)	(*)	14	(*)	12
Wealth index quintiles	Poorest	17.4	6.4	23.9	1.0	160	32.5	111
	Second	15.4	6.7	22.1	2.2	167	19.7	163
	Middle	9.9	3.2	13.1	0.0	192	14.2	164
	Fourth	7.4	3.9	11.3	0.0	159	14.9	149
	Richest	7.2	1.2	8.3	0.0	167	6.0	132
Ethnicity of household head	Creole	9.4	2.2	11.6	0.5	190	12.2	185
	Mestizo	12.9	5.7	18.7	1.0	431	19.3	352
	Garifuna	6.2	2.1	8.3	0.0	44	(12.7)	49
	Maya	15.9	5.4	21.4	0.0	98	21.4	80
	Other	5.1	0.9	6.0	0.0	69	13.0	45
	Missing/DK	(*)	(*)	(*)	(*)	12	(*)	8
Total		11.4	4.2	15.6	0.6	844	16.9	720

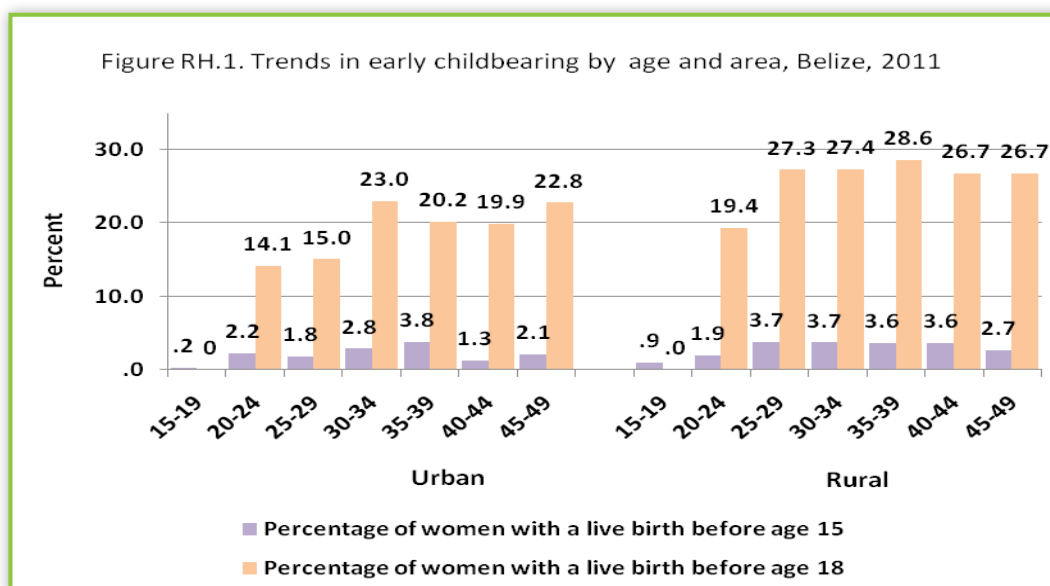
[1] MICS indicator 5.2

( ) 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

	Age	Urban				Rural				All			
		Percentage of women with a live birth before age 15	Number of women age 15-49 years	Percentage of women with a live birth before age 18	Number of women age 20-49 years	Percentage of women with a live birth before age 15	Number of women age 15-49 years	Percentage of women with a live birth before age 18	Number of women age 20-49 years	Percentage of women with a live birth before age 15	Number of women age 15-49 years	Percentage of women with a live birth before age 18	Number of women age 20-49 years
	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 method	Any modern method	Any traditional method	Any method [1]	Number of women currently married 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 of living children	0	76.3	22.4	1.4	23.7	275
	1	48.6	47.6	3.8	51.4	451
	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
Education	None	57.8	38.3	3.8	42.2	119
	Primary	44.4	52.7	2.9	55.6	1165
	Secondary + CET/ITVET/VOTEC	42.3	53.7	4.0	57.7	1056
	(*)	(*)	(*)	(*)	(*)	13
	Other	(8.6)	(11.4)	(0.0)	(11.4)	34
Wealth index quintiles	Poorest	57.8	40.8	1.4	42.2	409
	Second	46.0	50.9	3.0	54.0	498
	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
Ethnicity of household head	Creole	43.9	53.8	2.3	56.1	493
	Mestizo	40.0	56.1	4.0	60.0	1262
	Garifuna	46.8	47.3	5.9	53.2	120
	Maya	62.0	36.0	2.0	38.0	272
	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

[1] MICS indicator 5.3; MDG indicator 5.3

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

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.

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 using any method	Female sterilization	Male sterilization	IUD	Injectables	Implants	Pill	Number of women currently married or in union
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 Belize City South Side)	42.8	24.6	0.0	1.3	8.7	0.0	11.7	369
	Belize City South 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 of living children	0	76.3	0.3	0.3	0.0	3.0	0.0	11.7	275
	1	48.6	4.0	0.0	2.7	12.8	0.2	18.3	451
	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 + CET/ITVET/VOTEC	42.3	18.8	0.2	2.4	10.8	0.1	14.0	1056
		(*)	(*)	(*)	(*)	(*)	(*)	(*)	13
	Other	(88.6)	(9.3)	(0.0)	(0.0)	(0.0)	(0.0)	(2.1)	34
Wealth index quintiles	Poorest	57.8	15.9	0.0	0.9	15.0	0.0	7.6	409
	Second	46.0	18.7	0.0	0.8	12.7	0.2	12.1	498
	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 household head	Creole	43.9	22.3	0.0	1.9	8.4	0.3	13.6	493
	Mestizo	40.0	22.4	0.1	1.4	14.1	0.0	12.6	1262
	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

( ) 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 condom	Female condom	Diaphragm/ foam/jelly	Lactational amenorrhoea method (LAM)	Periodic abstinence/ Rhythm	Withdrawal	Other	Number of women currently married or 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 (Excluding Belize City South Side)	8.4	0.5	0.0	0.0	1.2	0.8	0.0	369
	Belize City South Side	7.0	1.1	0.0	0.0	2.2	0.4	0.0	257
	Belize 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
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 of living children	0	6.7	0.3	0.0	0.0	0.6	0.5	0.2	275
	1	8.8	0.8	0.0	0.2	2.1	1.4	0.1	451
	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/ VOTEC	(*)	(*)	(*)	(*)	(*)	(*)	(*)	13
	Other	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	34
Wealth index quintiles	Poorest	1.4	0.0	0.0	0.6	0.6	0.0	0.1	409
	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 household head	Creole	6.8	0.5	0.0	0.0	1.6	0.8	0.0	493
	Mestizo	5.2	0.2	0.1	0.2	2.5	1.2	0.1	1262
	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
	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	

( ) 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

- 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
- are pregnant and say that pregnancy was mistimed: would have wanted to wait OR
- 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
- are pregnant and say they didn't want to have a child OR
- 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.

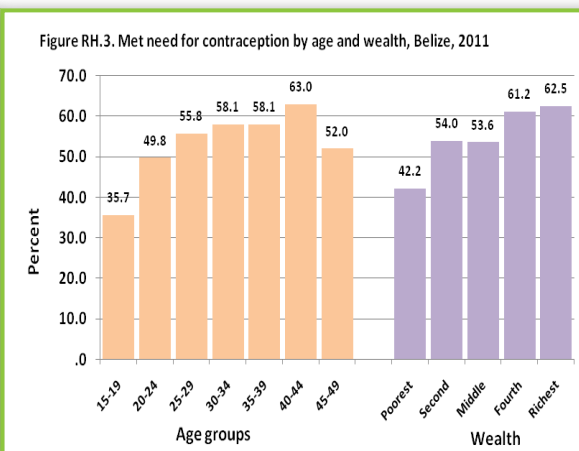
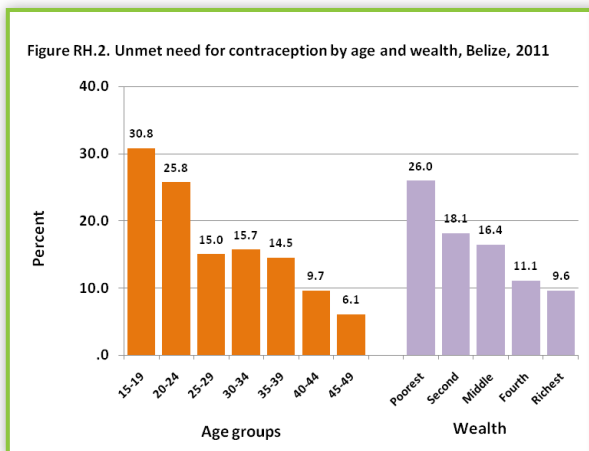
Education does not seem to be a factor in determining unmet need for contraception. However, area does show a slight difference in rates (urban 14.1 percent and rural 17.1 percent). Unmet need for contraception is quite dependent on the age of the woman and on the wealth of her family (Figure RH.2).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

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1 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

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

- (1a) has not had menstruation for at least six months, or
- (1b) never menstruated, or
- (1c) her last menstruation occurred before her last birth, or
- (1d) in menopause/has had hysterectomy OR
- (2) 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
- (3) She declares she cannot get pregnant when asked about desire for future birth OR
- (4) 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.

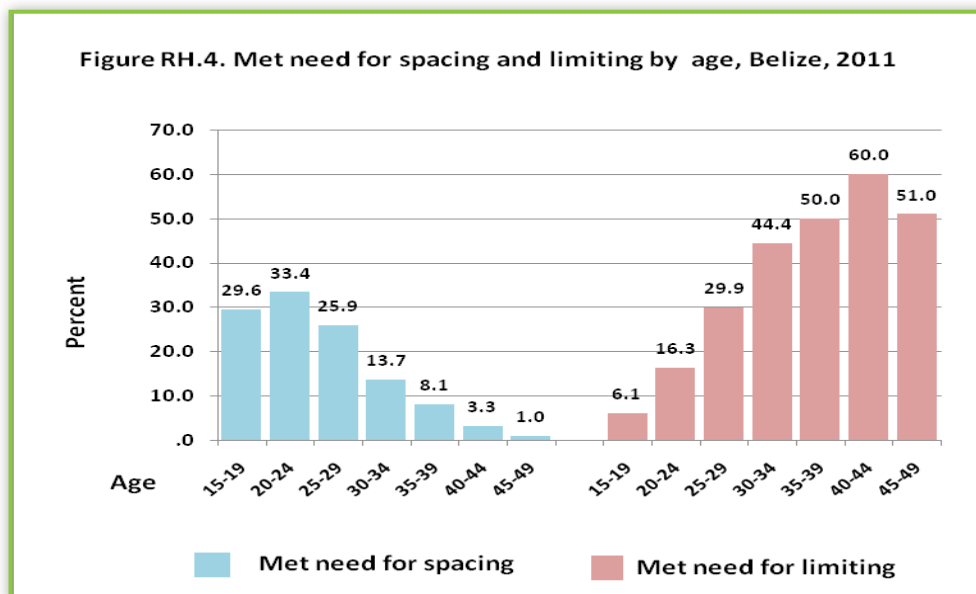


Table RH.5: Unmet need for contraception  
Percentage of women aged 15-49 years currently married or in union with an unmet need for family, Belize, 2011

		Met need for contra- ception - For spacing	Met need for contra- ception - For limiting	Met need for contra- ception - Total	Unmet need for contra- ception - For spacing	Unmet need for contra- ception - For limiting	Unmet need for contra- ception - Total [1]	Number of wom- en currently mar- ried or in union
Region	Corozal	17.2	44.9	61.8	4.7	6.7	11.4	346
	Orange Walk	15.8	43.1	58.9	7.4	5.6	13.0	373
	Belize (Excluding Be- lize City South Side)	15.4	41.7	57.2	9.5	6.4	15.9	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
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 index quin- tiles	Poorest	13.1	29.0	42.2	11.5	14.5	26.0	409
	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 household head	Creole	13.9	42.2	56.1	8.5	7.0	15.6	493
	Mestizo	17.1	42.9	60.0	6.5	7.0	13.5	1262
	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	

[1] MICS indicator 5.4; MDG indicator 5.6

( ) 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.

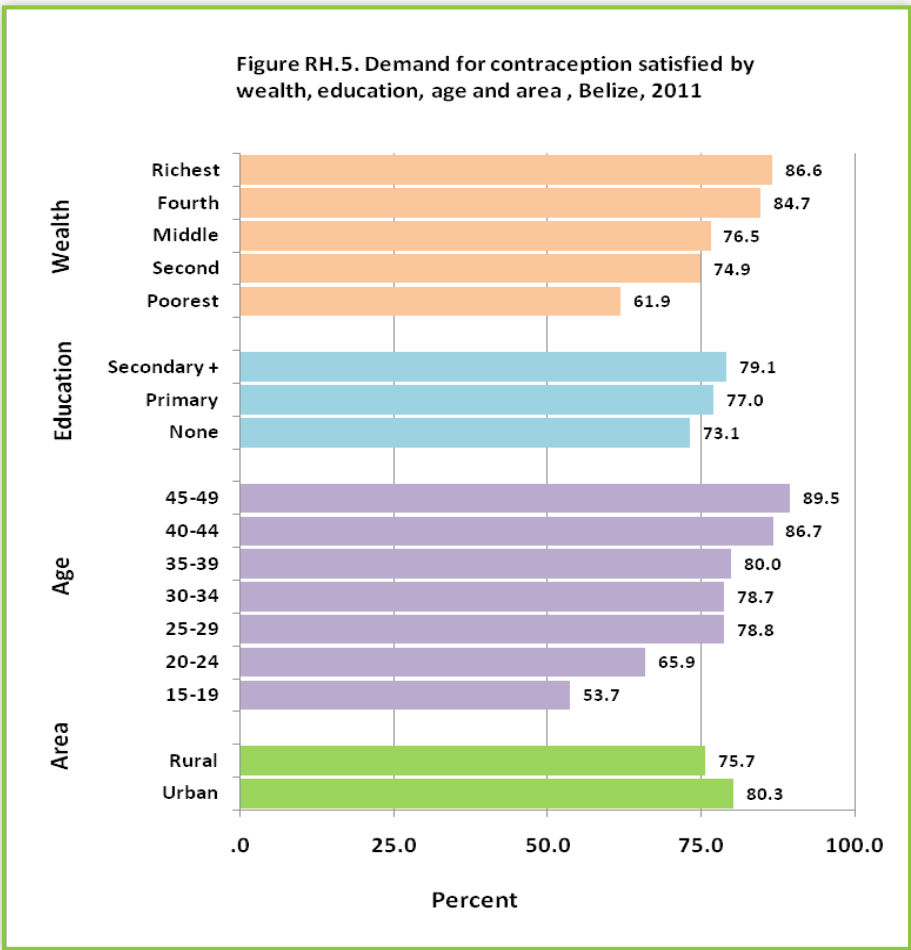


Table RH.5: Unmet need for contraception (cOntinued)  
Percentage of women aged 15-49 years currently married or in union with  
demand for contraception satisfied, Belize, 2011

		Percentage of demand for contraception satisfied	Number of women currently married or in union with need for 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
Rural		75.7	983
Age	15-19	53.7	85
	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 quintiles	Poorest	61.9	279
	Second	74.9	359
	Middle	76.5	339
	Fourth	84.7	357
	Richest	86.6	361
Ethnicity of household head	Creole	78.3	354
	Mestizo	81.6	928
	Garifuna	67.7	94
	Maya	59.0	175
	Other	78.5	116
	Missing/DK	(82.6)	29
Total		77.6	1695

( ) Figures that are based on 25-49 un-weighted cases;

(\*) Figures that are based on less than 25 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

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
- Urine testing for bacteriuria 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

		Person providing antenatal care					Total	At least once by skilled personnel [1]	Number of women who gave birth in the preceding two years
		Doctor	Nurse / Midwife	Community health worker	Other/ missing	No antenatal care received			
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 Belize City South Side)	57.2	29.7	8.6	0.0	4.6	100.0	86.9	74
	Belize City South 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 age at birth	Less than 20	36.4	60.2	1.6	0.5	1.3	100.0	96.7	118
	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 + CET/ITVET/VOTEC	57.8	38.9	1.8	0.2	1.3	100.0	96.7	315
	Other	(*)	(*)	(*)	(*)	(*)	100.0	(*)	3
	Other	(*)	(*)	(*)	(*)	(*)	100.0	(*)	15
Wealth index quintiles	Poorest	20.3	73.8	1.3	0.3	4.3	100.0	94.1	173
	Second	50.4	49.0	0.0	0.0	0.6	100.0	99.4	156
	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 household head	Creole	60.0	33.2	2.1	0.0	4.7	100.0	93.2	113
	Mestizo	42.3	56.3	0.5	0.2	0.7	100.0	98.7	355
	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

[1] MICS indicator 5.5a; MDG indicator 5.5

( ) 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

		Percent of women who had:						Total	Number of women who gave birth in the preceding two years
		No antenatal care visits	One visit	Two visits	Three visits	4 or more visits [1]	Missing/DK		
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 (Excluding Belize City South Side)	4.6	0.0	0.0	2.0	81.1	12.3	100.0	74
	Belize City South Side	3.6	1.2	0.0	2.2	82.3	10.7	100.0	77
	Belize 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
Rural		2.0	1.0	2.7	4.5	80.5	9.3	100.0	424
Mother's age at birth	Less than 20	1.3	0.7	2.4	4.5	80.5	10.6	100.0	118
	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	0.8	1.4	3.1	83.4	9.5	100.0	306
	Secondary + CET/ITVET/VOTEC	1.3	0.6	1.4	1.7	86.6	8.4	100.0	315
	Other	(*)	(*)	(*)	(*)	(*)	(*)	100.0	3
Wealth index quintiles	Poorest	4.3	1.0	5.4	7.9	70.3	11.1	100.0	173
	Second	0.6	1.7	1.2	1.9	88.1	6.5	100.0	156
	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 household head	Creole	4.7	0.0	0.0	4.3	76.3	14.7	100.0	113
	Mestizo	0.7	1.0	1.7	1.6	90.0	5.0	100.0	355
	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

[1] MICS indicator 5.5b; MDG indicator 5.5

( ) 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 pregnant women who had:			Blood pressure measured, urine specimen and blood test taken [1]	Number of women who gave birth in two years preceding survey
		Blood pressure measured	Urine specimen taken	Blood test taken		
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 at birth	Less than 20	98.7	98.7	98.7	98.7	118
	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 quintiles	Poorest	94.5	93.3	94.9	92.7	173
	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 household head	Creole	95.3	94.0	94.5	93.1	113
	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

[1] MICS indicator 5.6

( ) 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 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 age at birth	Less than 20	97.2	25.8	118
	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 index quintiles	Poorest	89.4	19.3	173
	Second	98.5	27.7	156
	Middle	97.6	32.8	134
	Fourth	99.6	26.8	132
	Richest	98.1	40.6	91
Ethnicity of household 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

[1] 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

Table RH.9: Assistance during delivery (continued)  
Percent distribution of women age 15-49 who had a live birth in the two years preceding the survey by person assisting, Belize, 2011

		Person assisting at delivery								Total	Number of women
		Doctor	Nurse / Midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Relative / Friend	Other/ missing	No attendant		
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 Belize City South Side)	73.1	24.8	0.0	0.0	0.0	0.0	2.1	0.0	100.0	74
	Belize City South 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
	Rural	45.3	47.9	1.6	2.7	0.1	0.7	1.3	0.4	100.0	424
Mother's age at birth	Less than 20	48.2	47.8	1.2	1.4	0.0	0.0	1.4	0.0	100.0	118
	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 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 index quintiles	Poorest	31.0	55.4	3.0	6.1	0.3	1.3	1.9	1.0	100.0	173
	Second	57.8	40.2	0.4	0.0	0.0	1.2	0.4	0.0	100.0	156
	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 household head	Creole	55.3	42.5	0.0	0.8	0.0	0.0	1.4	0.0	100.0	113
	Mestizo	52.3	43.7	0.7	2.3	0.0	1.0	0.2	0.0	100.0	355
	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
<b>Total</b>		49.7	45.4	1.1	1.8	0.1	0.8	0.9	0.3	100.0	685

( ) 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

		Place of delivery				Total	Delivered in health facility [1]	Number of women who gave birth in preceding two years
		Public sector health facility	Private sector health facility	Home	Other			
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 Belize City South Side)	67.2	28.3	2.4	2.1	100.0	95.5	74
	Belize City South Side	87.3	10.1	1.3	1.2	100.0	97.5	77
	Belize District	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 age at birth	Less than 20	91.1	4.8	4.1	0.0	100.0	95.9	118
	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 women who had:	None	(*)	(*)	(*)	(*)	100.0	(*)	14
	1-3 visits	(71.6)	(22.6)	(5.8)	(0.0)	100.0	(94.2)	42
	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 index quintiles	Poorest	70.6	13.6	15.4	0.3	100.0	84.2	173
	Second	88.9	9.9	1.2	0.0	100.0	98.8	156
	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 household head	Creole	88.0	9.8	.0	2.2	100.0	97.8	113
	Mestizo	78.1	16.0	5.7	0.2	100.0	94.1	355
	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
	Missing/DK	(*)	(*)	(*)	(*)	100.0	(*)	8
Total		76.8	17.0	5.6	0.5	100.0	93.8	685

[1] MICS indicator 5.8

( ) 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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3 Liu L, Johnson HL, Cousens S, et al. Global, regional, and national causes of child mortality in 2000-2010: an updated systematic analysis. *Lancet*. 2012;11 May 2012. doi:10.1016/S0140-6736(12)60560-1.

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

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

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

		Duration of stay in health facility:						Total	12 hours or more [1]	Number of women who gave birth in a health facility in the preceding two years
		Less than 6 hours	6-11 hours	12-23 hours	1-2 days	3 days or more	Missing/DK			
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 Belize City South Side)	(8.5)	(4.5)	(0.0)	(65.3)	(21.7)	(0.0)	100.0	(87.0)	71
	Belize City South Side	5.1	0.0	1.3	69.6	24.0	0.0	100.0	94.9	75
	Belize District	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
Rural		4.4	3.9	0.6	66.2	24.8	0.0	100.0	91.7	388
Mother's age at birth	Less than 20	2.3	0.0	0.0	63.2	34.5	0.0	100.0	97.7	113
	20-34	5.9	4.3	1.0	65.9	22.9	0.0	100.0	89.8	459
	35-49	0.0	0.0	0.0	75.1	24.9	0.0	100.0	100.0	71
Percent of women who had:	None	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	6
	1-3 visits	(6.7)	(15.2)	(0.0)	(48.8)	(29.3)	(0.0)	100.0	(78.1)	40
	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 + CET/ITVET/VOTEC	4.3	1.4	1.5	70.7	22.1	0.0	100.0	94.2	310
	Other	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	3
	Other	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	12
Wealth index quintiles	Poorest	4.5	9.3	0.0	57.1	29.1	0.0	100.0	86.2	146
	Second	4.7	0.8	1.2	65.1	28.3	0.0	100.0	94.5	154
	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 household head	Creole	3.2	0.0	0.0	68.9	27.9	0.0	100.0	96.8	110
	Mestizo	5.6	2.3	0.9	65.9	25.3	0.0	100.0	92.1	334
	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	

[1] MICS indicator 5.10

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

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.

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

		Health check following birth while in facility or at home	PNC visit							Total	Post-natal health check for the newborn [1]	Number of last births in the two years preceding the survey
			Same day	1 day following birth	2 days following birth	3-6 days following birth	After the first week following birth	No post-natal care visit	Missing/DK			
Region	Corozal	99.1	0.9	1.8	5.3	11.0	38.1	35.1	7.7	100.0	99.1	95
	Orange Walk	97.7	12.3	3.1	3.0	3.6	7.1	70.9	0.0	100.0	98.4	108
	Belize (Excluding Belize City South Side)	(95.8)	(10.1)	(2.0)	(2.1)	(6.3)	(50.3)	(25.4)	(3.8)	100.0	(95.8)	74
	Belize City South 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 age at birth	Less than 20	99.1	15.6	2.9	4.4	7.3	23.0	43.7	3.2	100.0	99.1	118
	20-34	97.0	14.6	3.7	2.6	7.3	29.4	40.0	2.4	100.0	97.5	490
	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 index quintiles	Poorest	94.7	21.1	3.6	2.0	3.5	19.2	46.2	4.5	100.0	94.7	173
	Second	97.8	13.4	4.5	2.4	7.5	31.6	38.8	1.9	100.0	98.3	156
	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 of household head	Creole	95.5	17.0	4.6	3.1	11.4	28.5	34.6	0.8	100.0	95.5	113
	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

[1] MICS indicator 5.11

( ) 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

		Location of first PNC visit						Provider of first PNC visit						Number of newborns born in the preceding two years with a PNC visit within the first week of life
		Home	Public Sector	Private Sector	Other location	Missing/DK	Total	Doctor/nurse/midwife	Auxiliary midwife	Community health worker	Traditional birth attendant	Other/missing	Total	
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 Belize City South Side)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	15
	Belize City South 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 age at birth	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
	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
	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
Education	None	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	9
	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 index quintiles	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
	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
	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 of household head	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
	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
	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	(*)	(*)	(*)	(*)	(*)	100.0	3	
Total	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	

( ) 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

		Health check following birth while in facility or at home	PNC visit							Total	Post-natal health check for the mother [1]	Number of women who gave birth in the two years preceding the survey
			Same day	1 day following birth	2 days following birth	3-6 days following birth	After the first week following birth	No post-natal care visit	Missing/DK			
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 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 age at birth	Less than 20	96.7	5.2	5.4	2.2	3.0	19.8	62.8	1.7	100.0	97.1	118
	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 delivery	Vaginal birth	93.0	8.2	3.0	2.2	2.7	16.6	65.6	1.6	100.0	93.8	493
	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 + CET/ITVET/VOTEC	94.2	5.7	3.1	2.2	3.1	24.4	60.8	0.7	100.0	94.7	315
	Other	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	100.0	(*)	3
Wealth index quintiles	Poorest	91.4	11.3	5.0	1.0	1.4	7.4	70.4	3.6	100.0	91.7	173
	Second	94.9	8.1	3.2	2.8	2.8	14.0	68.6	0.5	100.0	96.1	156
	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 household head	Creole	90.6	6.1	0.9	2.5	1.6	27.5	61.4	0.0	100.0	90.6	113
	Mestizo	96.0	5.5	3.3	2.6	3.2	16.6	66.9	1.9	100.0	97.0	355
	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	3.2	2.1	2.8	19.2	63.6	1.6	100.0	94.6	685

[1] MICS indicator 5.12

( ) 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 visits within two days of delivery

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						Provider of first PNC visit						Number of women who gave birth in the two years preceding survey and received a PNC visit within one week of delivery	
	Home	Public Sector	Private Sector	Other location	Missing/DK	Total	Doctor/nurse/midwife	Auxiliary midwife	Community health worker	Traditional birth attendant	Other/missing	Total		
Type of delivery														
Vaginal 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	
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	
Education														
None	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	6	
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	
Secondary +	(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	

( ) 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

		Health checks or PNC visits within 2 days of birth for:					Total	Number of women age 15-49 years who gave birth in the 2 years preceding the survey
		Both mothers and newborns	Mothers only	Newborns only	Neither mother nor newborn	Missing		
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 age at birth	Less than 20	95.4	0.5	2.4	0.5	1.2	100.0	118
	20-34	92.2	0.4	4.0	2.1	1.3	100.0	490
	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 delivery	Vaginal birth	91.8	0.8	3.6	2.6	1.2	100.0	493
	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 + CET/ITVET/VOTEC	94.5	0.0	3.8	1.6	0.2	100.0	315
	Other	(*)	(*)	(*)	(*)	(*)	100.0	3
	Other	(*)	(*)	(*)	(*)	(*)	100.0	15
Wealth index quintiles	Poorest	88.0	0.8	3.8	4.5	2.9	100.0	173
	Second	93.8	1.7	3.9	0.0	0.5	100.0	156
	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 of household head	Creole	90.6	0.0	4.9	4.5	0.0	100.0	113
	Mestizo	94.8	1.0	2.3	0.7	1.2	100.0	355
	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
	Missing/DK	(*)	(*)	(*)	(*)	(*)	100.0	8
Total		92.7	0.7	3.4	2.0	1.2	100.0	685

( ) 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

Attendance 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 36-59 months currently attending early childhood education [1]	Number of children aged 36-59 months
Sex	Male	29.5	393
	Female	33.9	399
Region	Corozal	19.1	101
	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
Area	Toledo	12.8	90
	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 education	None	(2.3)	38
	Primary	23.3	403
	Secondary +	46.6	325
	Other	(*)	19
Wealth index quintiles	Poorest	16.1	198
	Second	28.5	189
	Middle	25.6	166
	Fourth	46.0	140
	Richest	59.1	99
Ethnicity of household head	Creole	51.1	172
	Mestizo	27.6	368
	Garifuna	(52.4)	40
	Maya	19.4	121
	Other	14.8	77
Total		31.7	792

[1] MICS indicator 6.7

( ) Figures that are based on 25-49 un-weighted cases;

(\*) 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 children aged 36-59 months		Mean number of activities		Percentage of children not living with their natural father	Number of children aged 36-59 months
		With whom adult household members engaged in four or more activities [1]	With whom the father engaged in one or more activities [2]	Any adult household member engaged with the child	The father engaged with the child		
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 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
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 education	None	(60.7)	(42.6)	(3.8)	(1.4)	(10.7)	38
	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 education	None	58.7	51.0	3.8	1.4	na	44
	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 index quintiles	Poorest	72.5	52.0	4.4	1.9	15.3	198
	Second	84.6	41.9	5.1	1.5	28.6	189
	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 household head	Creole	89.2	43.5	5.1	1.4	38.8	172
	Mestizo	85.7	52.3	5.1	2.0	24.0	368
	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

[1] MICS indicator 6.1 [2] MICS Indicator 6.2

na = Not Applicable

( ) 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" and

22 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

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

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

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



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 child:		Child plays with:			Two or more types of playthings [2]	Number of children under age 5
		3 or more children's books [1]	10 or more children's books	Homemade toys	Toys from a shop/ manufactured toys	Household objects/objects found outside		
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 Belize City South Side)	53.3	37.4	19.9	91.6	55.3	60.1	240
	Belize City South 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 education	None	8.3	1.9	33.3	75.0	63.9	59.3	108
	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 index quintiles	Poorest	16.9	3.9	25.3	79.4	57.0	54.8	490
	Second	29.7	9.5	18.4	90.6	57.6	59.6	450
	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 household head	Creole	55.3	29.3	15.2	94.4	53.1	56.2	379
	Mestizo	34.9	16.9	19.7	88.6	58.3	57.2	949
	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

[1] MICS indicator 6.3 [2] MICS indicator 6.4

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

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

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

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

		Percentage of children under age 5			Number of children under age 5
		Left alone in the past week	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]	
Sex	Male	1.4	2.1	2.8	984
	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
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 education	None	0.9	5.8	5.8	100
	Primary	1.2	1.9	2.5	946
	Secondary +	1.2	1.4	2.1	839
Wealth index quintiles	Poorest	1.5	4.0	4.3	490
	Second	1.2	1.1	1.5	450
	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 household head	Creole	0.7	1.4	1.9	379
	Mestizo	1.2	2.1	2.9	949
	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

[1] MICS indicator 6.5

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

11 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

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

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

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:

- 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.
- 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, social-emotional, and learning domains, and the early child development index score, Belize, 2011

		Percentage of children age 36-59 months who are developmentally on track for indicated domains				Early child development index score [1]	Number of children age 36-59 months
		Literacy-numeracy	Physical	Social-Emotional	Learning		
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 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
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 to early childhood education	Attending preschool	70.8	99.7	80.2	99.7	93.8	251
	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 quintiles	Poorest	31.6	99.1	75.3	96.4	81.4	198
	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 household head	Creole	46.3	98.5	81.3	98.1	88.8	172
	Mestizo	46.5	99.3	74.9	98.9	84.0	368
	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

[1] 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

One 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

		Percentage literate [1]	Percentage not known	Number of women age 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 quintiles	Poorest	74.6	14.4	271	
	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 household head	Creole	98.1	0.4	376	
	Mestizo	91.0	3.7	784	
	Garifuna	100.0	0.0	93	
	Maya	88.7	1.0	179	
	Other	65.6	31.5	113	
	Missing/DK	(*)	(*)	19	
Total		91.1	4.4	1564	

[1] MICS indicator 7.1; MDG indicator 2.3

( ) 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 attending first grade 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 education	None	10.9	58
	Primary	29.6	468
	Secondary +	41.9	312
Wealth index quintiles	Poorest	23.5	213
	Second	33.9	201
	Middle	30.1	158
	Fourth	42.1	154
	Richest	39.6	116
Ethnicity of household head	Creole	40.4	185
	Mestizo	29.6	436
	Garifuna	43.2	53
	Maya	29.8	117
	Other	(26.9)	43
	Missing/DK	(*)	9
Total		32.9	843

[1] MICS indicator 7.2

( ) Figures that are based on 25-49 un-weighted cases;

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

## 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:

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

The indicators of school progression include:

- 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 of primary school entry 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 education	None	(42.6)	29
	Primary	89.8	212
	Secondary + CET/ITVET/VOTEC	92.0	151
	Missing/DK	(*)	1
	Other	(*)	1
Wealth index quintiles	Poorest	70.8	108
	Second	88.6	93
	Middle	87.9	69
	Fourth	93.6	75
	Richest	93.1	57
Ethnicity of household head	Creole	97.8	84
	Mestizo	86.4	191
	Garifuna	86.4	25
	Maya	88.2	67
	Other	(36.8)	32
	Missing/DK	(*)	4
Total		85.3	403

[1] MICS indicator 7.3

( ) 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		Female		Total	
		Net attendance ratio (adjusted)	Number of children	Net attendance ratio (adjusted)	Number of children	Net attendance ratio (adjusted) [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 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
	11	96.5	197	96.1	209	96.3	406
Mother's education	12	94.1	189	93.7	207	93.9	395
	None	79.4	135	78.6	131	79.0	266
	Primary	97.8	886	96.9	869	97.4	1756
	Secondary + CET/ITVET/VOTEC	97.7	576	98.5	607	98.1	1183
	Missing/DK	(*)	6	(*)	5	(*)	11
Wealth index quintiles	Other	(5.2)	31	(2.6)	27	4.0	58
	Poorest	87.9	413	87.4	384	87.7	797
	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
Ethnicity of household head	Richest	97.1	240	98.2	275	97.7	515
	Creole	98.0	359	99.4	383	98.7	742
	Mestizo	97.6	837	97.2	784	97.4	1621
	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
Total	Missing/DK	(*)	17	(*)	17	(100.0)	34
		94.4	1643	94.5	1643	94.4	3286

[1] MICS indicator 7.4; MDG indicator 2.1;

( ) Figures that are based on 25-49 un-weighted cases;

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

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

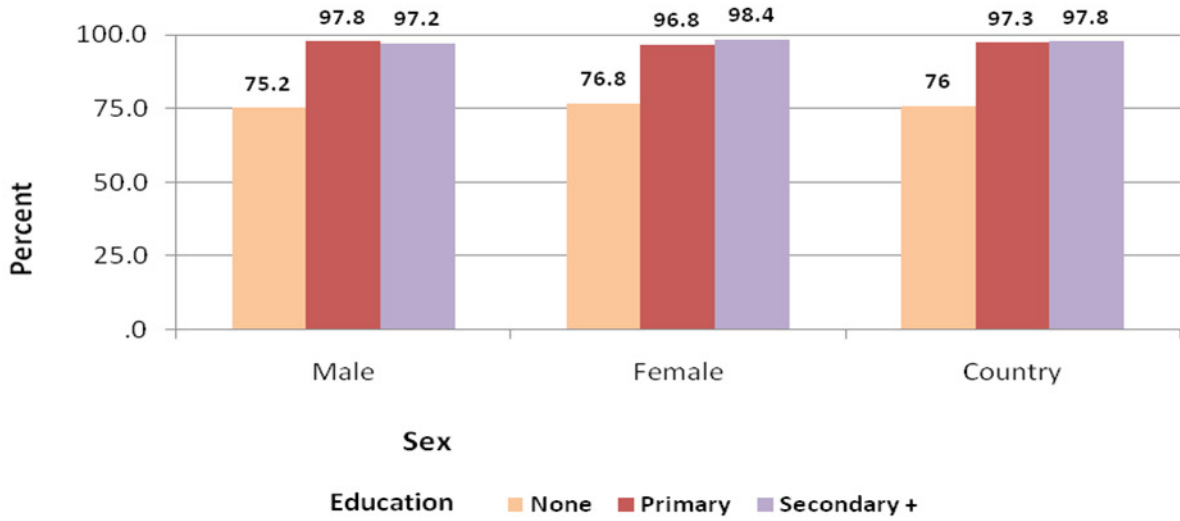
In the report, results are also presented using the International Standard Classification of Education (ISCED) categories, which in the case of Belize, differs from what occurs in-country. These figures are presented mainly for the use of international data comparisons (Table ED.4B)

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

		Male		Female		Total	
		Net attendance ratio (adjusted)	Number of children	Net attendance ratio (adjusted)	Number of children	Net attendance ratio (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 (Excluding Belize City South Side)	98.1	168	96.5	182	97.3	350
	Belize City South Side	97.4	149	99.3	145	98.4	294
	Belize 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
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 + CET/ITVET/VOTEC	97.2 (*)	444 6	98.4 (*)	452 5	97.8 (*)	897 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

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

**Figure ED.1: Primary net attendance ratio by education of mother and sex, Belize, 2011**



**Figure ED.2: Primary net attendance ratio by wealth and sex, Belize, 2011**

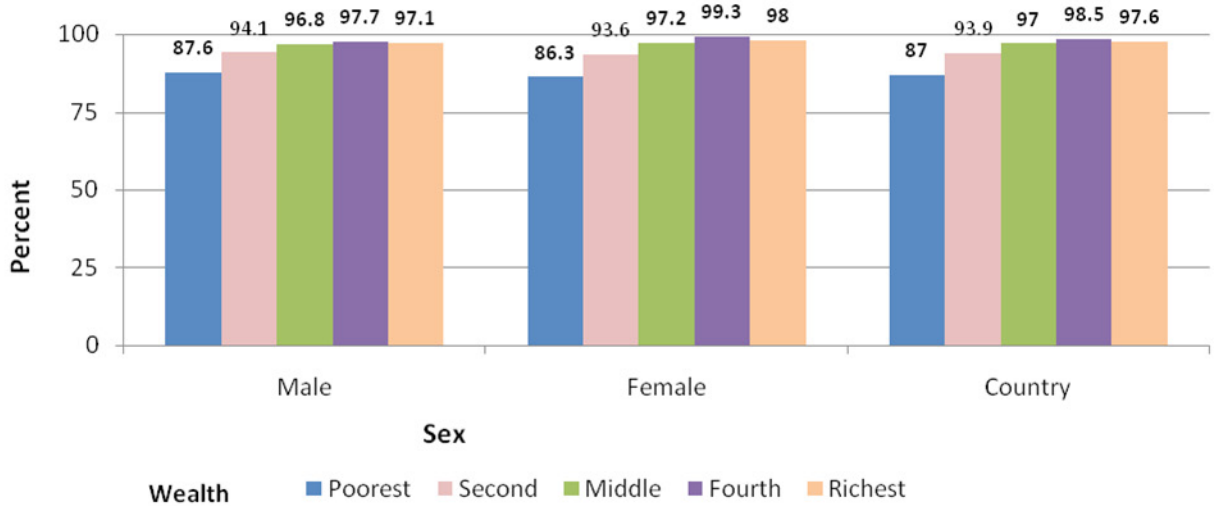


Table ED.5A: Secondary school attendance  
Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance ratio), and percentage of children attending primary school, Belize, 2011

		Male			Female			Total		
		Net attendance ratio (adjusted)	Percent attending primary school	Number of children	Net attendance ratio (adjusted)	Percent attending primary school	Number of children	Net attendance ratio (adjusted) [1]	Percent attending primary school	Number of 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 Belize City South Side)	64.4	25.2	99	73.8	16.7	124	69.6	20.5	223
	Belize City South 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 beginning of school 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	.9	178	59.3	2.8	338
Mother's education	None	25.4	37.2	77	30.3	25.8	66	27.6	32.0	142
	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
Wealth index quintiles	Poorest	22.9	33.8	168	29.4	21.8	144	25.9	28.3	312
	Second	37.9	28.9	148	44.6	15.6	150	41.3	22.2	298
	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 household head	Creole	69.1	17.5	157	80.9	11.5	179	75.3	14.3
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

[1] MICS indicator 7.5

( ) 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).

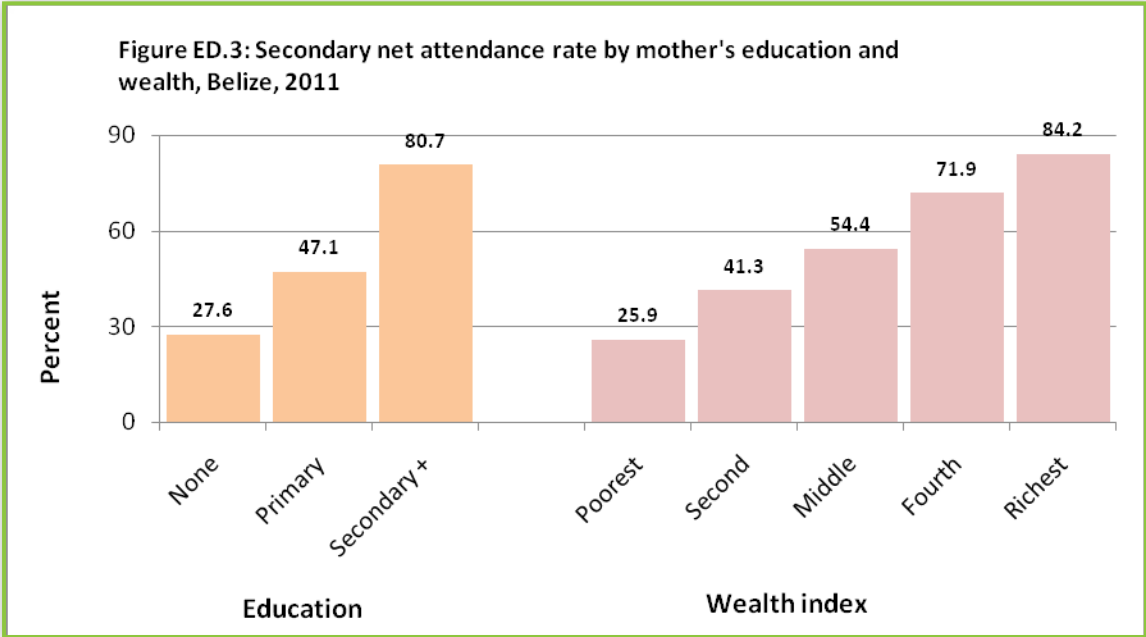


Table ED.5B below presents the figures for secondary education according to International Standard Classification of Education (ISCED) categories.

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 attendance ratio (adjusted)	Percent attending primary school	Number of children	Net attendance ratio (adjusted)	Percent attending primary school	Number of children	Net attendance ratio (adjusted) [1]	Percent attending primary school	Number of 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 Belize City South Side)	46.4	45.5	146	54.7	38.5	173	50.9	41.7	319
	Belize City South 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 beginning of school year	11	1.8	94.7	197	0.8	94.8	209	1.2	94.8	406
	12	14.4	79.2	189	15.8	78.0	207	15.1	78.6	395
	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 education	None	17.5	54.2	116	20.1	45.7	102	18.8	50.2	218
	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 index quintiles	Poorest	15.6	52.7	264	18.2	48.6	239	16.8	50.8	503
	Second	26.0	50.8	227	28.8	43.1	243	27.5	46.8	470
	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 household head	Creole	48.3	42.2	235	56.5	38.3	281	52.8	40.1	515
	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

( ) 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.

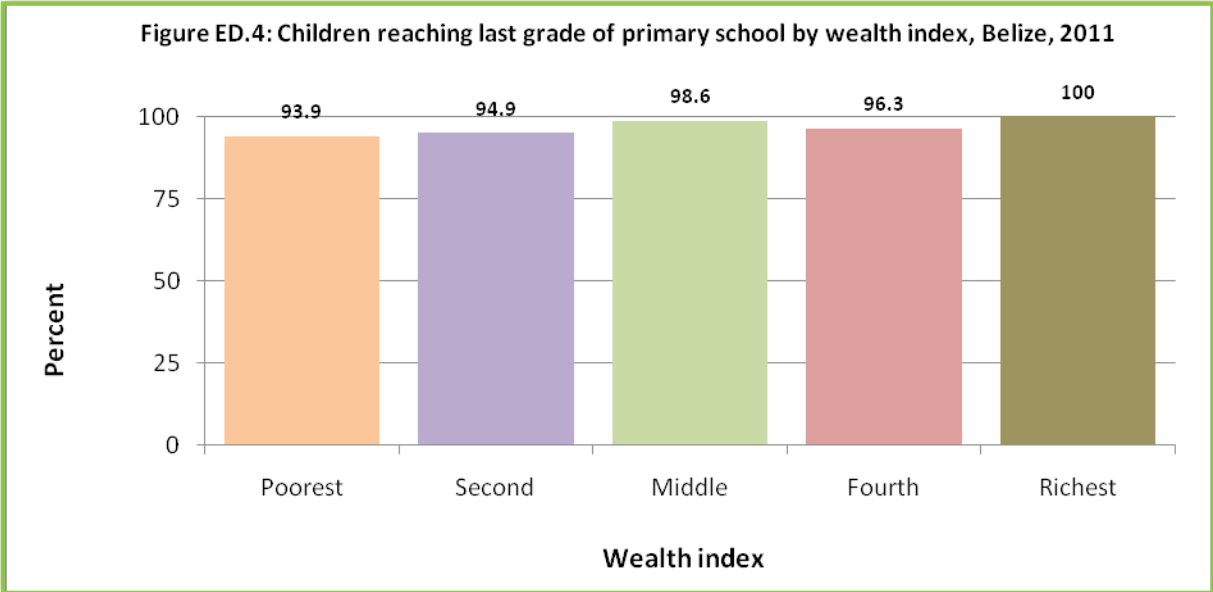


Table ED.6: Children reaching last grade of primary school  
 Percentage of children entering first grade of primary school who eventually reach the last grade of primary school (Survival rate to last grade of primary school), Belize, 2011

		Percent attending grade 1 last year who are in grade 2 this year	Percent attending grade 2 last year who are attending grade 3 this year	Percent attending grade 3 last year who are attending grade 4 this year	Percent attending grade 4 last year who are attending grade 5 this year	Percent attending grade 5 last year who are attending grade 6 this year	Percent who reach grade 6 of those who enter grade 1 [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 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 education	None	97.3	100.0	100.0	100.0	93.7	91.2
	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 index quintiles	Poorest	100.0	100.0	99.4	96.3	98.1	93.9
	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 household head	Creole	100.0	100.0	100.0	100.0	97.8	97.8
	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

[1] 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 completion rate [1]	Number of children of primary school completion age	Transition rate to secondary school [2]	Number of children who were in the last grade of primary school the 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 education	None	(74.7)	41	(89.0)	27
	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 index quintiles	Poorest	77.0	94	(85.0)	36
	Second	91.8	78	86.4	62
	Middle	112.9	79	87.4	77
	Fourth	99.7	81	95.3	87
	Richest	84.2	63	94.9	90
Ethnicity of household head	Creole	92.2	90	90.3	101
	Mestizo	87.1	204	88.5	178
	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

[1] MICS indicator 7.7; [2] MICS indicator 7.8

( ) 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 completion rate [1]	Number of children of primary school completion age	Transition rate to secondary school [2]	Number of children who were in the last grade of primary school the previous 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 education	None	(95.8)	32	(89.0)	27
	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
Wealth index quintiles	Other	(*)	8	(*)	2
	Poorest	73.8	98	(*)	36
	Second	82.7	87	86.4	62
	Middle	100.7	89	87.4	77
	Fourth	130.8	62	95.3	87
	Richest	70.0	76	94.9	90
Ethnicity of household head	Creole	78.1	106	90.3	101
	Mestizo	94.4	188	88.5	178
	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
<b>Total</b>		<b>89.4</b>	<b>411</b>	<b>90.9</b>	<b>352</b>

( ) 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 adjusted net attendance ratio (NAR), girls	Primary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school adjusted NAR [1]	Secondary school adjusted net attendance ratio (NAR), girls	Secondary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school adjusted 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 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 mother/caretaker	None	78.6	79.4	0.99	30.3	25.4	1.20
	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 quintiles	Poorest	87.4	87.9	0.99	29.4	22.9	1.28
	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 household head	Creole	99.4	98.0	1.01	80.9	69.1	1.17
	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

[1] 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 school adjusted net attendance ratio (NAR), girls	Primary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school adjusted NAR [1]	Secondary school adjusted net attendance ratio (NAR), girls	Secondary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school adjusted 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 Belize City South Side)	96.5	98.1	0.98	54.7	46.4	1.18
	Belize City South 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 mother/caretaker	None	76.8	75.2	1.02	20.1	17.5	1.15
	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 quintiles	Poorest	86.3	87.6	0.99	18.2	15.6	1.17
	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 household head	Creole	99.5	97.8	1.02	56.5	48.3	1.17
	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

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

## XI. CHILD PROTECTION

### Birth Registration

The 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

		Children under age 5 whose birth is registered with civil authorities				Number of children	Children under age 5 whose birth is not registered	
		Has birth certificate		No birth certificate	Total registered [1]		Percent of children whose mother/caretaker knows how to register birth	Number of children without birth registration
		Seen	Not seen					
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 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)
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 education	None	52.7	36.6	4.9	94.2	100	(*)	6
	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-TEC	(*)	(*)	(*)	(*)	14	(*)	4
	Other	(64.4)	(35.6)	(0.0)	(100.0)	47	(*)	0
Wealth index quintiles	Poorest	39.3	49.0	6.8	95.1	490	(*)	24
	Second	40.3	48.3	5.9	94.5	450	(*)	25
	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 of household head	Creole	32.3	55.9	5.7	93.9	379	(*)	23
	Mestizo	44.4	45.5	5.6	95.4	949	(90.7)	43
	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

[1] MICS indicator 8.1

( ) 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) and in either case is more prevalent for the younger children.

Figure CP.1. Child Labour by wealth index and education, Belize, 2011

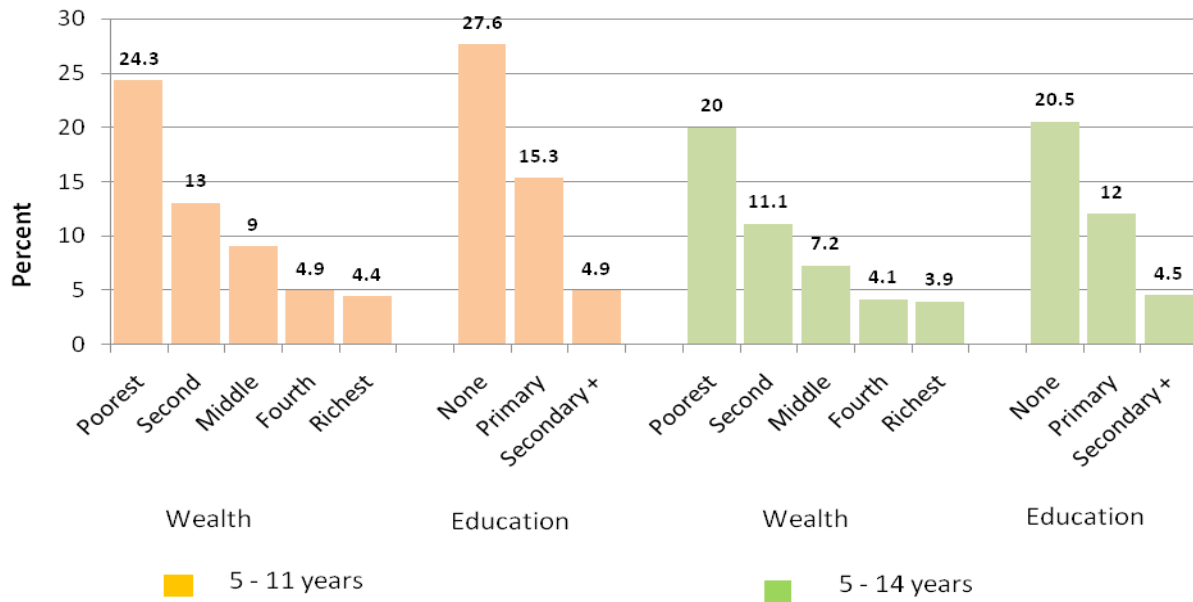


Figure CP.2. Labour force participation by ethnicity, Belize, 2011

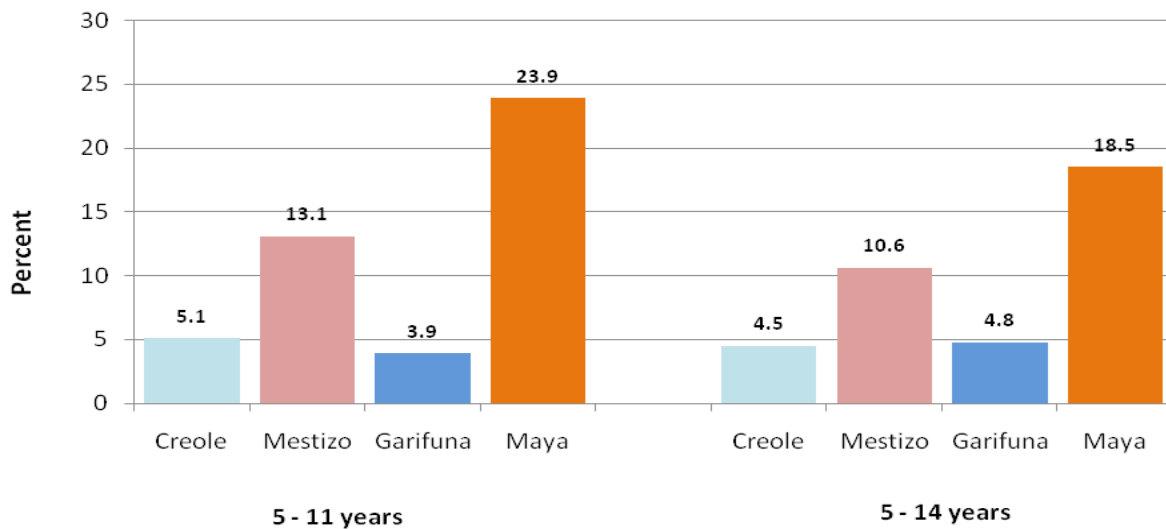




Table CP2: Child labour  
Percentage of children by involvement in economic activity and household chores during the past week, according to age groups, and percentage of children age 5-14 involved in child labour, Belize, 2011

		Percentage of children age 5-11 involved in							Number of children age 5-11
		Economic activity			Economic activity for at least one hour	Household chores less than 28 hours	Household chores for 28 hours or more	Child labour	
		Working outside household		Working for family business					
		Paid work	Unpaid work						
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 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 participation	Yes	2.3	1.3	9.8	11.9	56.8	0.3	12.1	2702
	No	1.4	0.8	11.4	13.3	41.1	0.0	13.3	184
Mother's education	None	3.6	1.2	25.2	27.2	59.0	0.7	27.6	219
	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 quintiles	Poorest	2.6	1.1	22.2	23.9	52.4	0.6	24.3	710
	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 household head	Creole	1.0	0.9	3.3	5.1	56.6	0.0	5.1	647
	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

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

Table CP2: 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

		Percentage of children age 12-14 involved in								Number of children age 12-14	Total child labour [1]	Number of children age 5-14 years
		Economic activity			Economic activity less than 14 hours	Economic activity for 14 hours or more	Household chores less than 28 hours	Household chores for 28 hours or more	Child labour			
		Working outside household		Working for family business								
		Paid work	Unpaid work									
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	525
	Orange Walk	4.0	0.0	16.7	15.0	3.4	72.6	7.8	11.2	158	7.4	581
Area	Belize (Excluding Belize City South Side)	4.2	1.7	5.0	5.1	5.0	60.3	0.0	5.0	167	4.9	570
	Belize City South Side	5.8	1.4	2.7	7.9	0.7	83.2	0.0	0.7	140	4.0	488
Area	Belize 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	952
Area	Stann Creek	8.2	0.6	29.4	22.9	10.2	83.4	0.6	10.8	133	13.5	467
	Toledo	2.2	2.3	32.2	30.4	3.1	77.1	0.9	3.5	130	15.9	489
Area	Urban	4.8	1.7	8.1	10.2	3.0	77.2	0.3	3.3	460	4.1	1582
	Rural	7.0	1.7	29.3	29.2	3.7	76.3	2.2	5.8	725	13.8	2489
School participation	Yes	6.1	1.9	20.5	21.5	3.3	77.1	0.7	3.9	1100	9.7	3802
	No	6.8	0.0	27.9	26.3	5.3	70.3	11.9	17.2	86	14.5	270
Mother's education	None	15.1	0.5	42.1	41.8	7.3	81.0	0.6	7.9	123	20.5	342
	Primary	5.5	2.4	25.9	26.7	3.0	76.7	1.2	4.0	626	12.0	2173
Mother's education	Secondary +	4.5	1.3	7.1	8.4	2.8	76.6	0.6	3.5	399	4.5	1450
	CET/ITVET/VOTEC	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5	(*)	18
Mother's education	Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	7	(*)	12
	Other	6.7	0.0	20.0	16.6	6.7	50.6	26.5	33.2	25	13.3	77
Wealth index quintiles	Poorest	8.7	2.1	45.9	42.1	6.0	72.3	3.3	8.7	273	20.0	983
	Second	6.0	1.6	24.5	25.3	4.1	75.6	2.0	6.2	248	11.1	882
Wealth index quintiles	Middle	7.7	0.7	13.2	16.1	2.3	79.1	0.4	2.7	221	7.2	786
	Fourth	4.0	2.9	8.3	12.3	1.6	81.6	1.0	2.6	249	4.1	763
Wealth index quintiles	Richest	3.8	1.1	7.0	7.4	2.7	74.8	0.0	2.7	193	3.9	658
	Ethnicity of household head	6.6	1.5	9.6	12.1	2.3	77.3	1.0	3.0	265	4.5	913
Ethnicity of household head	Mestizo	6.5	1.6	23.2	23.3	3.6	77.1	1.2	4.7	590	10.6	1997
	Garifuna	4.9	1.4	12.3	10.2	7.1	73.3	0.0	7.1	58	4.8	217
Ethnicity of household head	Maya	3.3	1.7	41.0	39.5	3.5	79.8	0.4	3.5	142	18.5	537
	Other	7.9	2.6	16.6	21.0	3.8	70.0	6.0	9.8	122	10.5	364
Ethnicity of household head	Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	8	(14.6)	44
	Total	6.1	1.7	21.1	21.8	3.5	76.6	1.5	4.8	1185	10.0	4072

[1] MICS indicator 8.2

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

Table CP3 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

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 CP3: 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 of children involved in child labour	Percentage of children attending school	Number of children age 5-14 years	Percentage of child labourers who are attending school [1]	Number of children age 5-14 years involved in child labour	Percentage of children attending school who are involved in child labour [2]	Number of children age 5-14 years attending 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 Belize City South Side)	4.9	97.3	570	88.8	28	4.4	555
	Belize City South 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
	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 education	None	20.5	77.5	342	72.9	70	19.2	265
	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 index quintiles	Poorest	20.0	85.9	983	86.3	196	20.1	845
	Second	11.1	92.8	882	90.8	97	10.8	818
	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 household head	Creole	4.5	97.9	913	97.9	41	4.5	894
	Mestizo	10.6	94.6	1997	94.8	212	10.7	1889
	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

( ) 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 CP4: Child discipline  
Percentage of children age 2-14 years according to method of disciplining the child, Belize, 2011

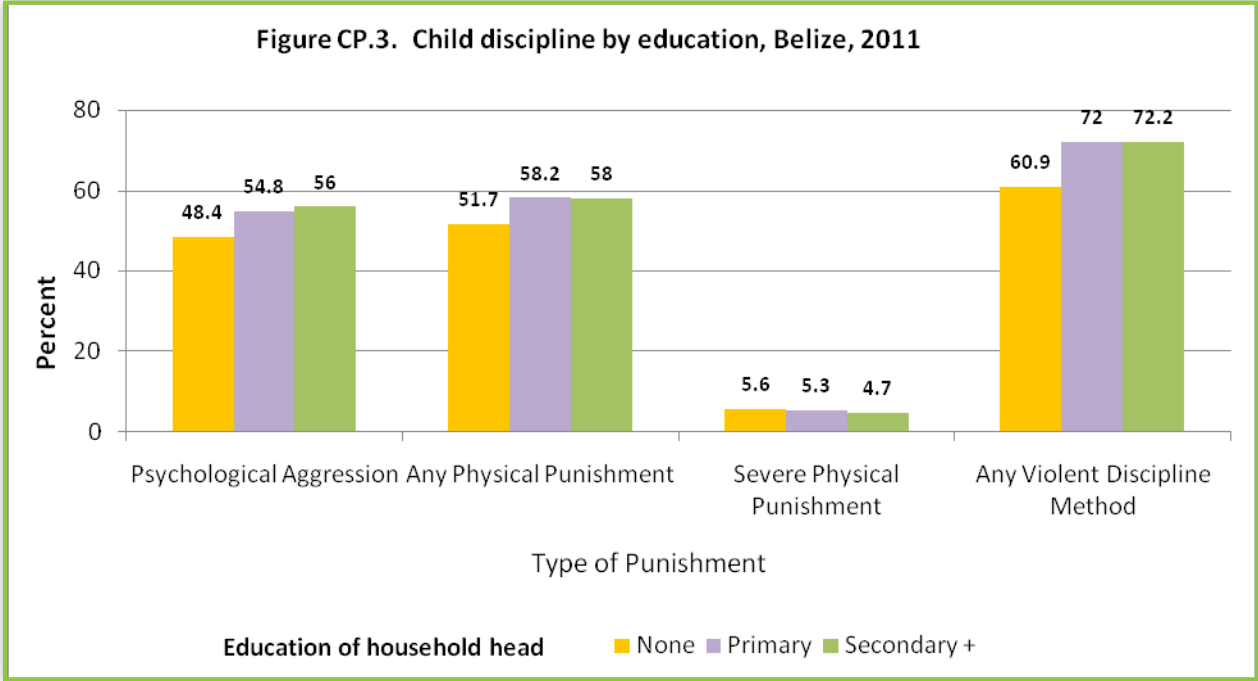
		Percentage of children age 2-14 years who experienced:					Number of children age 2-14 years	Respondent believes that the child needs to be physically punished	Respondents to the child discipline
		Only non-violent discipline	Psychological aggression	Physical punishment		Any violent discipline method [1]			
				Any	Severe				
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 Belize City South Side)	19.8	66.6	53.8	4.4	75.7	723	39.0	377
	Belize City South Side	17.7	62.8	65.4	3.9	76.0	646	24.3	332
	Belize District	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 household head	None	27.5	48.4	51.7	5.6	60.9	415	na	na
	Primary	22.4	54.8	58.2	5.3	72.0	2692	na	na
	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 education	None	na	na	na	na	na	na	24.2	511
	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 quintiles	Poorest	21.1	55.9	63.4	5.7	74.3	1275	28.7	436
	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
Ethnicity of household head	Creole	16.2	67.4	64.7	5.2	80.0	1161	27.8	577
	Mestizo	28.2	47.3	52.2	4.0	64.7	2537	24.6	1216
	Garifuna	19.5	58.4	65.4	13.6	77.8	275	24.1	130
	Maya	15.4	61.5	66.3	8.8	78.5	715	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		23.5	53.9	56.9	5.2	70.5	5231	26.2	2436

[1] MICS indicator 8.5

( ) 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 CP5: 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 married before age 15 [1]	Number of women age 15-49 years	Percentage married before age 15	Percentage married before age 18 [2]	Number of women age 20-49 years	Percentage of women 15-19 years currently married/in union [3]	Number of women age 15-19 years	Percentage of women age 15-49 years in polygynous marriage/union [4]	Number of women age 15-49 years currently married/in 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 Belize City South Side)	5.1	687	6.2	26.5	548	11.7	139	2.0	369
	Belize City South 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 index quintiles	Poorest	8.9	644	11.0	44.8	485	21.9	160	2.4	409
	Second	7.5	815	8.5	39.8	648	28.5	167	4.0	498
	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 household head	Creole	2.6	985	3.0	23.4	794	8.2	190	3.4	493
	Mestizo	6.0	2046	7.0	33.6	1615	19.4	431	3.1	1262
	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

[1] MICS indicator 8.6

[2] MICS indicator 8.7

[3] MICS indicator 8.8

[4] MICS indicator 8.9

( ) 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).

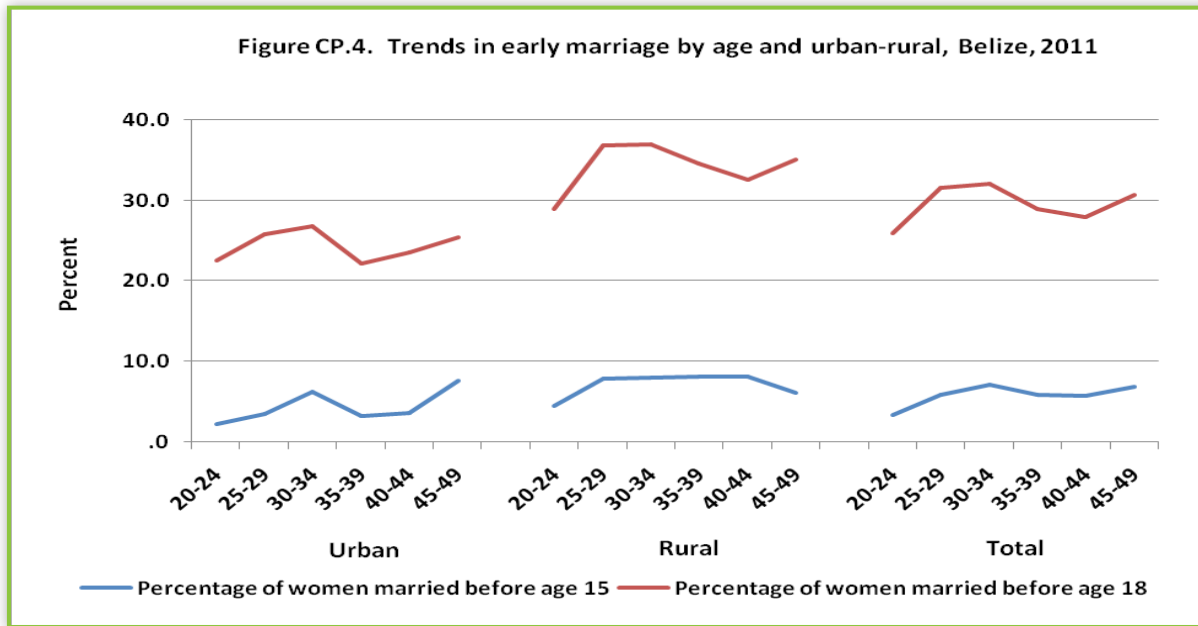


Table CP.6: Trends in early marriage  
Percentage of women who were first married or entered into a marital union before age 15 and 18, by area and age groups, Belize, 2011

Age	Urban				Rural				All			
	Percentage of women married before age 15	Number of women age 15-49	Percentage of women married before age 18	Number of women age 20-49	Percentage of women married before age 15	Number of women age 15-49	Percentage of women married before age 18	Number of women age 20-49	Percentage of women married before age 15	Number of women age 15-49	Percentage of women married before age 18	Number of women age 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 of currently married/in union women age 15-19 years whose husband or partner is:						Number of women age 15-19 years currently married/in union
		Younger	0-4 years older	5-9 years older	10+ years older [1]	Husband/partner's age unknown	Total	
Region	Corozal	(*)	(*)	(*)	(*)	(*)	100.0	18
	Orange Walk	(*)	(*)	(*)	(*)	(*)	100.0	23
	Belize (Excluding Belize City South Side)	(*)	(*)	(*)	(*)	(*)	100.0	16
	Belize City South 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 index quintiles	Poorest	(7.3)	(44.4)	(32.1)	(10.1)	(6.1)	100.0	35
	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 household head	Creole	(*)	(*)	(*)	(*)	(*)	100.0	16
	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

[1] MICS indicator 8.10a

( ) 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

		Percentage of currently married/in union women age 20-24 years whose husband or partner is:						Number of women age 20-24 years currently married/in union
		Younger	0-4 years older	5-9 years older	10+ years older [2]	Husband/partner's age unknown	Total	
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 Belize City South Side)	(14.9)	(42.9)	(32.8)	(9.3)	(0.0)	100.0	50
	Belize City South 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 quintiles	Poorest	12.7	55.5	17.8	12.3	1.7	100.0	72
	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 household head	Creole	14.9	46.9	16.1	22.1	0.0	100.0	72
	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

( ) 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).

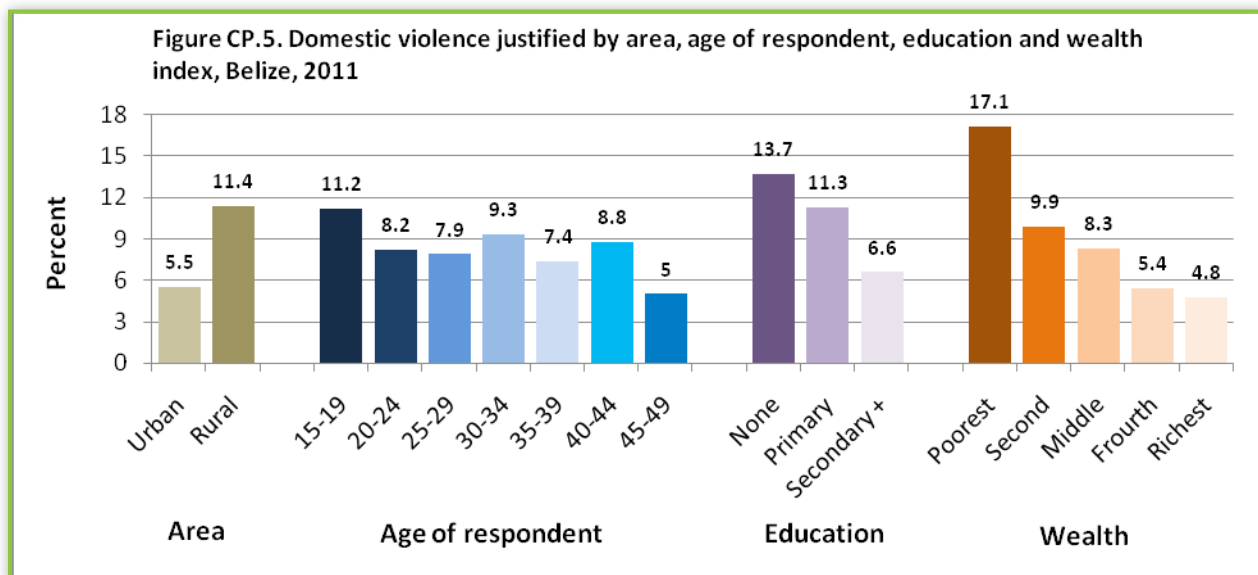


Table CP8: Attitudes toward domestic violence  
Percentage of women age 15-49 years who believe a husband is justified in beating his wife/partner in various circumstances, Belize, 2011

		Percentage of women age 15-49 years who believe a husband is justified in beating his wife/partner:								Number of women age 15-49 years
		If goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	If she has sex with another man	If she wastes the money	For any of these reasons [1]	
Region	Corozal	2.1	7.9	2.8	0.5	1.5	18.3	3.1	10.0	534
	Orange Walk	0.7	4.4	1.5	0.7	0.5	10.1	2.3	5.8	618
	Belize (Excluding 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
	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
	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	0.8	4.0	2.4	0.7	0.5	12.0	2.9	5.0	359
Marital/Union status	Currently married/in union	1.7	6.3	1.9	1.2	1.1	15.3	3.6	8.3	2386
	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 + CET/ITVET/VOTEC	0.8	5.7	1.0	0.5	0.6	10.3	2.3	6.6	2259
	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	26
	Other	(0.0)	(3.2)	(0.0)	(0.0)	(0.0)	(4.3)	(4.4)	(3.2)	55
Wealth index quintiles	Poorest	4.1	11.7	6.2	4.6	4.0	26.3	7.7	17.1	644
	Second	2.0	7.9	2.3	0.8	1.1	16.9	4.6	9.9	815
	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	1.8	5.4	862
	Richest	0.6	3.8	0.3	0.4	0.3	7.1	1.8	4.8	898
Ethnicity of household head	Creole	0.4	6.8	0.4	0.6	0.7	10.4	3.0	7.5	985
	Mestizo	1.5	6.0	1.9	0.5	0.9	14.7	2.6	7.6	2046
	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

[1] MICS indicator 8.14

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

( ) 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

## XII. HIV/AIDS, SEXUAL BEHAVIOUR, AND ORPHANHOOD

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

One 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. 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

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).

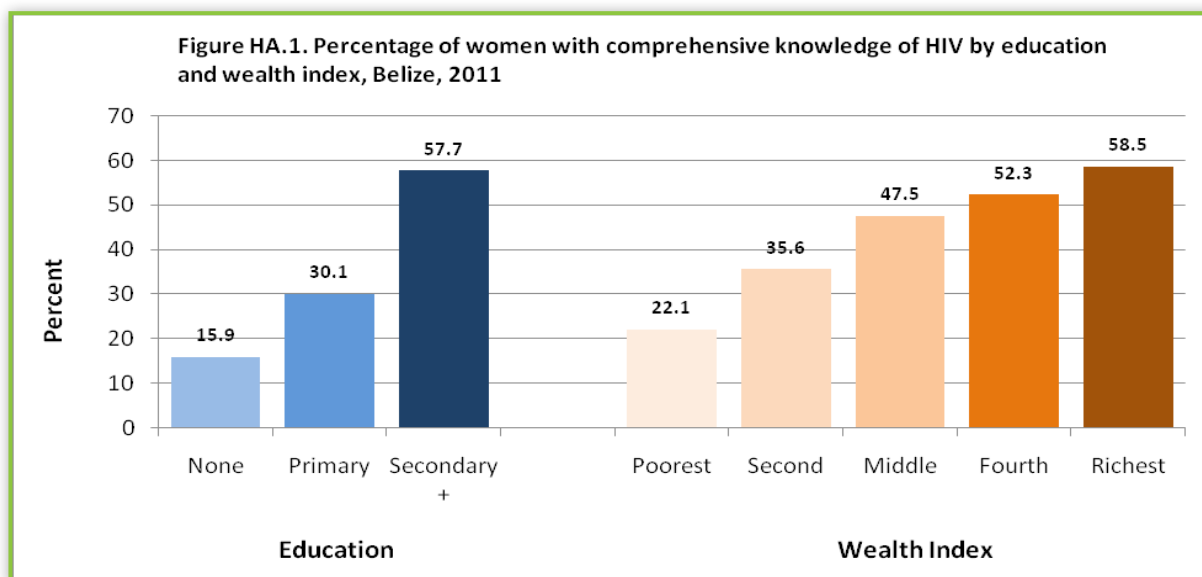


Table HA.1: Knowledge about HIV transmission, misconceptions about HIV/AIDS, and comprehensive knowledge about HIV transmission. Percentage of women age 15-49 years who know the main ways of preventing HIV transmission and percentage who know that a healthy looking person can have the AIDS virus, Belize,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

		Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:		Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Number of women
			Having only one faithful uninfected sex partner	Using a condom every time			
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 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 status	Ever married/in union	94.5	77.5	73.2	64.5	84.5	2875
	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 index quintiles	Poorest	78.2	54.8	49.3	39.3	60.0	644
	Second	95.4	75.6	70.8	60.9	84.4	815
	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 household head	Creole	99.0	85.9	85.9	77.2	95.9	985
	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

( ) 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 Marital 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 HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge [1]	Number of women
		Mosquito bites	Supernatural means	Sharing food with someone with AIDS			
Region	Corozal	60.5	81.2	75.4	48.3	31.5	534
	Orange Walk	65.2	85.9	71.1	51.8	32.5	618
	Belize (Excluding Belize City South Side)	83.4	93.9	90.7	77.8	69.6	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
	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 status	Ever married/in union	68.6	85.5	79.5	58.5	44.4	2875
	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 + CET/ITVET/VOTEC	80.7	94.1	90.2	72.9	57.7	2259
	(*)	(*)	(*)	(*)	(*)	(*)	26
	Other	(7.1)	(7.4)	(8.9)	(4.2)	(1.5)	55
Wealth index quintiles	Poorest	47.8	62.8	57.9	34.2	22.1	644
	Second	61.1	84.3	77.6	50.3	35.6	815
	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 household head	Creole	81.9	93.5	90.0	74.5	61.2	985
	Mestizo	67.3	89.2	81.0	56.3	39.1	2046
	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

[1] MICS indicator 9.1

( ) 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 Marital Status is excluded from the table

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.



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

		Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:		Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Number of women age 15-24
			Having only one faithful uninfected sex partner	Using a condom every time			
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 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 status	Ever married/in union	92.4	74.6	70.3	60.3	82.4	583
	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 index quintiles	Poorest	76.1	51.3	46.7	34.8	60.1	271
	Second	94.4	75.3	70.0	59.9	87.0	330
	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 household head	Creole	99.8	85.5	85.0	76.1	96.7	376
	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

( ) 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 HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can have the AIDS virus	Percentage with comprehensive knowledge [1]	Number of women age 15-24
		Mosquito bites	Supernatural means	Sharing food with someone with AIDS			
Region	Corozal	54.8	77.6	73.4	45.8	26.6	194
	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 status	Ever married/in union	64.7	83.7	75.2	53.0	41.6	583
	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 + CET/ITVET/VOTEC	78.5	94.0	89.4	69.9	53.3	1064
	Other	(*)	(*)	(*)	(*)	(*)	10
	Other	(3.4)	(7.5)	(7.5)	(0.0)	(0.0)	25
Wealth index quintiles	Poorest	47.1	61.4	53.7	33.5	19.7	271
	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 household head	Creole	84.2	92.4	91.3	76.3	61.5	376
	Mestizo	65.7	89.2	79.9	54.3	36.8	784
	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

[1] MICS indicator 9.2; MDG indicator 6.3

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

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.

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

		Percentage who know HIV can be transmitted from mother to child	Percent who know HIV can be transmitted:				Does not know any of the specific means	Number of women
			During pregnancy	During delivery	By breastfeeding	All three means [1]		
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 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 + CET/ITVET/VOTEC	96.9	88.0	70.9	83.0	58.2	2.2	2259
	(*)	(*)	(*)	(*)	(*)	(*)	(*)	26
	Other	7.4	7.4	7.4	7.4	7.4	33.4	55
Wealth index quintiles	Poorest	70.6	65.5	50.8	62.2	45.0	7.6	644
	Second	89.9	83.1	65.8	80.0	58.8	5.5	815
	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 household head	Creole	97.1	88.2	70.5	84.6	59.2	1.9	985
	Mestizo	92.6	85.1	68.1	78.3	57.1	5.1	2046
	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

( ) 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).

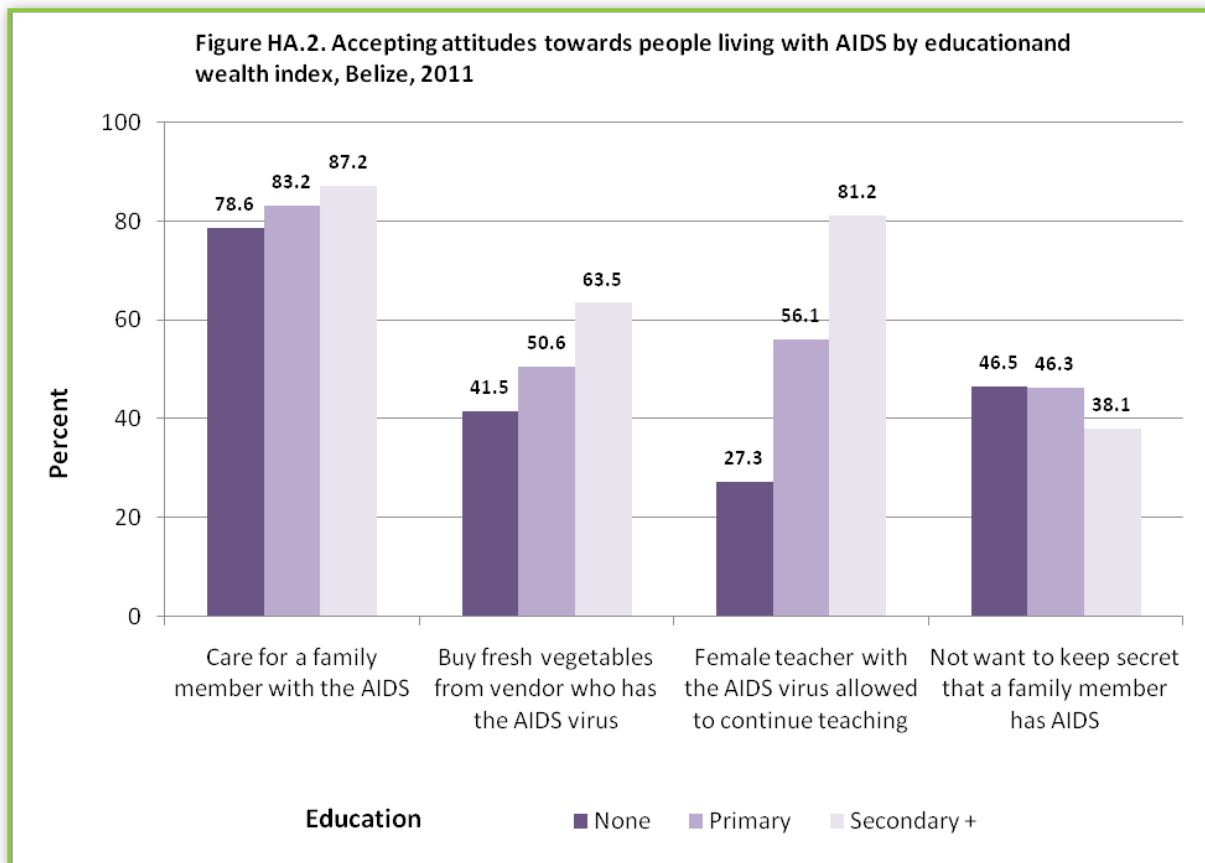


Table HA.4: Accepting attitudes toward people living with HIV/AIDS  
Percentage of women age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV/AIDS, Belize, 2011

		Percent of women who:						Number of women who have heard of AIDS
		Are willing to care for a family member with the AIDS virus in own home	Would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus	Believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators [1]	
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 Belize City South Side)	89.5	65.4	86.5	35.1	98.5	21.8	676
	Belize City South 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 + CET/ITVET/VOTEC	87.2	63.5	81.2	38.1	97.9	21.2	2238
	(*)	(*)	(*)	(*)	(*)	(*)	(*)	26
	Other	(*)	(*)	(*)	(*)	(*)	(*)	22
Wealth index quintiles	Poorest	71.7	39.9	42.5	46.2	90.2	11.5	504
	Second	85.4	54.8	63.7	40.6	96.4	16.8	778
	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 household head	Creole	86.8	65.2	81.8	40.1	99.0	22.2	975
	Mestizo	86.3	55.2	66.8	40.4	97.0	17.4	1999
	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
	Missing/DK	85.0	52.3	69.3	38.3	97.6	16.4	69
Total		85.0	57.6	69.7	41.4	96.5	19.3	3879

[1] MICS indicator 9.4

( ) 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

## 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.

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

		Percentage of women who:				Number of women
		Know a place to get tested [1]	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result [2]	
Region	Corozal	81.7	59.7	21.3	19.6	534
	Orange Walk	86.5	60.8	27.3	26.0	618
	Belize (Excluding Belize City South 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
	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 + CET/ITVET/VOTEC	92.3	63.9	32.2	31.3	2259
	Other	(*)	(*)	(*)	(*)	26
		30.0	23.2	12.3	12.3	55
Wealth index quintiles	Poorest	63.6	45.7	19.9	17.2	644
	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 household head	Creole	95.8	72.8	39.5	38.5	985
	Mestizo	88.0	63.5	26.9	25.1	2046
	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

[1] MICS indicator 9.5 [2] MICS indicator 9.6

( ) 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.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

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 seem 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

		Percentage who have had sex in the last 12 months	Number of women age 15-24 years	Percentage of women who:				Number of women age 15-24 years who have had sex in the last 12 months
				Know a place to get tested	Have ever been tested	Have been tested in the last 12 months	Have been tested in the last 12 months and have been told result [1]	
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 Belize City South Side)	57.3	255	98.0	62.9	38.2	38.2	146
	Belize City South 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
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 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 + CET/ITVET/VOTEC	48.5	1064	94.0	69.2	42.5	41.2	516
	Other	(*)	10	(*)	(*)	(*)	(*)	7
	Other	(*)	25	(*)	(*)	(*)	(*)	8
Wealth index quintiles	Poorest	49.0	271	69.3	56.2	33.0	28.3	133
	Second	59.5	330	90.1	80.8	45.9	43.3	196
	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 household head	Creole	60.4	376	97.2	75.7	50.5	49.7	227
	Mestizo	50.0	784	89.1	69.5	42.0	39.0	392
	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		52.4	1564	89.3	69.6	43.3	40.8	820

[1] MICS indicator 9.7

( ) Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases  
9 un-weighted cases in "Missing" on the Ethnicity of the Head of Household variable are excluded from the table

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

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

		Percent of women who:					Number of women who gave birth in the 2 years preceding the survey
		Received antenatal care from a health care professional for last pregnancy	Received HIV counselling during antenatal care [1]	Were offered an HIV test and were tested for HIV during antenatal care	Were offered an HIV test and were tested for HIV during antenatal care, and received the results [2]	Received HIV counselling, were offered an HIV test, accepted and received the results	
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 Belize City South Side)	(86.9)	(59.8)	(81.8)	(81.8)	(55.9)	74
	Belize City South Side	96.4	58.7	88.1	85.8	56.4	77
	Belize District	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
	Rural	95.5	54.9	69.1	62.9	45.4	424
Young 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
	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 index quintiles	Poorest	94.1	40.0	48.9	43.5	32.1	173
	Second	99.4	68.2	82.2	77.6	61.3	156
	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 household head	Creole	93.2	67.7	88.4	84.7	63.9	113
	Mestizo	98.7	65.1	81.3	76.2	56.2	355
	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

[1] MICS indicator 9.8 [2] MICS indicator 9.9

( ) Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases  
3 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

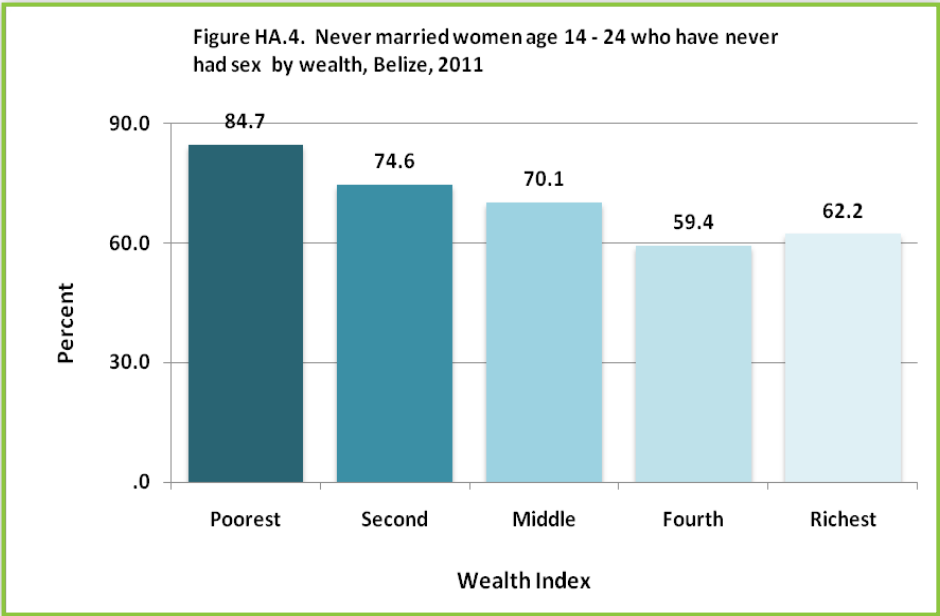
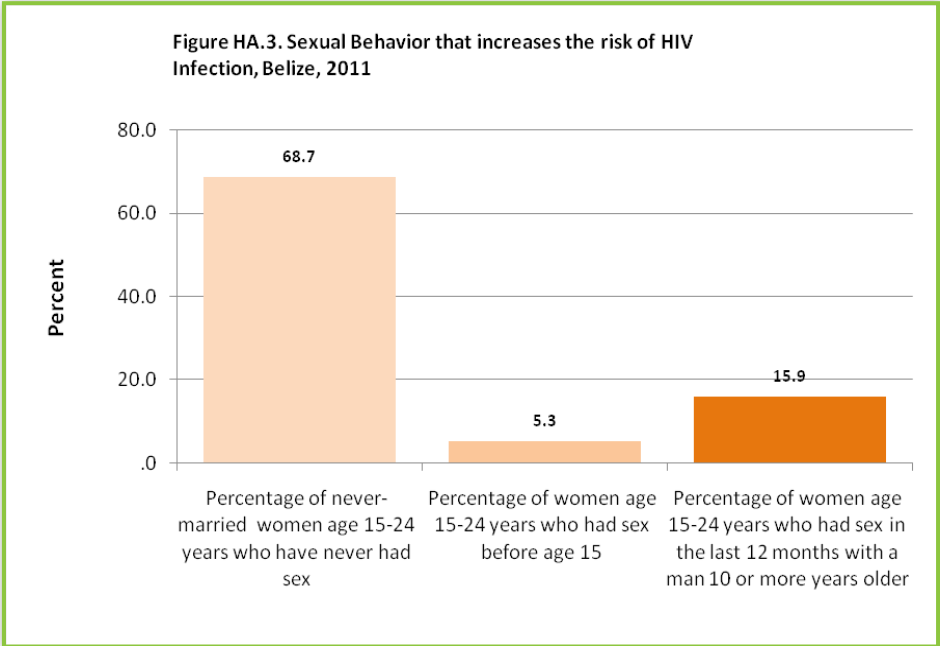
		Percentage of never-married women age 15-24 years who have never had sex [1]	Number of never-married women age 15-24 years	Percentage of women age 15-24 years who had sex before age 15 [2]	Number of women age 15-24 years	Percentage of women age 15-24 years who had sex in the last 12 months with a man 10 or more years older [3]	Number of women age 15-24 years who had sex in the 12 months preceding the survey
Region	Corozal	78.7	116	4.7	194	14.0	89
	Orange Walk	77.8	152	5.1	258	12.1	134
	Belize (Excluding Belize City South Side)	58.2	174	6.0	255	13.6	146
	Belize City South Side	47.6	149	6.0	216	19.6	131
	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
Age	15-19	80.3	696	4.1	844	13.4	260
	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 + CET/ITVET/VOTEC	66.6	760	3.0	1064	12.8	516
	Other	(*)	5	(*)	10	(*)	7
	Other	(*)	18	(*)	25	(*)	8
Wealth index quintiles	Poorest	84.7	146	6.5	271	15.3	133
	Second	74.6	158	9.1	330	20.6	196
	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 household head	Creole	50.4	257	5.2	376	19.2	227
	Mestizo	75.9	475	5.0	784	15.6	392
	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

( ) Figures that are based on 25-49 un-weighted cases; (\*) Figures that are based on less than 25 un-weighted cases  
na = not applicable

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

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

		Percentage of women who:			Number of women age 15-49 years	Percent of women age 15-49 years who had more than one sexual partner in the last 12 months, who also reported that a condom was used the last time they had sex [2]	Number of women age 15-49 years who had more than one sexual partner in the last 12 months
		Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months [1]			
Region	Corozal	80.9	70.1	1.6	534	(*)	8
	Orange Walk	77.1	69.0	1.2	618	(*)	7
	Belize (Excluding Belize City South Side)	84.6	75.2	3.4	687	(*)	23
	Belize City South 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 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 + CET/ITVET/VOTEC	76.2	67.5	2.7	2259	28.8	62
	Other	(*)	(*)	(*)	26	(*)	0
	Other	67.7	66.2	1.9	55	(*)	1
Wealth index quintiles	Poorest	78.5	70.0	1.3	644	(*)	8
	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 household head	Creole	86.3	76.3	3.7	985	(28.4)	37
	Mestizo	80.1	70.9	1.4	2046	(22.9)	28
	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

[1] 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

		Percentage of women who:			Number of women age 15-24 years	Percent of women age 15-24 years who had 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 age 15-24 years who had more than one sexual partner in the last 12 months
		Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months			
Region	Corozal	53.0	46.2	2.2	194	(*)	4
	Orange Walk	54.3	51.8	1.5	258	(*)	4
	Belize (Excluding Belize City South Side)	60.3	57.3	5.4	255	(*)	14
	Belize City South 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 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 quintiles	Poorest	54.1	49.0	1.7	271	(*)	5
	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 household head	Creole	65.5	60.4	4.8	376	(*)	18
	Mestizo	54.0	50.0	2.8	784	(*)	22
	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

( ) 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 non-cohabiting partners at a rate of 68.3 percent: this compares to the rate for Maya households of 14.2 percent.

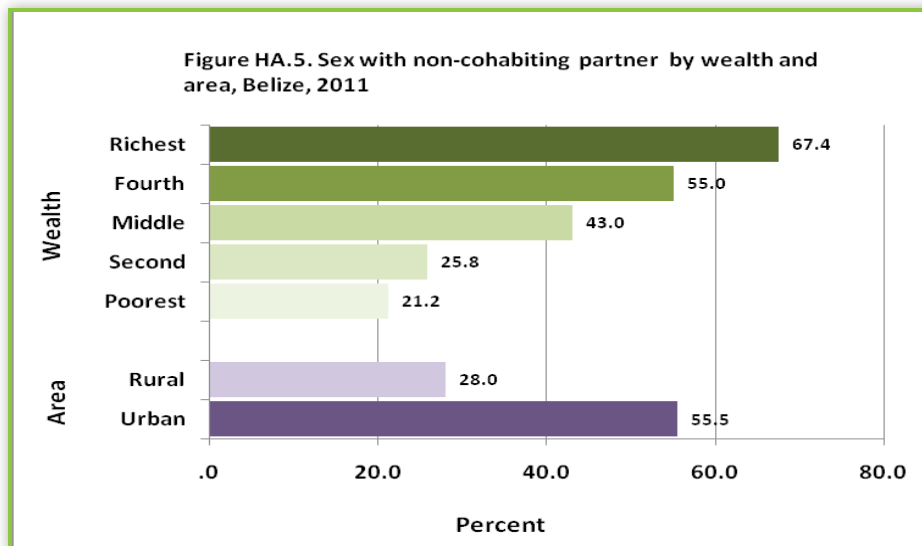
Table HA.11: Sex with non-regular partners

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

		Percentage of women 15-24 who:		Number of women age 15-24 years	Percentage who had sex with a non-marital, non-cohabiting partner in the last 12 months [1]	Number of women age 15-24 years who had sex in the last 12 months	Percentage of women age 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 age 15-49 years who had more than one sexual partner in the last 12 months
		Ever had sex	Had sex in the last 12 months					
Region	Corozal	53.0	46.2	194	26.8	89	(61.8)	24
	Orange Walk	54.3	51.8	258	26.5	134	(55.3)	35
	Belize (Excluding Belize City South Side)	60.3	57.3	255	56.4	146	72.0	82
	Belize City South 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 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 + CET/ITVET/VOTEC	52.5	48.5	1064	54.5	516	68.2	281
	Other	(*)	(*)	10	(*)	7	(*)	3
	Other	(33.0)	(33.0)	25	(*)	8	(*)	1
Wealth index quintiles	Poorest	54.1	49.0	271	21.2	133	(55.3)	28
	Second	64.2	59.5	330	25.8	196	56.1	51
	Middle	56.2	55.0	356	43.0	196	62.8	84
	Fourth	59.7	55.2	308	55.0	170	71.3	93
	Richest	48.9	41.8	299	67.4	125	67.3	84
Ethnicity of household head	Creole	65.5	60.4	376	62.8	227	71.9	143
	Mestizo	54.0	50.0	784	32.4	392	61.7	127
	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

[1] 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).

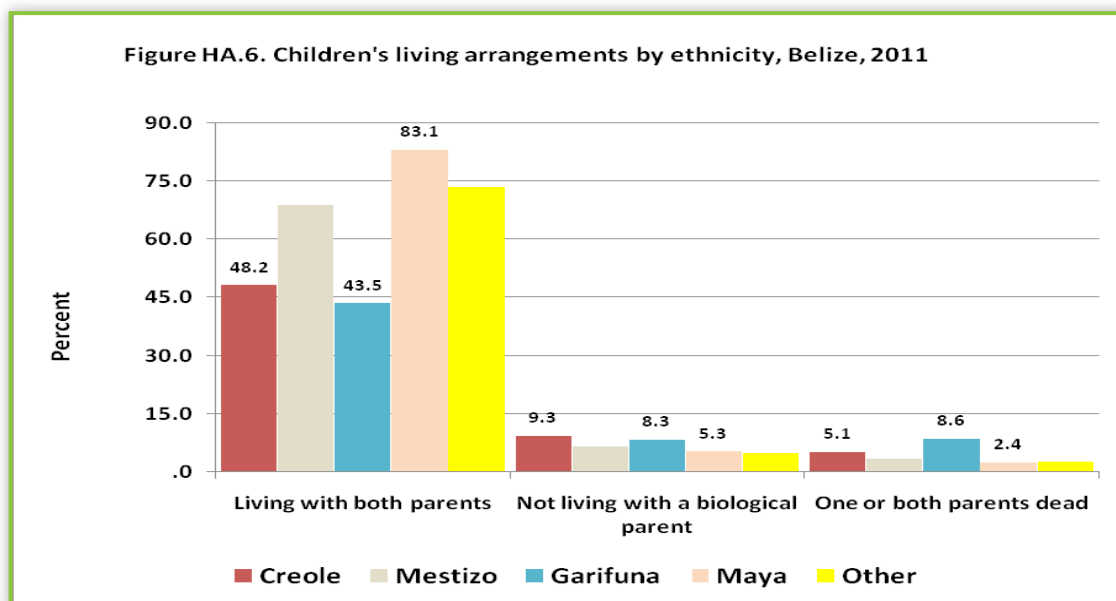


Table HA.12: Children's living arrangements and orphanhood  
Percent distribution of children age 0-17 years according to living arrangements, percentage of children age 0-17 years in households not living with a biological parent and percentage of children who have one or both parents dead, Belize, 2011

	Living with both parents	Living with neither parent				Living with mother only		Living with father only		Total	Not living with a biological parent [1]	One or both parents dead [2]	Num-ber of children age 0-17 years
		Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead				
Sex													
	66.0	0.5	0.2	5.6	0.5	21.5	1.7	2.5	0.3	100.0	6.8	3532	
Female	64.7	0.7	0.2	5.6	0.5	22.1	2.7	1.9	0.3	100.0	7.0	3561	
Region													
Corozal	75.8	0.8	0.3	5.3	0.4	13.2	1.7	1.5	0.3	100.0	6.9	928	
Orange Walk	72.3	0.2	0.2	4.8	0.7	17.7	1.4	1.3	0.5	100.0	5.8	1039	
Belize (Excluding Belize City South Side)	59.0	1.3	0.2	4.4	0.1	28.5	2.0	3.4	0.4	100.0	6.0	956	
Belize City South Side	41.8	0.8	0.3	7.9	0.6	42.2	2.6	2.3	0.3	100.0	9.6	866	
Belize District	50.9	1.1	0.2	6.0	0.3	35.0	2.3	2.9	0.4	100.0	7.7	1822	
Cayo	69.3	0.1	0.2	6.0	0.0	17.4	2.5	2.6	0.2	100.0	6.5	1676	
Stann Creek	54.9	0.8	0.4	5.9	1.2	28.1	3.7	2.6	0.4	100.0	8.2	804	
Toledo	79.3	0.7	0.1	5.0	0.8	10.4	1.5	1.5	0.4	100.0	5.9		
Area													
Urban	51.4	0.5	0.1	6.3	0.5	33.3	3.0	2.8	0.1	100.0	7.7	2780	
Rural	74.4	0.8	0.3	5.1	0.5	14.4	1.7	1.8	0.5	100.0	6.3	4314	
Age													
0-4 years	74.6	0.7	0.0	3.2	0.2	19.4	1.3	0.9	0.0	100.0	3.4	1902	
5-9 years	67.5	1.0	0.2	4.6	0.1	21.1	1.9	2.4	0.2	100.0	5.8	2004	
10-14 years	61.8	0.1	0.4	6.5	0.4	23.2	3.0	2.6	0.7	100.0	7.9	2068	
15-17 years	52.4	1.2	0.4	9.9	1.8	24.7	2.7	3.4	0.5	100.0	13.0	1120	
Wealth index quintiles													
Poorest	77.4	0.7	0.3	4.4	0.9	11.7	2.5	1.1	0.6	100.0	5.8	1685	
Second	60.0	0.3	0.3	6.0	0.3	26.1	1.7	2.8	0.1	100.0	7.1	1537	
Middle	62.2	1.4	0.2	5.4	0.4	26.2	1.9	1.9	0.3	100.0	7.1	1406	
Fourth	60.1	1.6	0.3	6.7	0.2	25.0	2.1	2.9	0.5	100.0	8.0	1317	
Richest	64.7	0.2	0.1	5.8	0.6	21.9	2.9	2.6	0.2	100.0	6.7	1148	
Ethnicity of household head													
Creole	48.2	0.0	0.2	7.5	0.2	35.2	2.6	3.1	0.8	100.0	9.3	1527	
Mestizo	68.8	0.9	0.3	5.4	0.4	19.3	2.0	1.9	0.3	100.0	6.5	3486	
Garifuna	43.5	0.6	0.0	4.8	1.9	36.0	4.9	4.6	0.2	100.0	8.3	380	
Maya	83.1		0.1	4.4	0.6	7.1	1.4	1.6	0.1	100.0	5.3	953	
Other	73.6		0.2	4.5	0.1	17.3	2.1	1.3	0.3	100.0	4.8	653	
Missing/DK	69.4		0.0	6.0	0.9	20.3	0.0	2.6	0.0	100.0	7.8	93	
Total	65.4		0.2	5.6	0.5	21.8	2.2	2.2	0.3	100.0	6.9	7094	

[1] MICS indicator 9.17

[2] MICS indicator 9.18

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 of children whose mother and father have died (orphans)	Percentage of children of whom both parents are alive and child is living with at least one parent (non-orphans)	Number of children age 10-14 years	Percentage of children who are orphans and are attending school	Total number of orphan children age 10-14 years	Percentage of children who are non-orphans and are attending school [1]	Total number of non-orphan children age 10-14 years	Orphans to non-orphans school attendance 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

[1] MICS indicator 9.20; MDG indicator 6.4

( ) 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

It 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
- 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:									Number of women age 15-24 years
		Family life	Friendships	School	Current job	Health	Living environment	Treatment by others	The way they look	Current income	
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 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 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 + CET/ITVET/VOTEC	94.9	90.9	93.7	85.6	93.7	89.8	90.2	96.5	81.5	1064
		(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	10
	Other	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	25
Wealth index 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 household 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
<b>Total</b>		<b>95.0</b>	<b>91.3</b>	<b>94.0</b>	<b>86.8</b>	<b>93.8</b>	<b>90.7</b>	<b>90.6</b>	<b>96.4</b>	<b>82.6</b>	<b>1564</b>

(\*) 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.

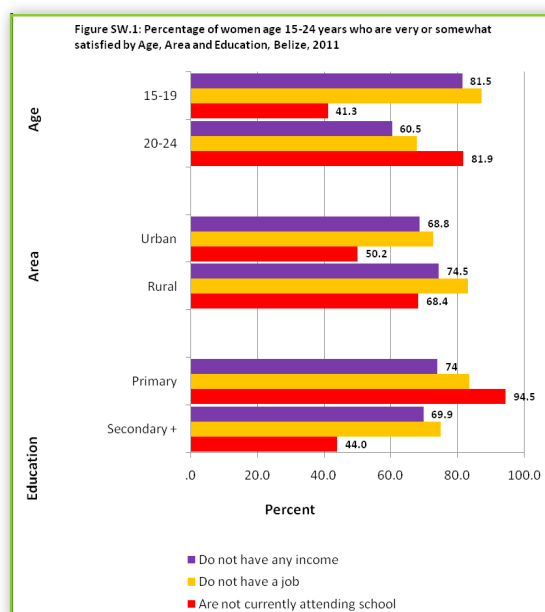


Table SW.1: Domains of life satisfaction [continued]  
Percentage of women age 15-24 years who are very or somewhat satisfied in selected domains, Belize, 2011

		Percentage of women age 15-24 who:			Number of women age 15-24 years
		Are not currently attending school	Do not have a job	Do not have any income	
Age	15-19	41.3	87.3	81.5	844
	20-24	81.9	67.8	60.5	720
Region	Corozal	72.1	81.6	77.4	194
	Orange Walk	71.4	84.3	82.8	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 Toledo	58.6 63.2	76.3 80.3	75.2 55.1	147 147
Area	Urban	50.2	72.7	68.8	726
	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 head	Creole	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
Total	Missing/DK	(*)	(*)	(*)	19
		59.9	78.3	71.9	1564

(\*) 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 women with life satisfaction [1]	Average life satisfaction score	Missing / Cannot be calculated	Women with life satisfaction who are very or somewhat satisfied with their income	No income / Cannot be calculated	Percentage who are very or somewhat happy [2]	Number of women age 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
Rural		76.7	1.3	0.6	64.9	75.1	92.4	838
Marital/Union 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 quintiles	Poorest	72.6	1.4	0.4	60.7	71.5	91.6	271
	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 household 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

[1] MICS Indicator SW.1; [2] MICS indicator SW.2  
 (\*) 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 and 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).

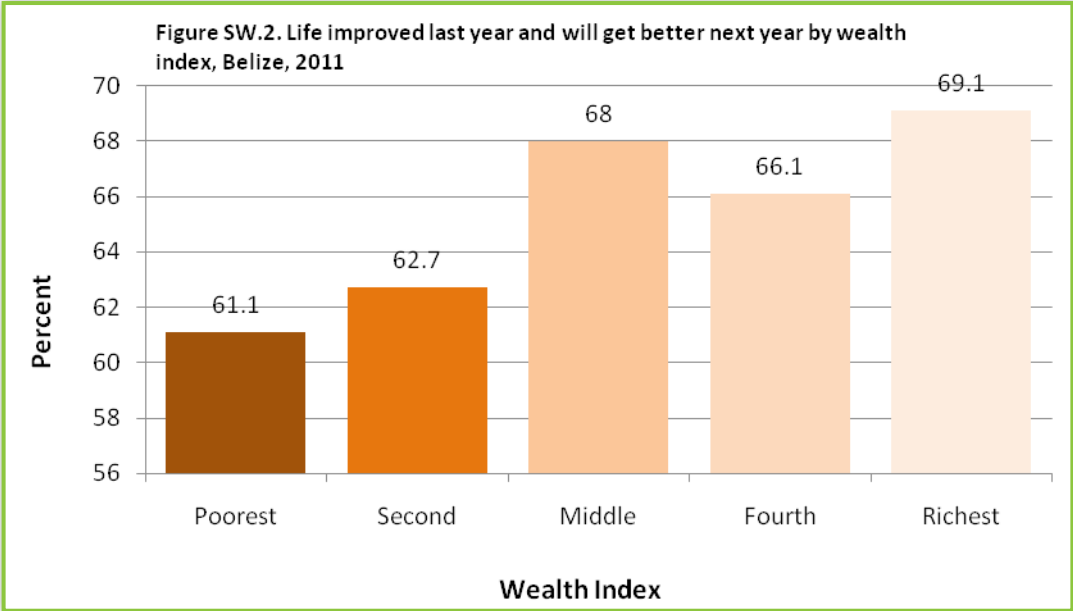


Table SW.3: Perception of a better life  
 Percentage of women age 15-24 years who think that their lives improved during the last one year and those who expect that their lives will get better after one year, Belize, 2011

		Percentage of women who think that their life			Number of women age 15-24 years
		Improved during the last one year	Will get better after one year	Both [1]	
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
	Belize District	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 status	Currently married/in union	73.4	87.7	68.7	497
	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 quintiles	Poorest	66.8	80.1	61.1	271
	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 household head	Creole	68.7	90.6	64.8	376
	Mestizo	68.4	86.3	63.7	784
	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

[1] MICS indicator SW.3

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

- $n$  is the required sample size, expressed as number of households
- 4 is a factor to achieve the 95 percent level of confidence
- $r$  is the predicted or anticipated value of the indicator, expressed in the form of a proportion
- 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]
- $f$  is the shortened symbol for *deff* (design effect)
- $0.12r$  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  $r$ )
- $p$  is the proportion of the total population upon which the indicator,  $r$ , is based
- $\bar{n}$  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  $\bar{n}$  (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 r	Design effect deff	Relevant group as % of total population p	Average household size, $n_h$	Relative margin of error	Required sample size 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 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	Households (2010 Estimates)			Number of Clusters (Enumeration 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 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: 5<sup>th</sup> to 20<sup>th</sup> 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,	Orange Walk urban, Orange Walk rural,
Belize other urban,	Belize Other rural, Belize City South Side,
Cayo urban, Cayo rural,	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  $f_{hi}$ , 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:

$$f_h = p_{1h} \times p_{2h} \times p_{3h}$$

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:

$$RR_h = \text{Number of interviewed households in stratum } h / \text{Number of occupied households listed in stratum } h$$

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:

$$RR_h = \text{Completed women's (or under-5's) questionnaires in stratum } h / \text{Eligible women (or under-5s) in stratum } h$$

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**  
**24 FEB, 2011**  
**DETAILED BUDGET and FINANCING REQUIREMENTS**  
**CURRENCY: US Dollars**

**Sample size: 4,900 Households**

Activity	Detailed Cost Item	units	days/ weeks	Unit Cost	Tot Cost	Time-bound Expenditure Forecast			
						Jan - Mar Qrt 1	Apr - Jun Qrt 2	Jul - Sept Qrt 3	Oct - Dec Qrt 4
<b>Pre-testing</b>									
	Personnel: interviewers	4	2 days	15	120				
	Personnel: driver(s)	1	2 days	15	30				
	Personnel: monitoring staff	2	2 days	15	60				
	Per diems: interviewer/monitoring staff/driver	8	2 days	22.5	360				
	Transportation:	2	2 days	3	12				
	Accommodation:	8	1 nights	41.5	332				
	Fuel:	1	2 days	60	120				
	Supplies	1	1	375	375				
	Communications	1	1	250	250				
					<b>1,659</b>				
<b>Listing</b>									
	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	17.5	700				
	Per diems: monitoring staff HQ	4	10 days	75	3,000				
	Per diems: monitoring staff other	21	10 days	17.5	3,675				
	Per diems: drivers	3	10 days	75	2,250				
	Car Rental	7	10 days	75	5,250				
	Fuel	7	10 days	75	5,250				
	Supplies	7	1 days	75	525				

	196	1 map	5	980	980
<b>Training of trainers</b>				<b>50,330</b>	
Copies of maps					
Per diems: trainers	7	10 days	22.5	1,575	1,575
Accommodation:	7	9 nights	45	2,835	2,835
Transportation:	7	4 days	12	336	336
Catering	17	10 days	7.5	1,275	1,275
Supplies	1	1	50	50	50
				<b>6,071</b>	
<b>Field Training</b>					
Per diems: trainers (for field training)	7	11 days	22.5	1,733	1,733
Per diems: trainees	56	11 days	17.5	10,780	10,780
Accommodation:	46	10 nights	50	23,000	23,000
Printing questionnaires	100	1	2.5	250	250
Printing of manuals	60	1	4	240	240
Per diems: SIB drivers	2	6 days	22.5	270	270
Fuel	2	6 days	60	720	720
Rental venue	1	11 days	300	3,300	3,300
Supplies	1	11 days	50	550	550
				<b>40,843</b>	
<b>Fieldwork Data Collection</b>					
Personnel: Field Supervisor/Driver	7	8 wks	155	8,680	8,680
Personnel: Editors	7	8 wks	128.5	7,196	7,196
Personnel: Asst Editors for wk 1 & 2	7	2 wks	128.5	1,799	1,799
Personnel: Interviewers	28	8 wks	155	34,720	34,720
Per diem: Supervisors	7	15 days	10	1,050	1,050
Per diem: Editors	7	15 days	10	1,050	1,050
Per diem: Asst Editors for wk 1 & 2	7	12 days	10	840	840
Per diem: Monitoring staff	6	16 days	22.5	2,160	2,160
Per diem: Drivers for Monitoring Accommodation: Monitoring staff and drivers	3	16 days	22.5	1,080	1,080
Car Rental	9	8 nights	50	3,600	3,600
Fuel	7	44 days	75	23,100	23,100
Printing questionnaires, forms	21,000	1	0.75	15,750	15,750
Supplies for anthropometry	6,000	1	0.5	3,000	3,000
Supplies (stationary, IDs, etc)	7	1	300	2,100	2,100
Communications	1	1	1,000	1,000	1,000



## 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.

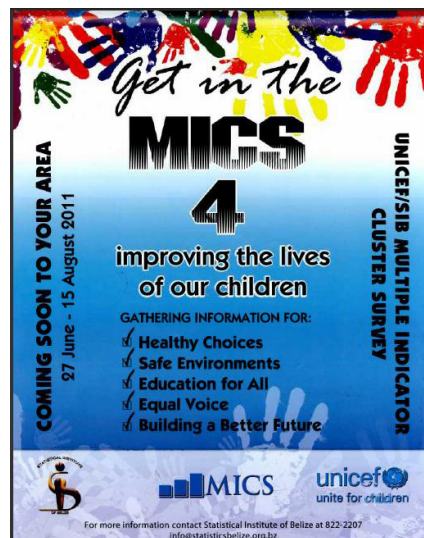


Figure 1. MICS4 Flyer, Belize, 2011







## APPENDIX D. LIST OF PERSONNEL INVOLVED IN THE SURVEY

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### 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
Karl Tyndell	Assistant Statistician II
Javier Romero	Assistant Statistician II
Andy Morales	Assistant Statistician II
Rennick Jackson	Assistant Statistician II
Ms. Wendi Benavides	Assistant Statistician III
Six data entry operators	
Twenty four interviewers	

**UNICEF**

Ms Christine Norton  
Mr Joseph Hendrikx  
Ms. Paulette Wade

UNICEF Belize Representative  
Social Policy Officer  
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 CPro 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

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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

MICS4 Indicator	Base Population	
<b>HOUSEHOLD MEMBERS</b>		
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
<b>WOMEN</b>		
-	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-cohabiting partner in the 12 months preceding the survey

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## UNDER-5s

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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

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Table SE.2: Sampling errors: Total sample  
Standard errors, coefficients of variation, design effects (def), square root of design effects (def) and confidence intervals for selected indicators, Belize, 2011

	MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (def)	Square root of design effect (def)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
Use of improved drinking water sources	4.1	0.9765	0.0060	0.006	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	0.3383	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
<b>WOMEN</b>										
Pregnant women	-	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	685	702	0.949	0.976
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	685	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	0.0096	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 told the results	9.6	0.2838	0.0097	0.034	1.896	1.377	4096	4096	0.264	0.303
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	0.699
<b>UNDER-5s</b>										
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	0.0172	0.045	0.950	0.975	761	755	0.347	0.416
Tuberculosis immunization coverage	-	0.9796	0.0073	0.007	1.090	1.044	403	410	0.965	0.994
Polio or DTPaP immunization	-	0.7000	0.0210	0.030	0.839	0.916	395	400	0.658	0.742
DPT (Pentavalent)	-	0.7178	0.0212	0.030	0.885	0.941	396	400	0.675	0.760
Received measles immunization	-	0.8904	0.0197	0.022	1.568	1.252	392	394	0.851	0.930
Received Hepatitis B or Pentavalent immunization	-	0.7139	0.0211	0.030	0.866	0.931	394	399	0.672	0.756
Received Hib or Pentavalent immunization	-	0.7114	0.0209	0.029	0.847	0.921	394	399	0.670	0.753
Diarrhoea in last two weeks	-	0.0788	0.0060	0.077	0.976	0.988	1946	1946	0.067	0.091
Illness with cough in the previous 2 weeks	-	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	57	66	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	8.1	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 (deff), square root of design effects (deff) and confidence intervals for selected indicators, Belize, 2011

	MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
<b>HOUSEHOLD MEMBERS</b>										
	Use of improved drinking water sources	4.1	0.9954	0.0020	1.678	1.295	7536	2004	0.991	0.999
	Use of improved sanitation	4.3	0.9378	0.0053	0.955	0.977	7410	1961	0.927	0.948
	Secondary school net attendance ratio (adjusted)	7.5	0.6920	0.0207	1.165	1.080	625	579	0.651	0.733
	Child labour	8.2	0.0412	0.0056	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	2.036	1.427	2780	2615	0.033	0.056
	Violent discipline	8.5	0.7020	0.0153	1.122	1.059	2022	1000	0.671	0.733
<b>WOMEN</b>										
	Pregnant women	-	0.0496	0.0058	1.268	1.126	1926	1772	0.038	0.061
	Early childbearing	5.2	0.1415	0.0201	1.066	1.033	343	323	0.101	0.182
	Contraceptive prevalence	5.3	0.5775	0.0196	1.413	1.189	991	896	0.538	0.617
	Unmet need	5.4	0.1413	0.0108	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	0.388	0.623	262	247	0.960	0.986
	Antenatal care coverage - at least four times by any provider	5.5b	0.8736	0.0188	0.787	0.887	262	247	0.836	0.911
	Skilled attendant at delivery	5.7	0.9843	0.0084	1.128	1.062	262	247	0.967	1.000
	Institutional deliveries	5.8	0.9750	0.0111	1.245	1.116	262	247	0.953	0.997
	Caesarean section	5.9	0.2966	0.0340	1.360	1.166	262	247	0.229	0.364
	Literacy rate among young women	7.1	0.9582	0.0096	1.545	1.243	726	670	0.939	0.977
	Marriage before age 18	8.7	0.2431	0.0137	1.446	1.202	1542	1425	0.216	0.270
	Polygyny	8.9	0.0410	0.0064	0.938	0.968	991	896	0.028	0.054
	Comprehensive knowledge about HIV prevention among young people	9.2	0.5467	0.0193	1.009	1.005	726	670	0.508	0.585
	Knowledge of mother-to-child transmission of HIV	9.3	0.5861	0.0129	1.215	1.102	1926	1772	0.560	0.612
	Accepting attitudes towards people living with HIV	9.4	0.2339	0.0119	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 the results	9.6	0.3376	0.0119	1.113	1.055	1926	1772	0.314	0.361
	Sexually active young women who have been tested for HIV and know the results	9.7	0.3714	0.0252	1.011	1.006	404	373	0.321	0.422
	Sex before age 15 among young women	9.11	0.0501	0.0083	0.981	0.990	726	670	0.033	0.067
	Condom use with non-regular partners	9.16	0.7004	0.0285	0.802	0.895	224	208	0.643	0.757
<b>UNDER-5s</b>										
	Underweight prevalence	2.1a	0.0539	0.0084	0.862	0.929	678	626	0.037	0.071
	Stunting prevalence	2.2a	0.1572	0.0162	1.218	1.104	662	614	0.125	0.190
	Wasting prevalence	2.3a	0.0282	0.0067	0.998	0.999	661	612	0.015	0.042
	Exclusive breastfeeding under 6 months	2.6	0.1093	0.0291	0.471	0.686	61	55	0.051	0.168
	Age-appropriate breastfeeding	2.14	0.3305	0.0260	0.821	0.906	298	270	0.279	0.382
	Tuberculosis immunization coverage	-	0.9886	0.0085	0.851	0.923	145	135	0.972	1.000
	Polio or DTapP immunization	-	0.6898	0.0378	0.883	0.940	143	133	0.614	0.765
	DPT (Pentavalent)	-	0.6943	0.0338	0.716	0.846	143	134	0.627	0.762
	Received measles immunization	-	0.8874	0.0293	1.141	1.068	144	134	0.829	0.946
	Received Hepatitis B or Pentavalent immunization	-	0.6955	0.0339	0.710	0.843	142	132	0.628	0.763
	Received HiB or Pentavalent immunization	-	0.6907	0.0345	0.734	0.857	143	133	0.622	0.760
	Diarrhoea in last two weeks	-	0.0641	0.0120	1.620	1.273	743	681	0.040	0.088
	Illness with cough in the previous 2 weeks	-	0.0204	0.0058	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	1.173	1.083	300	275	0.844	0.927
	Attendance to early childhood education	6.7	0.4044	0.0328	1.226	1.107	300	275	0.339	0.470
	Birth registration	8.1	0.9463	0.0083	0.922	0.960	743	681	0.930	0.963

(\*): the number of un-weighted observations is less than 50



Table SE.4: Sampling errors: Rural  
Standard errors, coefficients of variation, design effects (deff), square root of design effects (deff), square root of design effects (deff) and confidence intervals for selected indicators, Belize, 2011

MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits	
								r - 2se	r + 2se
<b>HOUSEHOLD MEMBERS</b>									
Use of improved drinking water sources	4.1	0.9619	0.0105	0.011	2.709	9752	2420	0.941	0.983
Use of improved sanitation	4.3	0.9041	0.0060	0.007	0.976	9368	2296	0.892	0.916
Secondary school net attendance ratio (adjusted)	7.5	0.4594	0.0186	0.041	1.169	906	979	0.422	0.497
Child labour	8.2	0.1375	0.0093	0.068	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	2.128	4314	4706	0.023	0.045
Violent discipline	8.5	0.7068	0.0158	0.022	1.330	3209	1467	0.675	0.738
<b>WOMEN</b>									
Pregnant women	-	0.0660	0.0061	0.093	1.188	2170	2324	0.054	0.078
Early childbearing	5.2	0.1938	0.0174	0.090	0.884	377	406	0.159	0.229
Contraceptive prevalence	5.3	0.5332	0.0180	0.034	1.395	1395	1498	0.497	0.569
Unmet need	5.4	0.1713	0.0097	0.057	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	1.031	424	455	0.935	0.975
Antenatal care coverage - at least four times by any provider	5.5b	0.8050	0.0172	0.021	0.855	424	455	0.771	0.839
Skilled attendant at delivery	5.7	0.9476	0.0143	0.015	1.863	424	455	0.919	0.976
Institutional deliveries	5.8	0.9157	0.0160	0.017	1.504	424	455	0.884	0.948
Caesarean section	5.9	0.2715	0.0181	0.067	0.866	424	455	0.235	0.308
Literacy rate among young women	7.1	0.8595	0.0178	0.021	1.549	838	911	0.824	0.895
Marriage before age 18	8.7	0.3401	0.0138	0.041	1.542	1710	1819	0.312	0.368
Polygyny	8.9	0.0299	0.0045	0.150	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	838	911	0.289	0.364
Knowledge of mother-to-child transmission of HIV	9.3	0.5314	0.0139	0.026	1.806	2170	2324	0.504	0.559
Accepting attitudes towards people living with HIV	9.4	0.1539	0.0100	0.065	1.588	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	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	1.229	416	444	0.254	0.362
Sex before age 15 among young women	9.11	0.0552	0.0075	0.137	0.995	838	911	0.040	0.070
Condom use with non-regular partners	9.16	0.5412	0.0474	0.088	1.003	116	112	0.446	0.636
<b>UNDER-5s</b>									
Underweight prevalence	2.1a	0.0662	0.0062	0.093	0.736	1132	1196	0.054	0.079
Stunting prevalence	2.2a	0.2143	0.0135	0.063	1.276	1118	1184	0.187	0.241
Wasting prevalence	2.3a	0.0357	0.0058	0.164	1.158	1107	1169	0.024	0.047
Exclusive breastfeeding under 6 months	2.6	0.1726	0.0320	0.186	0.640	87	90	0.109	0.237
Age-appropriate breastfeeding	2.14	0.4151	0.0225	0.054	1.012	463	485	0.370	0.460
Tuberculosis immunization coverage	-	0.9745	0.0103	0.011	1.173	258	275	0.954	0.995
Polio or DTapP immunization	-	0.7058	0.0252	0.036	0.810	252	267	0.656	0.756
DPT (Pentavalent)	-	0.7311	0.0275	0.038	1.019	253	266	0.676	0.786
Received measles immunization	-	0.8922	0.0261	0.029	1.840	249	260	0.840	0.944
Received Hepatitis B or Pentavalent immunization	-	0.7242	0.0271	0.037	0.981	252	267	0.670	0.779
Received Hib or Pentavalent immunization	-	0.7231	0.0266	0.037	0.937	252	266	0.670	0.776
Diarrhoea in last two weeks	-	0.0879	0.0063	0.072	0.633	1203	1265	0.075	0.101
Illness with cough in the previous 2 weeks	-	0.0352	0.0067	0.192	1.692	1203	1265	0.022	0.049
Oral rehydration therapy with continued feeding	3.8	0.3560	0.0464	0.130	1.007	106	108	0.263	0.449
Antibiotic treatment of suspected pneumonia	3.10	0.6371	0.0235	0.037	0.122	42	52	0.590	0.684
Support for learning	6.1	0.8389	0.0226	0.027	1.934	492	513	0.794	0.884
Attendance to early childhood education	6.7	0.2641	0.0254	0.096	1.700	492	513	0.213	0.315
Birth registration	8.1	0.9562	0.0054	0.006	0.889	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 (deff), square root of design effects (deff) and confidence intervals for selected indicators, Belize, 2011

	MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
<b>HOUSEHOLD MEMBERS</b>										
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	0.930	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	0.606	0.716
<b>WOMEN</b>										
Pregnant women	-	0.0539	0.0076	0.141	0.736	0.858	534	648	0.039	0.069
Early childbearing	5.2	0.1526	0.0284	0.186	0.649	0.806	87	105	0.096	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	0.009	0.964	0.982	95	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	95	115	0.751	0.930
Skilled attendant at delivery	5.7	0.9458	0.0234	0.025	1.219	1.104	95	115	0.899	0.993
Institutional deliveries	5.8	0.9822	0.0130	0.013	1.091	1.045	95	115	0.956	1.000
Caesarean section	5.9	0.3016	0.0355	0.118	0.681	0.825	95	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	0.966	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 the results	9.6	0.1960	0.0228	0.116	2.128	1.459	534	648	0.150	0.241
Sexually active young women who have been tested for HIV and know the results	9.7	0.2265	0.0428	0.189	1.117	1.057	89	108	0.141	0.312
Sex before age 15 among young women	9.11	0.0474	0.0126	0.265	0.819	0.905	194	235	0.022	0.073
Condom use with non-regular partners	9.16	*	*	*	*	*	24	29	*	*
<b>UNDER-5s</b>										
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	55	66	0.950	1.000
Polio or DTap-P immunization	-	0.7132	0.0595	0.037	0.393	0.627	53	63	0.760	0.882
DPT (Pentavalent)	-	0.9362	0.0379	0.041	1.566	1.251	55	66	0.860	1.000
Received measles immunization	-	0.7622	0.0424	0.056	0.625	0.791	54	64	0.677	0.847
Received Hepatitis B or Pentavalent immunization	-	0.7723	0.0378	0.049	0.506	0.711	53	63	0.698	0.849
Received Hib or Pentavalent immunization	-	0.0923	0.0129	0.140	0.623	0.789	263	314	0.066	0.118
Diarrhoea in last two weeks	-	0.0219	0.0111	0.508	1.808	1.344	263	314	0.000	0.044
Illness with cough in the previous 2 weeks	-	*	*	*	*	*	24	30	*	*
Oral rehydration therapy with continued feeding	3.8	*	*	*	*	*	6	7	*	*
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	101	121	0.728	0.951
Support for learning	6.1	0.8395	0.0560	0.067	2.791	1.671	101	121	0.112	0.269
Attendance to early childhood education	6.7	0.1906	0.0392	0.205	1.193	1.092	101	121	0.091	0.192
Birth registration	8.1	0.9333	0.0108	0.012	0.582	0.763	263	314	0.912	0.955

(\*): the number of unweighted observations is less than 50

Table SE.6: Sampling errors: Orange Walk  
Standard errors, coefficients of variation, design effects (deff), square root of design effects (deff), square root of design effects (deff) and confidence intervals for selected indicators, Belize, 2011

	MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
HOUSEHOLD MEMBERS										
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	-	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	5.7	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	5.9	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	9.2	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	688	0.555	0.638
Accepting attitudes towards people living with HIV	9.4	0.1369	0.0117	0.086	0.748	0.865	580	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	0.2603	0.0165	0.063	0.970	0.985	618	688	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-5s										
Underweight prevalence	2.1a	0.0468	0.0094	0.201	0.587	0.766	280	296	0.028	0.066
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
Exclusive breastfeeding under 6 months	2.6	*	*	*	*	*	28	29	*	*
Age-appropriate breastfeeding	2.14	0.3474	0.0531	0.153	1.607	1.268	124	130	0.241	0.454
Tuberculosis immunization coverage	-	1.0000	0.0000	0.000	-	-	67	70	1.000	1.000
Polio or DTap-P immunization	-	0.7436	0.0516	0.069	0.962	0.981	67	70	0.641	0.847
DTP (Pentavalent)	-	0.7590	0.0528	0.070	1.020	1.010	65	68	0.653	0.865
Received measles immunization	-	0.9575	0.0232	0.024	0.897	0.947	66	69	0.911	1.000
Received Hepatitis B or Pentavalent immunization	-	0.7388	0.0563	0.076	1.132	1.064	67	70	0.626	0.851
Received Hib or Pentavalent immunization	-	0.7388	0.0563	0.076	1.132	1.064	67	70	0.626	0.851
Diarrhoea in last two weeks	-	0.0341	0.0087	0.254	0.725	0.852	302	320	0.017	0.051
Illness with cough in the previous 2 weeks	-	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	11	*	*
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	3	3	*	*
Support for learning	6.1	0.8309	0.0262	0.032	0.612	0.782	118	126	0.778	0.883
Attendance to early childhood education	6.7	0.1633	0.0234	0.143	0.501	0.708	118	126	0.117	0.210
Birth registration	8.1	0.9525	0.0085	0.009	0.509	0.713	302	320	0.935	0.969

(\*): the number of unweighted observations is less than 50

Table SE.7: Sampling errors: Belize (Excluding Belize City South Side) and confidence intervals for selected indicators, Belize, 2011

	MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deff)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
<b>HOUSEHOLD MEMBERS</b>										
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	956	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
<b>WOMEN</b>										
Pregnant women	-	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	0.006	0.033
Comprehensive knowledge about HIV prevention among young people	9.2	0.6966	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	687	448	0.531	0.634
Accepting attitudes towards people living with HIV	9.4	0.2180	0.0200	0.092	1.034	1.017	676	441	0.178	0.258
Women who have been tested for HIV during last 12 months and who have been told the results	9.6	0.3078	0.0284	0.092	1.695	1.302	687	448	0.251	0.365
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
<b>UNDER-5s</b>										
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	0.070
Exclusive breastfeeding under 6 months	2.6	*	*	*	*	*	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	-	*	*	*	*	*	36	23	*	*
Polio or DTap-P immunization	-	*	*	*	*	*	36	23	*	*
DPT (Pentavalent)	-	*	*	*	*	*	36	23	*	*
Received measles immunization	-	*	*	*	*	*	36	23	*	*
Received Hepatitis B or Pentavalent immunization	-	*	*	*	*	*	36	23	*	*
Received Hib or Pentavalent immunization	-	*	*	*	*	*	36	23	*	*
Diarrhoea in last two weeks	-	0.0537	0.0213	0.396	1.353	1.163	240	153	0.011	0.096
Illness with cough in the previous 2 weeks	-	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	8	*	*
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	2	1	*	*
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

(\*): the number of unweighted observations is less than 50

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

	MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
<b>HOUSEHOLD MEMBERS</b>										
Use of improved drinking water sources	4.1	0.9981	0.0020	0.002	1.255	1.120	2177	638	0.994	1.000
Use of improved sanitation	4.3	0.9283	0.0101	0.011	0.929	0.964	2071	604	0.908	0.949
Secondary school net attendance ratio (adjusted)	7.5	0.7474	0.0249	0.033	0.596	0.772	175	182	0.698	0.797
Child labour	8.2	0.0401	0.0131	0.327	2.257	1.502	488	506	0.014	0.066
Prevalence of children with one or both parents dead	9.18	0.0460	0.0085	0.185	1.481	1.217	866	900	0.029	0.063
Violent discipline	8.5	0.7600	0.0261	0.034	1.287	1.134	646	345	0.708	0.812
<b>WOMEN</b>										
Pregnant women	-	0.0438	0.0086	0.196	1.074	1.037	573	612	0.027	0.061
Early childbearing	5.2	0.1582	0.0341	0.216	1.015	1.007	110	117	0.090	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	0.0252	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
<b>UNDER-5s</b>										
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

(\*): 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

	MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Un-weighted count	Confidence limits	
									r - 2se	r + 2se
<b>HOUSEHOLD MEMBERS</b>										
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
<b>WOMEN</b>										
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
<b>UNDER-5s</b>										
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

(\*): 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 Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Un-weighted count	Confidence limits	
									r - 2se	r + 2se
<b>HOUSEHOLD MEMBERS</b>										
Use of improved drinking water sources	4.1	0.9556	0.0243	0.025	8.723	2.954	3865	626	0.907	1.000
Use of improved sanitation	4.3	0.9114	0.0080	0.009	0.491	0.701	3829	620	0.895	0.927
Secondary school net attendance ratio (adjusted)	7.5	0.5434	0.0347	0.064	1.284	1.133	382	266	0.474	0.613
Child labour	8.2	0.0937	0.0163	0.174	2.033	1.426	952	650	0.061	0.126
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	0.052
Violent discipline	8.5	0.6576	0.0364	0.055	2.238	1.496	1201	381	0.585	0.730
<b>WOMEN</b>										
Pregnant women	-	0.0599	0.0104	0.173	1.156	1.075	933	605	0.039	0.081
Early childbearing	5.2	0.1453	0.0380	0.262	1.142	1.069	151	99	0.069	0.221
Contraceptive prevalence	5.3	0.5686	0.0362	0.064	2.057	1.434	601	387	0.496	0.641
Unmet need	5.4	0.1180	0.0151	0.128	0.844	0.919	601	387	0.088	0.148
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	1.000
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	0.951
Skilled attendant at delivery	5.7	0.9660	0.0271	0.028	2.664	1.632	189	120	0.912	1.000
Institutional deliveries	5.8	0.9474	0.0307	0.032	2.245	1.498	189	120	0.886	1.000
Caesarean section	5.9	0.3960	0.0413	0.104	0.851	0.922	189	120	0.313	0.479
Literacy rate among young women	7.1	0.9096	0.0273	0.030	2.046	1.431	347	226	0.855	0.964
Marriage before age 18	8.7	0.2698	0.0172	0.064	0.718	0.847	737	478	0.235	0.304
Polygyny	8.9	0.0517	0.0109	0.211	0.940	0.969	601	387	0.030	0.074
Comprehensive knowledge about HIV prevention among young people	9.2	0.2724	0.0319	0.117	1.152	1.073	347	226	0.209	0.336
Knowledge of mother-to-child transmission of HIV	9.3	0.5704	0.0245	0.043	1.485	1.219	933	605	0.521	0.619
Accepting attitudes towards people living with HIV	9.4	0.1824	0.0180	0.099	1.266	1.125	898	584	0.146	0.218
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	0.362
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	0.503
Sex before age 15 among young women	9.11	0.0313	0.0137	0.439	1.396	1.182	347	226	0.004	0.059
Condom use with non-regular partners	9.16	*	*	*	*	*	59	38	*	*
<b>UNDER-5s</b>										
Underweight prevalence	2.1a	0.0526	0.0107	0.204	0.636	0.798	421	276	0.031	0.074
Stunting prevalence	2.2a	0.1857	0.0265	0.142	1.245	1.116	413	270	0.133	0.239
Wasting prevalence	2.3a	0.0278	0.0108	0.388	1.151	1.073	410	268	0.006	0.049
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	0.341
Tuberculosis immunization coverage	-	0.9690	0.0220	0.023	1.067	1.033	99	67	0.925	1.000
Polio or DTaP-P immunization	-	0.6986	0.0512	0.073	0.823	0.907	99	67	0.596	0.801
DPT (Pentavalent)	-	0.7779	0.0517	0.066	1.006	1.003	98	66	0.674	0.881
Received measles immunization	-	0.8042	0.0650	0.081	1.772	1.331	99	67	0.674	0.934
Received Hepatitis B or Pentavalent immunization	-	0.7684	0.0514	0.067	0.981	0.990	99	67	0.666	0.871
Received HiB or Pentavalent immunization	-	0.7684	0.0514	0.067	0.981	0.990	99	67	0.666	0.871
Diarrhoea in last two weeks	-	0.1356	0.0158	0.116	0.624	0.790	450	295	0.104	0.167
Illness with cough in the previous 2 weeks	-	0.0280	0.0121	0.433	1.586	1.259	450	295	0.004	0.052
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	0.993
Attendance to early childhood education	6.7	0.2472	0.0569	0.230	1.863	1.365	167	108	0.133	0.361
Birth registration	8.1	0.9477	0.0126	0.013	0.948	0.973	450	295	0.922	0.973

(\*): the number of unweighted observations is less than 50

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

MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits		
								r - 2se	r + 2se	
<b>HOUSEHOLD MEMBERS</b>										
Use of improved drinking water sources	4.1	0.9951	0.0038	0.004	1.794	1.340	1833	605	0.988	1.000
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
<b>WOMEN</b>										
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	*	*
<b>UNDER-5s</b>										
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	-	0.0824	0.0118	0.143	0.458	0.677	212	251	0.059	0.106
Illness with cough in the previous 2 weeks	-	0.0370	0.0148	0.400	1.537	1.240	212	251	0.007	0.067
Oral rehydration therapy with continued feeding	3.8	*	*	*	*	*	18	21	*	*
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	8	10	*	*
Support for learning	6.1	0.8608	0.0464	0.054	1.904	1.380	92	107	0.768	0.954
Attendance to early childhood education	6.7	0.4496	0.0280	0.062	0.337	0.580	92	107	0.394	0.506
Birth registration	8.1	0.9766	0.0082	0.008	0.745	0.863	212	251	0.960	0.993

(\*): 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

	MICS Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
<b>HOUSEHOLD MEMBERS</b>										
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 dead	9.18	0.0283	0.0076	0.268	2.799	1.673	825	1334	0.013	0.044
Violent discipline	8.5	0.8137	0.0122	0.015	0.384	0.620	631	395	0.789	0.838
<b>WOMEN</b>										
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	*	*
<b>UNDER-5s</b>										
Underweight prevalence	2.1a	0.0740	0.0136	0.184	0.927	0.963	216	344	0.047	0.101
Stunting prevalence	2.2a	0.4160	0.0264	0.063	0.974	0.987	214	341	0.363	0.469
Wasting prevalence	2.3a	0.0328	0.0095	0.290	0.931	0.965	206	327	0.014	0.052
Exclusive breastfeeding under 6 months	2.6	*	*	*	*	*	16	25	*	*
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	6.7	0.1282	0.0176	0.137	0.392	0.626	90	143	0.093	0.163
Birth registration	8.1	0.9581	0.0126	0.013	1.421	1.192	226	361	0.933	0.983

(\*): the number of unweighted observations is less than 50

## APPENDIX F. DATA QUALITY TABLES

Table DQ.1: Age distribution of household population  
Single-year age distribution of household population by sex, Belize, 2011

Age	Male		Female	
	Number	Percent	Number	Percent
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	1.9
24	159	1.8	156	1.8
25	128	1.5	142	1.6
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	0.3	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
DK/missing	29	0.3	19	0.2
Total	8582	100.0	8705	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 women age 15-49		Percentage of eligible women interviewed (Completion rate)
			Number	Number	
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	
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

		Household population of women age 15-49 years		Interviewed women age 15-49 years		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 head	None	318	7.1	297	7.3	93.3
	Primary	2165	48.3	1974	48.7	91.1
	Secondary +	1818	40.6	1626	40.1	89.4
	CET/TVET/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

		Household population of under-5 children		Interviewed under-5 children		Percent of eligible under-5s with completed under-5 questionnaires (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 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 head	None	145	7.6	145	7.8	100.0
	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 head	Creole	375	19.7	361	19.4	96.2
	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/incomplete information*	Number of cases
<b>Household</b>			
Age	All household members	0.3	17538
Starting time of interview	All households interviewed	0.0	4424
Ending time of interview	All households interviewed	0.0	4424
<b>Women</b>			
Woman's date of birth	All women age 15-49		
Only month		0.0	4096
Both month and year		0.1	4096
Date of first birth	All women age 15-49 with at least one live birth		
Only month		0.2	2728
Both month and year		1.1	2728
Completed years since first birth	All women age 15-49 with at least one live birth with year of first birth unknown	16.1	53
Date of last birth	All women age 15-49 with a live birth in last 2 years		
Only month		0.2	2728
Both month and year		0.4	2728
Date of first marriage/union	All ever married women age 15-49		
Only month		11.5	2877
Both month and year		21.1	2877
Age at first marriage/union	All ever married women age 15-49 with year of first marriage not known	0.6	2877
Age at first intercourse	All women age 15-24 who have ever had sex	2.6	889
Time since last intercourse	All women age 15-24 who have ever had sex	1.6	889
Starting time of interview	All women interviewed	0.0	4096
Ending time of interview	All women interviewed	0.0	4096
<b>Under-5</b>			
Date of birth	All under-5 children		
Only month		0.0	1946
Both month and year		0.0	1946
Anthropometric measurements	All under-5 children		
Weight		7.0	1946
Height		7.5	1946
Both weight and height		6.7	1946
Starting time of interview	All under-5 children	0.0	1946
Ending time of interview	All under-5 children	0.0	1946

\* Includes "Don't know" responses

Table DQ.7: Completeness of information for anthropometric indicators  
Distribution of children under 5 by completeness of information for anthropometric indicators, Belize, 2011

	Valid weight and date of birth	Reason for exclusion from analysis				Total	Percent of children excluded from analysis	Number of children under 5
		Weight not measured	Incomplete date of birth	Weight not measured, incomplete date of birth	Flagged cases (outliers)			
<b>Weight by age</b>								
<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	391
48-59 months	94.7	5.3	0.0	0.0	0.0	100.0	5.3	397
Total	93.6	6.3	0.0	0.0	0.1	100.0	6.4	1946
	Valid height and date of birth	Reason for exclusion from analysis				Total	Percent of children excluded from analysis	Number of children under 5
		Height not measured	Incomplete date of birth	Height not measured, incomplete date of birth	Flagged cases (outliers)			
<b>Height by age</b>								
<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	212
12-23 months	93.7	5.0	0.0	0.0	1.3	100.0	6.3	398
24-35 months	90.8	8.7	0.0	0.0	0.5	100.0	9.2	403
36-47 months	94.6	4.6	0.0	0.0	0.8	100.0	5.4	391
48-59 months	94.2	5.3	0.0	0.0	0.5	100.0	5.8	397
Total	92.4	6.7	0.0	0.0	0.9	100.0	7.6	1946
	Valid weight and height	Reason for exclusion from analysis				Total	Percent of children excluded from analysis	Number of children under 5
		Weight not measured	Height not measured	Weight not measured, incomplete date of birth	Flagged cases (outliers)			
<b>Weight by height</b>								
<6 months	80.7	0.7	2.1	12.4	4.1	100.0	19.3	145
6-11 months	90.1	0.0	0.0	7.1	2.8	100.0	9.9	212
12-23 months	94.0	0.0	0.3	4.7	1.0	100.0	6.0	398
24-35 months	89.8	0.0	1.2	7.5	1.5	100.0	10.2	403
36-47 months	94.4	0.5	0.3	4.3	0.5	100.0	5.6	391
48-59 months	92.7	0.3	0.3	4.9	1.8	100.0	7.3	397
Total	91.5	0.2	0.6	6.0	1.6	100.0	8.5	1946

Table DQ.8: Heaping in anthropometric measurements  
Distribution of weight and height/length measurements by digits  
reported for decimals, Belize, 2011

		Weight		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

		Woman does not have health card	Woman has health card		Missing/DK	Total	Percent of health cards seen by the interviewer (1)/(1+2)*100	Number of women with a live birth in the last two years
			Seen by the interviewer (1)	Not seen by the interviewer (2)				
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 Belize City South Side)	27.1	25.0	45.8	2.1	100.0	35.3	48
	Belize City South 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 quintiles	Poorest	20.8	23.1	54.7	1.4	100.0	29.7	212
	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 does not have birth certificate	Child has birth certificate		Missing/DK	Total	Percent of birth certificates seen by the interviewer (1)/(1+2)*100	Number of children under age 5
			Seen by the interviewer (1)	Not seen by the interviewer (2)				
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 age	0	21.4	33.2	45.4	0.0	100.0	42.3	355
	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

		Child does not have vaccination card		Child has vaccination card		Missing/DK	Total	Percent of vaccination cards seen by the interviewer (1)/(1+2)*100	Number of children under age 5
		Had vaccination card previously	Never had vaccination card	Seen by the interviewer (1)	Not seen by the interviewer (2)				
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 Belize City South Side)	2.0	3.9	63.4	30.7	0.0	100.0	67.4	153
	Belize City South 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 age	0	2.8	10.4	74.4	12.4	0.0	100.0	85.7	355
	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

	Mother in the household			Mother not in the household			Total	Number of children under 5
	Mother interviewed	Father interviewed	Other adult female interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed		
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 2 or more children age 2-14 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 households by number of children 2-14	2	94.6	701
	3	90.3	435
	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	Preschool	Primary							Secondary				
				1	2	3	4	5	6	DK	1	2	3	4	
Age at beginning of school year	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
	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
	8	3.6	0.0	22.9	45.8	22.2	1.6	0.0	0.0	0.0	0.0	0.0	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	0.0	0.3	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	0.0	0.7	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	0.0	14.1	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	0.0	28.5	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	0.0	23.5	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	0.0	13.9	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	0.0	6.4	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	0.0	1.9	6.0	13.0	13.4
	18	66.4	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.2	0.0	0.7	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	0.7	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	0.0	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	0.4	1.1
	22	90.4	0.0	0.0	0.0	0.0	0.0	0.0	0.3	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	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

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 and higher	CET/ITVET/VOTEC	Infant	DK	Total	Number of household members
Age at beginning of school year	5	0.0	0.0	0.0	76.8	1.5	100.0	403
	6	0.0	0.0	0.0	59.3	1.5	100.0	384
	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

Age	Children Ever Born			Children Living			Children Deceased			Number of women
	Number of sons ever born	Number of daughters ever born	Sex ratio	Number of sons living	Number of daughters living	Sex ratio	Number of deceased sons	Number of deceased daughters	Sex ratio	
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>
<b>1. MORTALITY</b>					
1.1	Under-five mortality rate <sup>3</sup>	CM	Probability of dying by exact age 5 years		MDG 4.1
1.2	Infant mortality rate <sup>4</sup>	CM	Probability of dying by exact age 1 year		MDG 4.2
<b>2. NUTRITION</b>					
2.1a 2.1b	Underweight 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 age of the WHO standard	Total number of children under age 5	MDG 1.8
2.2a 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 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 in the 2 years preceding the survey 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 the 2 years preceding the survey who put the newborn infant to the breast within 1 hour of birth	Total number of women with a live birth in the 2 years preceding the survey	
2.6	Exclusive breastfeeding 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 breastfeeding at 1 year	BF	Number of children age 12-15 months who are currently breastfeeding	Total number of children age 12-15 months	
2.8	Continued breastfeeding at 2 years	BF	Number of children age 20-23 months who are currently breastfeeding	Total number of children age 20-23 months	
2.9	Predominant breastfeeding under 6 months	BF	Number of infants under 6 months of age who received breast milk as the predominant source of nourishment <sup>6</sup> during the previous day	Total number of infants under 6 months of age	
2.10	Duration of breastfeeding	BF	The age in months when 50 percent of children age 0-35 months did not receive breast milk during the previous day		
2.11	Bottle feeding	BF	Number of children age 0-23 months who were fed with a bottle during the previous day	Total number of children age 0-23 months	
2.12	Introduction of solid, semi-solid or soft foods	BF	Number of infants age 6-8 months who received solid, semi-solid or soft 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-breastfed 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>8</sup> during the previous day	Total number of children age 0-23 months	
2.15	Milk feeding frequency for non-breastfed children	BF	Number of non-breastfed children age 6-23 months who received at least 2 milk feedings during the previous day	Total number of non-breastfed children age 6-23 months	

MICS4 INDICATOR		Module <sup>1</sup>	Numerator	Denominator	MDG <sup>2</sup>
2.17	Vitamin A supplementation (children under age 5)	IM	Number of children age 6-59 months who received at least one high-dose vitamin A supplement in the 6 months preceding the survey	Total number of children age 6-59 months	
2.18	Low-birthweight infants	MN	Number of last live births in the 2 years preceding the survey weighing 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 years preceding the survey who were weighed at birth	Total number of last live births in the 2 years preceding the survey	
<b>3. CHILD HEALTH</b>					
3.1	Tuberculosis immunization coverage	IM	Number of children age 18-29 months who received BCG vaccine before their first birthday	Total number of children age 12-23 months	
3.2	Polio immunization coverage	IM	Number of children age 18-29 months who received OPV3 vaccine 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 months who received DPT3 vaccine before their first birthday	Total number of children age 12-23 months	
3.4	Measles immunization coverage	IM	Number of children age 18-29 months who received measles vaccine before their first birthday	Total number of children age 12-23 months	MDG 4.3
3.5	Hepatitis B immunization coverage	IM	Number of children age 18-29 months who received the third dose of Hepatitis B vaccine before their first birthday	Total number of children age 12-23 months	
3.7	Neonatal tetanus protection	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 diarrhoea in the previous 2 weeks who received ORT (ORS packet or recommended homemade fluid or increased fluids) and continued feeding during the episode of diarrhoea	Total number of children under age 5 with diarrhoea in the previous 2 weeks	
3.9	Care-seeking for suspected pneumonia	CA	Number of children under age 5 with suspected pneumonia in the previous 2 weeks who were taken to an 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 suspected pneumonia in the previous 2 weeks who received antibiotics	Total number of children under age 5 with suspected pneumonia in the previous 2 weeks	
3.11	Solid fuels	HC	Number of household members in households that use solid fuels as the primary source of domestic energy to cook	Total number of household members	
3.21	Child at increased risk of disability	DA	Number of children age 2-9 years reported by mothers/caretakers to have at least one of the specified impairments or activity limitations <sup>10</sup>	Total number of children age 2-9 years	
<b>4. WATER AND SANITATION</b>					
4.1	Use of improved drinking 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 using unimproved drinking water who use an appropriate treatment method	Total number of household members in households using unimproved drinking water sources	
4.3	Use of improved sanitation	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 whose last stools were disposed of safely	Total number of children age 0-2 years	

MICS4 INDICATOR		Module <sup>1</sup>	Numerator	Denominator	MDG <sup>2</sup>
4.5	Place for hand washing	HW	Number of households with a specific place for hand washing where 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	
<b>5. REPRODUCTIVE HEALTH</b>					
5.1	Adolescent birth rate <sup>11</sup>	CM - BH	Age-specific fertility rate for women age 15-19 years for the one year period preceding the survey		MDG 5.4
5.2	Early childbearing	CM - BH	Number of women age 20-24 years who had at least one live birth before age 18	Total number of women age 20-24 years	
5.3	Contraceptive prevalence rate	CP	Number of women age 15-49 years currently married or in union who are using (or whose partner is using) a (modern or traditional) contraceptive 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 5.5b	Antenatal care coverage	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 with a live birth in the 2 years preceding the survey who delivered 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 years preceding the survey who were delivered by caesarean section	Total number of last live births in the 2 years preceding the survey	
5.10	Post-partum stay in health facility	PN	Number of women age 15-49 years who stayed in the health facility for 12 hours or more after the delivery of their last live birth in the 2 years 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 for the newborn	PN	Number of last live births in the last 2 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after birth	Total number of last live births in the last 2 years	
5.12	Post-natal health check for the mother	PN	Number of women age 15-49 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after delivery	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	
<b>6. CHILD DEVELOPMENT</b>					
6.1	Support for learning	EC	Number of children age 36-59 months with whom an adult has engaged in four or more activities to promote learning and school readiness 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 learning	EC	Number of children age 36-59 months whose father has engaged in one or more activities to promote learning and school readiness in the past 3 days	Total number of children age 36-59 months	
6.3	Learning materials: 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 alone or in the care of another child younger than 10 years of age for more than one hour at least once in the past week	Total number of children under age 5	
6.6	Early child development index	EC	Number of children age 36-59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains	Total number of children age 36-59 months	
6.7	Attendance to early childhood education	EC	Number of children age 36-59 months who are attending an early childhood education programme	Total number of children age 36-59 months	
<b>7. LITERACY AND EDUCATION</b>					
7.1	Literacy rate among young women	WB	Number of women age 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education	Total number of women age 15-24 years	MDG 2.3
7.2	School readiness	ED	Number of children in first grade of primary school who attended pre-school during the previous school year	Total number of children attending the first grade of primary school	
7.3	Net intake rate in primary 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 school age currently attending primary 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 school age currently attending secondary 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 first grade of primary school who eventually reach last grade		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 completion age (age appropriate to final grade of primary school)	
7.8	Transition rate to secondary school	ED	Number of children attending the last grade of primary school during the previous school year who are in the first grade of secondary school during 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
<b>8. CHILD PROTECTION</b>					
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 who are involved in child labour and 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 who are involved in child labour and are currently attending school	Total number of children age 5-14 years attending school	



MICS4 INDICATOR		Module <sup>1</sup>	Numerator	Denominator	MDG <sup>2</sup>
8.5	Violent discipline	CD	Number of children age 2-14 years who experienced psychological aggression or physical punishment 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 who were first married or in union by 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 who were first married or in union by the exact age of 18	Total number of women age 20-49 years	
8.8	Young women age 15-19 years currently 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 8.10b	Spousal age difference	MA	Number of women currently married or in union whose spouse is 10 or more years older, (a) for women age 15-19 years, (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 domestic 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	
<b>9. HIV/AIDS, SEXUAL BEHAVIOUR AND ORPHANS</b>					
9.1	Comprehensive knowledge about HIV prevention	HA	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 knowledge about HIV prevention among young people	HA	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-to-child transmission of HIV	HA	Number of women age 15-49 years who correctly identify all three means <sup>14</sup> of mother-to-child transmission of HIV	Total number of women age 15-49 years	
9.4	Accepting attitudes towards people living with HIV	HA	Number of women age 15-49 years expressing accepting attitudes on all four questions <sup>15</sup> toward people living with HIV	Total number of women age 15-49 years who have heard of HIV	
9.5	Women who know where to be tested for HIV	HA	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 been tested for HIV and know the results	HA	Number of women age 15-49 years who have been tested for HIV in the 12 months preceding the survey and who know their results	Total number of women age 15-49 years	
9.7	Sexually active young women who have been tested for HIV and know the results	HA	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	HA	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 INDICATOR		Module <sup>1</sup>	Numerator	Denominator	MDG <sup>2</sup>
9.9	HIV testing during antenatal care	HA	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 age 15-24 years who have never 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 who have had sexual intercourse 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 who had sex in the 12 months preceding the survey with a partner 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 who have had sexual intercourse with more than one partner in the 12 months preceding the survey	Total number of women age 15-49 years	
9.14	Condom use during sex with multiple 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 arrangements	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 who have lost both parents and are 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, whose parents are alive, who are living with one or both parents, and 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
<b>11. SUBJECTIVE WELL-BEING</b>					
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 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)

- 1 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
- 3 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
- 5 Infants receiving breast milk, and not receiving any other fluids or foods, with the exception of oral rehydration solution, vitamins, mineral supplements and medicines
- 6 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
- 10 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
- 15 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

# APPENDIX H. HOUSEHOLD QUESTIONNAIRE



## HOUSEHOLD QUESTIONNAIRE BELIZE

HOUSEHOLD INFORMATION PANEL		HH
HH1. Cluster number _____	HH2. Household number: _____	
HH3. Interviewer name and number: Name _____	HH4. Supervisor name and number: Name _____	
HH5. Day/Month/Year of interview: _____ / _____ / _____		
HH6. Area: Urban ..... 1 Rural ..... 2	HH7. Region: Corozal ..... 1 Orange Walk..... 2 Belize (Excluding Belize City South Side) ..... 3 Cayo .....4 Stann Creek..... 5 Toledo .....6 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?

- Yes, permission is given ⇒ Go to HH18 to record the time and then begin the interview.
- No, permission is not given ⇒ Complete HH9. Discuss this result with your supervisor.

After all questionnaires for the household have been completed, fill in the following information:	
HH8. Name of head of household: _____	
HH9. Result of household interview Completed ..... 01 No household member or no competent respondent at home at time of visit ..... 02 Entire household absent for extended period of time ..... 03 Refused ..... 04 Dwelling vacant / Address not a dwelling ..... 05 Dwelling destroyed ..... 06 Dwelling not found ..... 07  Other ( <i>specify</i> ) _____ 96	HH10. Respondent to household questionnaire: Name: _____ Line Number: _____
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): Name _____	HH17. Data entry clerk (Name and number): Name _____

HH18.  
Record the time.

Hour ..... — m

Minutes ..... —

am/pm ..... — m

### 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)

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. 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.

		For women age 15-49		For children age 5-14	For children under age 5	For children age 2-9	For children age 0-17 years							
HL1. Line number	HL2. Name	HL3. WHAT IS THE RELATIONSHIP OF (name) TO THE HEAD OF HOUSEHOLD?	HL4. IS (name) MALE OR FEMALE?  1 Male 2 Female	HL5. WHAT IS (name)'S DATE OF BIRTH?  98 DK 9998 DK	HL6. HOW OLD IS (name)?  Record in circle completed years. If age is 95 or above, record '95'	HL7. Circle line number if woman is age 15-49	HL8. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record line number of mother/ caretaker	HL9. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record line number of mother/ caretaker	HL9A. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record line number of mother/ caretaker	HL11. IS (name)'S NATURAL MOTHER ALIVE?  1 Yes 2 No 8 DK	HL12. DOES (name)'S NATURAL MOTHER LIVE IN THIS HOUSEHOLD?  Record line number of mother or 00 for "No"	HL13. IS (name)'S NATURAL FATHER ALIVE?  1 Yes 2 No 8 DK	HL14. DOES (name)'S NATURAL FATHER LIVE IN THIS HOUSEHOLD?  Record line number of father or 00 for "No"	
Line	Name	Relation*	M	F	Month	Year	Age	Mother	Mother	Mother	Y	N	DK	Father
01		0 1	1	2							1	2	8	
02			1	2							1	2	8	
03			1	2							1	2	8	
04			1	2							1	2	8	
05			1	2							1	2	8	
06			1	2							1	2	8	
07			1	2							1	2	8	
08			1	2							1	2	8	
09			1	2							1	2	8	

HL1. Line number	HL2. Name	HL3. WHAT IS THE RELATION -SHIP OF (name) TO THE HEAD OF HOUSE- HOLD?	HL4. IS (name) MALE OR FEMALE?  1 Male 2 Female	HL5. WHAT IS (name)'S DATE OF BIRTH?  98 DK 9998 DK	HL6. HOW OLD IS (name)?  Record in completed years. If age is 95 or above, record '95'	HL7.  Circle line number if woman is age 15-49	HL8. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record line number of mother/ caretaker	HL9. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record line number of mother/ caretaker	HL9A. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD?  Record line number of mother/ caretaker	HL11. IS (name)'S NATURAL MOTHER ALIVE?  1 Yes 2 No's 8 DK's HL 13 HL 13	HL12. DOES (name)'S NATURAL MOTHER LIVE IN THIS HOUSEHOLD?  Record line number of mother or 00 for "No"	HL13. IS (name)'S NATURAL FATHER ALIVE?  1 Yes 2 No's Next Line 8 DK's Next Line	HL14. DOES (name)'S NATURAL FATHER LIVE IN THIS HOUSEHOLD?  Record line number of father or 00 for "No"
Line	Name	Relation*	M F	Month	Year	Age	Mother	Mother	Mother	Y N DK	Mother	Y N DK	Father
10			1 2			10				1 2 8		1 2 8	
11			1 2			11				1 2 8		1 2 8	
12			1 2			12				1 2 8		1 2 8	
13			1 2			13				1 2 8		1 2 8	
14			1 2			14				1 2 8		1 2 8	
15			1 2			15				1 2 8		1 2 8	

Codes for HL3: Relationship to head of household:

01 Head  
02 Wife / Husband  
03 Son / Daughter

04 Son-in-Law/Daughter-in-Law  
05 Grandchild  
06 Parent

07 Parent-in-Law  
08 Brother/Sister  
09 Brother-in-Law/Sister-in-Law

10 Uncle/Aunt  
11 Niece/Nephew  
12 Other relative

13 Adopted/Foster/Stepchild  
14 Not related  
98 Don't know

Tick here if additional questionnaire is used

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.  
For each child under 5 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 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.

EDUCATION		ED													
		For household members age 5 and above					For household members age 5-24 years								
ED1. Line number	ED2. Name and age Copy from Household Listing Form, HL2 and HL6	ED3. HAS (name) EVER ATTENDED SCHOOL OR PRE- SCHOOL?		ED4A. WHAT IS THE HIGHEST LEVEL OF SCHOOL (name) ATTENDED?		ED4B. WHAT IS THE HIGHEST STANDARD /FORM/YEAR (name) COMPLETED AT THIS LEVEL?		ED5. DURING THE 2010-2011 SCHOOL YEAR, DID (name) ATTEND SCHOOL OR PRE-SCHOOL AT ANY TIME?		ED6. DURING THIS SCHOOL YEAR, WHICH LEVEL AND STANDARD /FORM/YEAR IS (name) ATTENDING?		ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS 2009- 2010, DID (name) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME?		ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND STANDARD /FORM/YEAR DID (name) ATTEND?	
		Yes	No	Level	Level	Yes	No	Level	Level	Y	N	DK	Level	Level	Std/Form/ Year
		1 Yes	2 No	0 Preschool 1 Infant 2 Secondary 4 Associates 5 Bachelors & Higher 6 CET/ITVET/NOTEC 8 DK 9 Other If level=0, skip to ED5	98 DK If less than 1 year, enter 00.	1 Yes 2 No	0 Preschool 1 Infant 2 Secondary 4 Associates 5 Bachelors & Higher 6 ET/ITVET/NOTEC 8 DK 9 Other If level=0, skip to ED7	0 Preschool 1 Infant 2 Secondary 4 Associates 5 Bachelors & Higher 6 CET/ITVET/NOTEC 8 DK 9 Other If level=0, go to next line.	1 Yes 2 No 8 DK Next Line	Y	N	DK	Level	Std/Form/ Year	
01		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
02		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
03		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
04		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
05		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
06		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
07		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
08		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
09		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
10		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
11		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
12		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
13		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
14		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			
15		1	2	0 1 2 4 5 6 7 8 9		1	2	0 1 2 4 5 6 7 8 9	1	2	8	0 1 2 4 5 6 7 8 9			

WATER AND SANITATION		WS
WS1. WHAT IS THE <u>MAIN</u> SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?	Piped water Piped into dwelling ..... 11 Piped into compound, yard or plot..... 12 Piped to neighbour ..... 13 Public tap/standpipe ..... 14 Hand pump ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Bottled water ..... 91 Other ( <i>specify</i> ) _____ 96	11⇒WS6 12⇒WS6 13⇒WS6 14⇒WS3 21⇒WS3 31⇒WS3 32⇒WS3 41⇒WS3 42⇒WS3 51⇒WS3 61⇒WS3 71⇒WS3 81⇒WS3 96⇒WS3
WS2. WHAT IS THE <u>MAIN</u> SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HAND WASHING?	Piped water Piped into dwelling ..... 11 Piped into compound, yard or plot..... 12 Piped to neighbour ..... 13 Public tap/standpipe ..... 14 Hand pump ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Other ( <i>specify</i> ) _____ 96	11⇒WS6 12⇒WS6 13⇒WS6
WS3. WHERE IS THAT WATER SOURCE LOCATED?	In own dwelling ..... 1 In own yard / plot..... 2 Elsewhere ..... 3	1⇒WS6 2⇒WS6
WS4. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?	Number of minutes..... _ _ _ DK..... 998	



<p>WS5. WHO USUALLY GOES TO THIS SOURCE TO FETCH THE WATER FOR YOUR HOUSEHOLD?</p> <p><i>Probe:</i> IS THIS PERSON UNDER AGE 15? WHAT SEX?</p>	<p>Female (age 15+ years) ..... 1 Male (age 15+ years) ..... 2 Female (under 15) ..... 3 Male (under 15) ..... 4  DK ..... 8</p>	
<p>WS6. DO YOU DO ANYTHING TO THE WATER TO MAKE IT SAFER TO DRINK?</p>	<p>Yes ..... 1 No ..... 2  DK ..... 8</p>	<p>2⇒WS8  8⇒WS8</p>
<p>WS7. WHAT DO YOU USUALLY DO TO MAKE THE WATER SAFER TO DRINK?</p> <p><i>Probe:</i> ANYTHING ELSE?</p> <p><i>Record all items mentioned.</i></p>	<p>Boil ..... A Add bleach / chlorine ..... B Strain it through a cloth ..... C Use water filter (ceramic, sand, composite, etc.) ..... D Solar disinfection ..... E Let it stand and settle ..... F  Other (<i>specify</i>) ..... X DK ..... Z</p>	
<p>WS8. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE?</p> <p><i>If “flush” or “pour flush”, probe:</i> WHERE DOES IT FLUSH TO?</p> <p><i>If necessary, ask permission to observe the facility.</i></p>	<p>Flush / Pour flush Flush to piped sewer system ..... 11 Flush to septic tank ..... 12 Flush to pit (latrine) ..... 13 Flush to somewhere else ..... 14 Flush to unknown place / Not sure / DK where ..... 15 Pit latrine Ventilated Improved Pit latrine (VIP) .... 21 Pit latrine with slab ..... 22 Pit latrine without slab / Open pit ..... 23  Composting toilet ..... 31 Bucket ..... 41 Hanging toilet, Hanging latrine ..... 51  No facilities, Bush, Field ..... 95  Other (<i>specify</i>) ..... 96</p>	<p>95⇒Next Module</p>
<p>WS9. DO YOU SHARE THIS FACILITY WITH OTHERS WHO ARE NOT MEMBERS OF YOUR HOUSEHOLD?</p>	<p>Yes ..... 1 No ..... 2</p>	<p>2⇒Next Module</p>
<p>WS10. DO YOU SHARE THIS FACILITY ONLY WITH MEMBERS OF OTHER HOUSEHOLDS THAT YOU KNOW, OR IS THE FACILITY OPEN TO THE USE OF THE GENERAL PUBLIC?</p>	<p>Other households only (not public) ..... 1 Public facility ..... 2</p>	<p>2⇒Next Module</p>
<p>WS11. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY, INCLUDING YOUR OWN HOUSEHOLD?</p>	<p>Number of households (if less than 10) 0 __  Ten or more households ..... 10  DK ..... 98</p>	

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  Other ( <i>specify</i> ) _____ 96 Don't Know.....98	
HC1B. WHAT IS THE FIRST LANGUAGE OF THE HEAD OF THIS HOUSEHOLD?	English.....01 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.....01 East Indian.....02 Garifuna.....03 Maya (Ketchi/Mopan/Yucatecan).....04 Mennonite.....05 Mestizo/Spanish/Latino/Hispanic.....06 Asian (China/Hong Kong/Taiwan).....07 Caucasian/White.....08  Other ( <i>specify</i> ) _____ 96 DK/NS.....98	
HC2. HOW MANY ROOMS IN THIS DWELLING UNIT ARE USED FOR SLEEPING BY THE MEMBERS OF THIS HOUSEHOLD?	Number of rooms ..... __ __	
HC3. <i>Main material of the dwelling unit floor.</i>  <i>Record observation.</i> <i>If there is more than one kind of material, record the main flooring material.</i>	Natural floor Earth/ Sand ..... 11  Rudimentary floor Wood planks ..... 21 Plywood ..... 23  Finished floor Parquet or polished wood..... 31 Concrete..... 34  Other ( <i>specify</i> ) _____ 96	

<p>HC4. <i>Main material of the roof.</i></p> <p><i>Record observation.</i></p>	<p>Natural roofing Thatch/Bay leaf ..... 12</p> <p>Rudimentary Roofing Rubber rye..... 25</p> <p>Finished roofing Sheet metal/corrugated zinc ..... 31 Concrete ..... 35 Roofing shingles ..... 36</p> <p>Other (<i>specify</i>) _____ 96</p>										
<p>HC5. <i>Main material of the exterior walls.</i></p> <p><i>Record observation.</i></p>	<p>Natural walls No walls ..... 11 Palmetto/Wildcane/Sticks ..... 12</p> <p>Rudimentary walls Bamboo with mud ..... 21 Stone with mud ..... 22 Plywood ..... 24 Carton ..... 25 Reused wood ..... 26</p> <p>Finished walls Concrete ..... 31 Stone with lime/concrete ..... 32 Bricks ..... 33 Cement blocks ..... 34 Wood planks/shingles ..... 36 Wood and concrete ..... 37 Stucco ..... 38</p> <p>Other(<i>specify</i>) _____ 96</p>										
<p>HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD <u>MAINLY</u> USE FOR COOKING?</p>	<p>Electricity ..... 01 Butane ..... 02 Biogas ..... 04 Kerosene ..... 05 Charcoal ..... 07 Wood ..... 08 Agricultural crop residue ..... 11</p> <p>No food cooked in household ..... 95 Other (<i>specify</i>) _____ 96</p>	<p>01⇒HC8 02⇒HC8 04⇒HC8 05⇒HC8  95⇒HC8</p>									
<p>HC7. IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS?</p> <p><i>If 'In the house', probe: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN?</i></p>	<p>In the house In a separate room used as kitchen ..... 1 Elsewhere in the house ..... 2 In a separate building ..... 3 Outdoors ..... 4</p> <p>Other (<i>specify</i>) _____ 6</p>										
<p>HC8. DOES YOUR HOUSEHOLD HAVE:</p> <p>[A] ELECTRICITY?</p> <p>[B] A RADIO?</p>	<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>Electricity.....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Radio.....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		Yes	No	Electricity.....	1	2	Radio.....	1	2	
	Yes	No									
Electricity.....	1	2									
Radio.....	1	2									

	Yes	No
[C] A TELEVISION?	Television ..... 1	2
[D] A NON-MOBILE TELEPHONE?	Non-mobile telephone ..... 1	2
[E] A REFRIGERATOR?	Refrigerator ..... 1	2
[F] A FAN?	Fan ..... 1	2
[G] A MICRO WAVE OVEN?	Micro Wave Oven ..... 1	2
[H] A SECURITY ALARM SYSTEM?	Security Alarm System ..... 1	2
[I] A WASHING MACHINE?	Washing Machine ..... 1	2
[J] A DV D PLAYER?	DVD Player ..... 1	2
[K] A GAS BAR-B-Q GRILL?	Gas Bar-B-Q Grill ..... 1	2
[L] AN AIR CONDITIONER?	Air Conditioner ..... 1	2
[M] A WATER COOLER?	Water Cooler ..... 1	2
[N] A SOFA?	Sofa ..... 1	2
[O] A DINING ROOM TABLE?	Dining Room Table ..... 1	2
[P] A CLOTHES CLOSET?	Clothes Closet ..... 1	2
HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:		
	Yes	No
[A] A WATCH?	Watch ..... 1	2
[B] A CELL TELEPHONE?	Cell telephone ..... 1	2
[C] A BICYCLE?	Bicycle ..... 1	2
[D] A MOTORCYCLE OR SCOOTER?	Motorcycle/Scooter ..... 1	2
[F] A CAR OR TRUCK?	Car/Truck ..... 1	2
[G] A BOAT WITH A MOTOR?	Boat with motor ..... 1	2
[H] AN MP3/MP4 PLAYER?	Mp3/mp4 player ..... 1	2
[I] A FISHING ROD?	Fishing Rod ..... 1	2
[J] A WEIGHT TRAINING MACHINE?	Weight Training Machine ..... 1	2
[K] A COMPUTER	Computer ..... 1	2

<p>HC10. DO YOU OR SOMEONE LIVING IN THIS HOUSEHOLD OWN THIS DWELLING?</p> <p><i>If "No", then ask: DO YOU RENT THIS DWELLING FROM SOMEONE NOT LIVING IN THIS HOUSEHOLD?</i></p> <p><i>If "Rented from someone else", circle "2". For other responses, circle "6".</i></p>	<p>Own..... 1 Rent ..... 2</p> <p>Other (Not owned or rented)..... 6</p>	
<p>HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?</p>	<p>Yes..... 1 No ..... 2</p>	2⇒HC13
<p>HC12. HOW MANY ACRES OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN?</p> <p><i>If less than 1, record "00". If 95 or more, record '95'. If unknown, record '98'.</i></p>	<p>Acres..... ____</p>	
<p>HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?</p>	<p>Yes..... 1 No ..... 2</p>	2⇒HC15
<p>HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD OWN?</p> <p>[A] CATTLE, MILK COWS, OR BULLS?</p> <p>[B] HORSES, DONKEYS, OR MULES?</p> <p>[C] GOATS?</p> <p>[D] SHEEP?</p> <p>[E] CHICKENS?</p> <p>[F] PIGS?</p> <p><i>If none, record '00'. If 95 or more, record '95'. If unknown, record '98'.</i></p>	<p>Cattle, milk cows, or bulls..... ____</p> <p>Horses, donkeys, or mules..... ____</p> <p>Goats ..... ____</p> <p>Sheep..... ____</p> <p>Chickens ..... ____</p> <p>Pigs ..... ____</p>	
<p>HC15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT, A BANK BOOK OR CREDIT UNION BOOK?</p>	<p>Yes..... 1 No ..... 2</p>	

**CHILD LABOUR**

**CL**

To be administered for children in the household age 5-14 years. For household members below age 5 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. Line number	CL2. Name and Age		CL3. DURING THE PAST WEEK, DID (name) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? <i>If yes: FOR PAY IN CASH OR KIND?</i>			CL4. SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? <i>If more than one job, include all hours at all jobs.</i>			CL5. DURING THE PAST WEEK, DID (name) FETCH WATER OR COLLECT FIREWOOD FOR HOUSEHOLD USE?			CL6. SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE FETCH WATER OR COLLECT FIREWOOD FOR HOUSEHOLD USE?			CL7. DURING THE PAST WEEK, DID (name) DO ANY PAID OR UNPAID WORK FOR A HOUSEHOLD MEMBER ON A FAMILY FARM OR IN A FAMILY BUSINESS OR SELLING GOODS IN THE STREET? <i>Include work for a business run by the child, alone or with one or more partners.</i>			CL8. SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR HIS/HER FAMILY OR HIMSELF/HERSELF?			CL9. DURING THE PAST WEEK, DID (name) HELP WITH HOUSEHOLD CHORES SUCH AS SHOPPING, CLEANING, WASHING CLOTHES, COOKING; OR CARING FOR CHILDREN, OLD OR SICK PEOPLE?			CL10. SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE SPEND DOING THESE CHORES?			CL11. DURING THE PAST WEEK, WHEN DID (name) CARRY OUT THESE HOUSEHOLD CHORES?  <i>Circle all that apply</i>  Times: A. Morning B. Afternoon C. Evening D. Night			CL12. DURING THE PAST WEEK, WHICH HOUSEHOLD CHORES WAS (name) MAINLY CARRYING OUT?  <i>Circle all that apply</i>  Chores: A. Cooking/Serving Food B. Shopping for H. hold C. Cleaning Utensils/ house D. Washing clothes E. Minor household repairs F. Caring for children G. Caring for elderly or sick H. Other		
Line	Name	Age	Yes Paid	No Unpaid	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Times	Chores										
01			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
02			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
03			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
04			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
05			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
06			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
07			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
08			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
09			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
10			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
11			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
12			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
13			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
14			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									
15			1	2	3			1	2			1	2					1	2			A B C D	A B C D E F G H									

**Table 1: Children Aged 2-14 Years Eligible for Child Discipline Questions**

- 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.
- Record the line number, name, sex, and age for each child.
- Then record the total number of children aged 2-14 in the box provided (CD6).

CD1. Rank number	CD2. Line number from HL1	CD3. Name from HL2	CD4. Sex from HL4		CD5. Age from HL6	
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 children age 2-14 years					___

- 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.
- Check the total number of eligible children (2-14) in CD6 above. This is the number of the column you should go to.
- 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. Last digit of household number (HH2)	Total Number of Eligible Children in the Household (CD6)							
	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 .....

<p>CD9. Write the name and line number of the child selected for the module from CD3 and CD2, based on the rank number in CD8.</p>	<p>Name _____ Line number ..... _ _ _</p>	
<p>CD10. ADULTS USE CERTAIN WAYS TO TEACH CHILDREN THE RIGHT BEHAVIOUR OR TO ADDRESS A BEHAVIOUR PROBLEM. I WILL READ VARIOUS METHODS THAT ARE USED AND I WANT YOU TO TELL ME IF YOU OR ANYONE ELSE IN YOUR HOUSEHOLD HAS USED THIS METHOD WITH (name) IN THE PAST MONTH.</p> <p>CD11. TOOK AWAY PRIVILEGES, FORBADE SOMETHING (name) LIKED OR DID NOT ALLOW HIM/HER TO LEAVE HOUSE.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD12. EXPLAINED WHY (name)'S BEHAVIOUR WAS WRONG.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD13. SHOOK HIM/HER.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD14. SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD15. GAVE HIM/HER SOMETHING ELSE TO DO.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD16. SPANKED, HIT OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD17. HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, HAIRBRUSH, STICK OR OTHER HARD OBJECT.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD18. CALLED HIM/HER STUPID, LAZY, OR ANOTHER NAME LIKE THAT.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD19. HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD20. HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD21. BEAT HIM/HER UP, THAT IS HIT HIM/HER OVER AND OVER AS HARD AS ONE COULD.</p>	<p>Yes ..... 1 No ..... 2</p>	
<p>CD22. DO YOU BELIEVE THAT IN ORDER TO BRING UP, RAISE, OR EDUCATE A CHILD PROPERLY, THE CHILD NEEDS TO BE PHYSICALLY PUNISHED?</p>	<p>Yes ..... 1 No ..... 2 Don't know/No opinion ..... 8</p>	



HANDWASHING		HW
<p>HW1. PLEASE SHOW ME WHERE MEMBERS OF YOUR HOUSEHOLD MOST OFTEN WASH THEIR HANDS.</p>	<p>Observed ..... 1</p> <p>Not observed</p> <p>Not in dwelling / plot / yard ..... 2</p> <p>No permission to see ..... 3</p> <p>Other reason ..... 6</p>	<p>2 ⇨ HW4</p> <p>3 ⇨ HW4</p> <p>6 ⇨ HW4</p>
<p>HW2. <i>Observe presence of water at the specific place for hand washing.</i></p> <p><i>Verify by checking the tap/pump, or basin, bucket, water container or similar objects for presence of water.</i></p>	<p>Water is available ..... 1</p> <p>Water is not available ..... 2</p>	
<p>HW3. <i>Record if soap or detergent is present at the specific place for hand washing.</i></p> <p><i>Circle all that apply.</i></p> <p><i>Skip to HH19 if any soap or detergent code (A, B, C or D) is circled. If "None" (Y) is circled, continue with HW4.</i></p>	<p>Bar soap ..... A</p> <p>Detergent (Powder / Liquid / Paste) ..... B</p> <p>Liquid soap ..... C</p> <p>Ash / Mud / Sand ..... D</p> <p>None ..... Y</p>	<p>A ⇨ HH19</p> <p>B ⇨ HH19</p> <p>C ⇨ HH19</p> <p>D ⇨ HH19</p>
<p>HW4. DO YOU HAVE ANY BAR SOAP, SOAP POWDER OR LIQUID SOAP IN YOUR HOUSEHOLD FOR WASHING HANDS?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	<p>2 ⇨ HH19</p>
<p>HW5. CAN YOU PLEASE SHOW IT TO ME?</p> <p><i>Record observation. Circle all that apply.</i></p>	<p>Bar soap ..... A</p> <p>Detergent (Powder / Liquid / Paste) ..... B</p> <p>Liquid soap ..... C</p> <p>Ash / Mud / Sand ..... D</p> <p>Not able / Does not want to show ..... Y</p>	

HH19. Record the time.

Hour, minutes and am/pm ..... \_\_\_\_ : \_\_\_\_ \_\_\_\_ m

HH20. Does any eligible woman age 15-49 reside in the household?

Check Household Listing Form, column HL7 for any eligible woman.

You should have a questionnaire with the Information Panel filled in for each eligible woman.

Yes ⇒ Go to *QUESTIONNAIRE FOR INDIVIDUAL WOMEN* to administer the questionnaire to the first eligible woman.

No ⇒ Continue.

HH21. Does any child under the age of 5 reside in the household?

Check Household Listing Form, column HL9 for any eligible child under age 5.

You should have a questionnaire with the Information Panel filled in for each eligible child.

Yes ⇒ Go to *QUESTIONNAIRE FOR CHILDREN UNDER FIVE* to administer the questionnaire to mother or caretaker of the first eligible child.

No ⇒ Continue.

HH22. Does any child age 2-9 reside in the household?

Check Household Listing Form, column HL9A for any eligible child.

You should have a questionnaire with the Information Panel filled in for each eligible child age 2-9.

Yes ⇒ Go to *QUESTIONNAIRE FOR CHILD DISABILITY* to administer the questionnaire for the first eligible child.

No ⇒ End the interview by thanking the respondent for his/her cooperation.  
Gather together all questionnaires for this household and complete HH8 to HH15B on the cover page.

**Interviewer's Observations**

**Field Editor's Observations**

**Supervisor's Observations**

# APPENDIX I. QUESTIONNAIRE FOR INDIVIDUAL WOMEN



## QUESTIONNAIRE FOR INDIVIDUAL WOMEN BELIZE

WOMAN'S INFORMATION PANEL		WM
<p><i>This questionnaire is to be administered to all women age 15 through 49 (see Household Listing Form, column HL7). Fill in a separate questionnaire for each eligible woman.</i></p>		
WM1. Cluster number _____	WM2. Household number _____	
WM3. Woman's name: Name _____	WM4. Woman's line number: _____	
WM5. Interviewer name and number: Name _____	WM6. Day/Month/Year of interview: ____ / ____ / _____	

*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.

*If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:*

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 20 MINUTES. AGAIN, 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 record the time and then begin the interview.
- No, permission is not given ⇒ Complete WM7. Discuss this result with your supervisor.

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): Name _____	WM9. Data entry clerk (Name and number): 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 ..... ____ DK month ..... 98  Year ..... ____ DK year ..... 9998	
WB2. HOW OLD ARE YOU?  <i>Probe: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?</i>  <i>Compare and correct WB1 and/or WB2 if inconsistent</i>	Age (in completed years) ..... ____	
WB3. HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL?	Yes..... 1 No ..... 2	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/YEAR YOU COMPLETED AT THAT LEVEL?  <i>If less than Standard 1, Form 1 or Year 1, enter "00"</i>	Standard/Form/Year..... ____  DK ..... 98	
WB6. Check WB4:		
<input type="checkbox"/> Secondary or higher. ⇒ Go to Next Module  <input type="checkbox"/> Infant, Primary, other or DK ⇒ Continue with WB7		
WB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME.  <i>Show sentence on the card to the respondent. If respondent cannot read whole sentence, probe:</i>  CAN YOU READ PART OF THE SENTENCE TO ME?	Cannot read at all..... 1 Able to read only parts of sentence ..... 2 Able to read whole sentence ..... 3  No sentence in required language _____ 4 <i>(specify language)</i>  Blind/mute, visually/speech impaired ..... 5	

**CHILD MORTALITY**

**CM**

*All of the following questions refer only to **LIVE** births*

<p>CM1. NOW I WOULD LIKE TO ASK ABOUT ALL THE LIVE BIRTHS YOU HAVE HAD DURING YOUR LIFE.</p> <p>HAVE YOU EVER GIVEN BIRTH?</p>	<p>Yes.....1 No.....2</p>	<p>2⇒CM8</p>
<p>CM2. WHAT WAS THE DATE OF YOUR FIRST BIRTH?</p> <p>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.</p> <p><i>Skip to CM4 only if year of first birth is given. Otherwise, continue with CM3.</i></p>	<p>Date of first birth Day..... DK day.....98</p> <p>Month..... DK month.....98</p> <p>Year..... DK year.....9998</p>	<p>⇒CM4</p>
<p>CM3. HOW MANY YEARS AGO DID YOU HAVE YOUR FIRST BIRTH?</p>	<p>Completed years since first birth.....</p>	
<p>CM4. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?</p>	<p>Yes.....1 No.....2</p>	<p>2⇒CM6</p>
<p>CM5. HOW MANY SONS LIVE WITH YOU?</p> <p>HOW MANY DAUGHTERS LIVE WITH YOU?</p> <p><i>If none, record '00'.</i></p>	<p>Sons at home.....</p> <p>Daughters at home.....</p>	
<p>CM6. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?</p>	<p>Yes.....1 No.....2</p>	<p>2⇒CM8</p>
<p>CM7. HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU?</p> <p>HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU?</p> <p><i>If none, record '00'.</i></p>	<p>Sons elsewhere.....</p> <p>Daughters elsewhere.....</p>	
<p>CM8. HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED?</p> <p><i>If "No" probe by asking:</i> 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?</p>	<p>Yes.....1 No.....2</p>	<p>2⇒CM10</p>
<p>CM9. HOW MANY BOYS HAVE DIED?</p> <p>HOW MANY GIRLS HAVE DIED?</p> <p><i>If none, record '00'.</i></p>	<p>Boys dead.....</p> <p>Girls dead.....</p>	
<p>CM10. <i>Sum answers to CM5, CM7, and CM9.</i></p>	<p>Sum.....</p>	

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:

No live births ⇒ Go to *ILLNESS SYMPTOMS* Module.

One or more live births ⇒ Continue with CM12

No ⇒ Check responses to CM1-CM10 and make corrections as necessary before proceeding.

CM12. OF THESE (*total number in CM10*) BIRTHS YOU HAVE HAD, WHEN DID YOU DELIVER THE LAST ONE (EVEN IF HE OR SHE HAS DIED)?

*Month and year must be recorded.*

Date of last birth

Day.....\_\_\_\_\_

DK day.....98

Month.....\_\_ \_\_

Year .....\_\_ \_\_ \_\_ \_\_

CM13. Check CM12: Last birth occurred within the last 2 years, that is, since (day and month of interview) in **2009**

No  No live birth in last 2 years. ⇒ Go to *ILLNESS SYMPTOMS* Module

Yes  One or more live births in last 2 years. ⇒ Ask for the name of the child

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
<p><i>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.</i></p>		
DB1. WHEN YOU GOT PREGNANT WITH ( <i>name</i> ), DID YOU WANT TO GET PREGNANT AT THAT TIME?	Yes ..... 1 No ..... 2	1⇒Next Module
DB2. DID YOU WANT TO HAVE A BABY LATER ON, OR IS IT THAT YOU DID NOT WANT ANY (MORE) CHILDREN?	Later ..... 1 No more ..... 2	2⇒Next Module
DB3. HOW MUCH LONGER DID YOU WANT TO WAIT?	Months ..... 1 __ __ Years ..... 2 __ __ DK ..... 998	



MATERNAL AND NEWBORN HEALTH		MN												
<p><i>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.</i></p>														
MN1. DID YOU SEE ANYONE FOR PRENATAL CARE DURING YOUR PREGNANCY WITH (name)?	Yes ..... 1 No ..... 2	2⇒MN5												
MN2. WHOM DID YOU SEE?  <i>Probe:</i> ANYONE ELSE?  <i>Probe for the type of person seen and circle all answers given.</i>	Health professional: Doctor ..... A Nurse / Midwife ..... B Auxiliary midwife ..... C Other person Traditional birth attendant ..... F Community health worker ..... G  Other (specify) ..... X													
MN3. HOW MANY TIMES DID YOU RECEIVE PRENATAL CARE DURING THIS PREGNANCY?	Number of times ..... ____  DK ..... 98													
MN4. AS PART OF YOUR PRENATAL CARE DURING THIS PREGNANCY, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE:  [A] WAS YOUR BLOOD PRESSURE MEASURED?  [B] DID YOU GIVE A URINE SAMPLE?  [C] DID YOU GIVE A BLOOD SAMPLE?	<table border="0"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> </tr> </thead> <tbody> <tr> <td>Blood pressure .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Urine sample .....</td> <td>1</td> <td>2</td> </tr> <tr> <td>Blood sample .....</td> <td>1</td> <td>2</td> </tr> </tbody> </table>		Yes	No	Blood pressure .....	1	2	Urine sample .....	1	2	Blood sample .....	1	2	
	Yes	No												
Blood pressure .....	1	2												
Urine sample .....	1	2												
Blood sample .....	1	2												
MN5. DO YOU HAVE A PRENATAL CLINIC CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED?  MAY I SEE IT PLEASE?  <i>If a card is presented, use it to assist with answers to the following questions.</i>	Yes (card seen) ..... 1 Yes (card not seen) ..... 2 No ..... 3  DK ..... 8													
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 ..... 1  No ..... 2  DK ..... 8	2⇒MN9  8⇒MN9												
MN7. HOW MANY TIMES DID YOU RECEIVE THIS TETANUS INJECTION DURING YOUR PREGNANCY WITH (name)?  <i>If 7 or more times, record '7'.</i>	Number of times ..... ____  DK ..... 8	8⇒MN9												
MN8. How many tetanus injections during last pregnancy were reported in MN7?  <input type="checkbox"/> Two or more tetanus injections during last pregnancy. ⇒ Go to MN17  <input type="checkbox"/> Fewer than two tetanus injections during last pregnancy. ⇒ Continue with MN9														

<p>MN9. DID YOU RECEIVE ANY TETANUS INJECTION AT ANY TIME BEFORE YOUR PREGNANCY WITH <i>(name)</i>, EITHER TO PROTECT YOURSELF OR ANOTHER BABY?</p>	<p>Yes ..... 1  No ..... 2  DK ..... 8</p>	<p>2⇒MN17  8⇒MN17</p>
<p>MN10. HOW MANY TIMES DID YOU RECEIVE A TETANUS INJECTION BEFORE YOUR PREGNANCY WITH <i>(name)</i>?</p> <p><i>If 7 or more times, record '7'.</i></p>	<p>Number of times .....  DK ..... 8</p>	<p>8⇒MN17</p>
<p>MN11. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST TETANUS INJECTION BEFORE YOUR PREGNANCY WITH <i>(name)</i>?</p>	<p>Years ago.....</p>	
<p>MN17. WHO ASSISTED WITH THE DELIVERY OF <i>(name)</i>?</p> <p><i>Probe:</i>  ANYONE ELSE?</p> <p><i>Probe for the type of person assisting and circle all answers given.</i></p> <p><i>If respondent says no one assisted, probe to determine whether any adults were present at the delivery.</i></p>	<p>Health professional:  Doctor..... A  Nurse/ Midwife..... B  Auxiliary midwife..... C  Other person  Traditional birth attendant..... F  Community health worker..... G  Relative/Friend ..... H  Other (<i>specify</i>) ..... X  No one ..... Y</p>	
<p>MN18. WHERE DID YOU GIVE BIRTH TO <i>(name)</i>?</p> <p><i>Probe to identify the type of source.</i></p> <p><i>Write the name or description of the place below.</i></p> <p>_____</p> <p><i>(Name of place)</i></p>	<p>Home  Your home ..... 11  Other home ..... 12  Public sector  Govt. hospital ..... 21  Govt. clinic/health centre ..... 22  Govt. health post ..... 23  Other public (<i>specify</i>) ..... 26  Private Medical Sector  Private hospital ..... 31  Private clinic ..... 32  Private maternity home..... 33  Other private  medical (<i>specify</i>) ..... 36  Other (<i>specify</i>) ..... 96</p>	<p>11⇒MN20  12⇒MN20  96⇒MN20</p>
<p>MN19. WAS <i>(name)</i> DELIVERED BY CAESAREAN SECTION (C-SECTION)? THAT IS, DID THEY CUT YOUR BELLY OPEN TO TAKE THE BABY OUT?</p>	<p>Yes ..... 1  No ..... 2</p>	
<p>MN20. WHEN <i>(name)</i> WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?</p>	<p>Very large..... 1  Larger than average ..... 2  Average..... 3  Smaller than average ..... 4  Very small ..... 5  DK ..... 8</p>	
<p>MN21. WAS <i>(name)</i> WEIGHED AT BIRTH?</p>	<p>Yes ..... 1  No ..... 2  DK ..... 8</p>	<p>2⇒MN23  8⇒MN23</p>

<p>MN22. HOW MUCH DID <i>(name)</i> WEIGH?</p> <p><i>Record weight from health card, if available.</i></p> <p><i>Write the weight: Lbs _____ Oz _____ .</i></p>	<p>From card ..... 1 (lbs) ____ . ____</p> <p>From recall ..... 2 (lbs) ____ . ____</p> <p>DK ..... 99998</p>	
<p>MN23. HAS YOUR MENSTRUAL PERIOD RETURNED SINCE THE BIRTH OF <i>(name)</i>?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	
<p>MN24. DID YOU EVER BREASTFEED <i>(name)</i>?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	2⇒Next Module
<p>MN25. HOW LONG AFTER BIRTH DID YOU FIRST PUT <i>(name)</i> TO THE BREAST?</p> <p><i>If less than 1 hour, record '00' hours.</i></p> <p><i>If less than 24 hours, record hours.</i></p> <p><i>Otherwise, record days.</i></p>	<p>Immediately ..... 000</p> <p>Hours ..... 1 ____</p> <p>Days ..... 2 ____</p> <p>Don't know/remember ..... 998</p>	
<p>MN26. IN THE FIRST THREE DAYS AFTER DELIVERY, WAS <i>(name)</i> GIVEN ANYTHING TO DRINK OTHER THAN BREAST MILK??</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	2⇒Next Module
<p>MN27. WHAT WAS <i>(name)</i> GIVEN TO DRINK?</p> <p><i>(Circle all responses given)</i></p> <p><i>Probe:</i></p> <p>ANYTHING ELSE?</p>	<p>Milk (other than breast milk) ..... A</p> <p>Plain water ..... B</p> <p>Sugar or glucose water ..... C</p> <p>Gripe water ..... D</p> <p>Sugar-salt-water solution ..... E</p> <p>Fruit juice ..... F</p> <p>Infant formula ..... G</p> <p>Tea / Infusions ..... H</p> <p>Honey ..... I</p> <p>Other (<i>specify</i>) ..... X</p>	

**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?**

- Yes, the child was delivered in a health facility (MN18=21-26 or 31-36) ⇒ Continue with PN2*
- No, the child was not delivered in a health facility (MN18=11-12 or 96) ⇒ Go to PN6*

**PN2. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT WHAT HAPPENED IN THE HOURS AND DAYS AFTER THE BIRTH OF (name).**

YOU HAVE SAID THAT YOU GAVE BIRTH IN (name or type of facility in MN18). HOW LONG DID YOU STAY THERE AFTER THE DELIVERY?

*If less than one day, record hours.  
If less than one week, record days.  
Otherwise, record weeks.*

Hours..... 1 \_\_\_\_  
Days..... 2 \_\_\_\_  
Weeks ..... 3 \_\_\_\_  
Don't know / remember ..... 998

**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.**

BEFORE YOU LEFT THE (name or type of facility in MN18), DID ANYONE CHECK ON (name)'S HEALTH?

Yes..... 1  
No..... 2

**PN4. AND WHAT ABOUT CHECKS ON YOUR HEALTH – I MEAN, SOMEONE ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.**

DID ANYONE CHECK ON YOUR HEALTH BEFORE YOU LEFT (name or type or facility in MN18)?

Yes..... 1  
No..... 2

**PN5. NOW I WOULD LIKE TO TALK TO YOU ABOUT WHAT HAPPENED AFTER YOU GAVE BIRTH AT (name or type of facility in MN18).**

DID ANYONE CHECK ON (name)'S HEALTH AFTER YOU LEFT (name or type of facility in MN18)?

Yes..... 1     1⇒PN11  
No..... 2     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) ⇒ Continue with PN7*
- No, delivery not assisted by a health professional or other health worker (A-G not circled in MN17) ⇒ Go to PN10*

<p>PN7. YOU HAVE ALREADY SAID THAT (<i>person or persons in MN17</i>) ASSISTED WITH THE BIRTH. NOW I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (<i>name</i>)’S HEALTH AFTER DELIVERY, FOR EXAMPLE EXAMINING (<i>name</i>), CHECKING THE CORD, OR SEEING IF (<i>name</i>) IS OK.</p> <p>AFTER THE DELIVERY WAS OVER AND BEFORE (<i>person or persons in MN17</i>) LEFT YOU, DID (<i>person or persons in MN17</i>) CHECK ON (<i>name</i>)’S HEALTH?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	
<p>PN8. AND DID (<i>person or persons in MN17</i>) CHECK ON <u>YOUR</u> HEALTH BEFORE LEAVING?</p> <p>BY CHECK ON YOUR HEALTH, I MEAN ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	
<p>PN9. AFTER THE (<i>person or persons in MN17</i>) LEFT YOU, DID ANYONE CHECK ON THE HEALTH OF (<i>name</i>)?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	<p>1⇒PN11</p> <p>2⇒PN18</p>
<p>PN10. I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (<i>name</i>)’S HEALTH AFTER DELIVERY – FOR EXAMPLE, SOMEONE EXAMINING (<i>name</i>), CHECKING THE CORD, OR SEEING IF THE BABY IS OK.</p> <p>AFTER (<i>name</i>) WAS DELIVERED, DID ANYONE CHECK ON HIS/HER HEALTH?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	<p>2⇒PN19</p>
<p>PN11. DID SUCH A CHECK HAPPEN ONLY ONCE, OR MORE THAN ONCE?</p>	<p>Once ..... 1</p> <p>More than once ..... 2</p>	<p>1⇒PN12A</p> <p>2⇒PN12B</p>
<p>PN12A. HOW LONG AFTER DELIVERY DID THAT CHECK HAPPEN?</p> <p>PN12B. HOW LONG AFTER DELIVERY DID THE FIRST OF THESE CHECKS HAPPEN?</p> <p><i>If less than one day, record hours.</i>  <i>If less than one week, record days.</i>  <i>Otherwise, record weeks.</i></p>	<p>Hours ..... 1 ___</p> <p>Days ..... 2 ___</p> <p>Weeks ..... 3 ___</p> <p>Don’t know / remember ..... 998</p>	
<p>PN13. WHO CHECKED ON (<i>name</i>)’S HEALTH AT THAT TIME?</p>	<p>Health professional</p> <p>  Doctor ..... A</p> <p>  Nurse/ Midwife ..... B</p> <p>  Auxiliary midwife ..... C</p> <p>Other person</p> <p>  Traditional birth attendant ..... F</p> <p>  Community health worker ..... G</p> <p>  Relative/Friend ..... H</p> <p>Other (<i>specify</i>) ..... X</p>	

<p>PN14. WHERE DID THIS CHECK TAKE PLACE?</p> <p><i>Probe to identify the type of source.</i></p> <p><i>Write the name of the place below.</i></p> <p>_____</p> <p><i>(Name of place)</i></p>	<p>Home</p> <p>Your home ..... 11</p> <p>Other home..... 12</p> <p>Public sector</p> <p>Govt. hospital..... 21</p> <p>Govt. clinic/health centre ..... 22</p> <p>Govt. health post ..... 23</p> <p>Other public (<i>specify</i>) _____ 26</p> <p>Private medical sector</p> <p>Private hospital ..... 31</p> <p>Private clinic ..... 32</p> <p>Private maternity home ..... 33</p> <p>Other private medical (<i>specify</i>) _____ 36</p> <p>Other (<i>specify</i>) _____ 96</p>	
<p>PN15. Check MN18: Was the child delivered in a health facility?</p> <p><input type="checkbox"/> Yes, the child was delivered in a health facility (MN18=21-26 or 31-36) ⇒ Continue with PN16</p> <p><input type="checkbox"/> No, the child was not delivered in a health facility (MN18=11-12 or 96) ⇒ Go to PN17</p>		
<p>PN16. AFTER YOU LEFT (<i>name or type of facility in MN18</i>), DID ANYONE CHECK ON <u>YOUR</u> HEALTH?</p>	<p>Yes ..... 1</p> <p>No..... 2</p>	<p>1⇒PN20</p> <p>2⇒Next Module</p>
<p>PN17. Check MN17: Did a health professional, traditional birth attendant, or community health worker assist with the delivery?</p> <p><input type="checkbox"/> Yes, delivery assisted by a health professional or other health worker (MN17=A-G) ⇒Continue with PN18</p> <p><input type="checkbox"/> No, delivery not assisted by a health professional or other health worker (A-G not circled in MN17) ⇒ Go to PN19</p>		
<p>PN18. AFTER THE DELIVERY WAS OVER AND (<i>person or persons in MN17</i>) LEFT, DID ANYONE CHECK ON <u>YOUR</u> HEALTH?</p>	<p>Yes ..... 1</p> <p>No..... 2</p>	<p>1⇒PN20</p> <p>2⇒Next Module</p>
<p>PN19. AFTER THE BIRTH OF (<i>name</i>), DID ANYONE CHECK ON <u>YOUR</u> HEALTH?</p> <p>I MEAN SOMEONE ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.</p>	<p>Yes ..... 1</p> <p>No..... 2</p>	<p>2⇒Next Module</p>
<p>PN20. DID SUCH A CHECK HAPPEN ONLY ONCE, OR MORE THAN ONCE?</p>	<p>Once..... 1</p> <p>More than once ..... 2</p>	<p>1⇒PN21A</p> <p>2⇒PN21B</p>

IS1. Check Household Listing, column HL9

Is the respondent the mother or caretaker of any child under age 5?

Yes ⇒ Continue with IS2.

No ⇒ Go to Next Module.

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		CP
<p>CP1. I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING.</p> <p>ARE YOU PREGNANT NOW?</p>	<p>Yes, currently pregnant ..... 1</p> <p>No ..... 2</p> <p>Unsure or DK ..... 8</p>	1⇒Next Module
<p>CP2. SOME PEOPLE USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY.</p> <p>ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?</p>	<p>Yes..... 1</p> <p>No ..... 2</p>	2⇒Next Module
<p>CP3. WHICH METHOD ARE YOU USING?</p> <p><i>Do not prompt.</i></p> <p><i>Do not read methods.</i></p> <p><i>If more than one method is mentioned, circle each one.</i></p>	<p>Female sterilization (tie-off).....A</p> <p>Male sterilization (vasectomy).....B</p> <p>IUD/Coil.....C</p> <p>Injections.....D</p> <p>Implants .....E</p> <p>Pill .....F</p> <p>Male condom .....G</p> <p>Female condom .....H</p> <p>Diaphragm .....I</p> <p>Foam/ Jelly.....J</p> <p>Lactational amenorrhoea method (LAM) .....K</p> <p>Periodic abstinence/Rhythm/Calendar .....L</p> <p>Withdrawal .....M</p> <p>Other (<i>specify</i>) ..... X</p>	



UNMET NEED		UN
<b>UN1. Check CP1. Currently pregnant?</b> <input type="checkbox"/> Yes, currently pregnant ⇒ Continue with UN2 <input type="checkbox"/> No, unsure or DK ⇒ Go to UN5		
<b>UN2. Now I would like to talk to you about your current pregnancy. When you got pregnant, did you want to get pregnant at that time?</b>	Yes ..... 1 No ..... 2	1⇒UN4
<b>UN3. Did you want to have a baby later on or is it that you did not want any (more) children?</b>	Later ..... 1 No more ..... 2	
<b>UN4. Now I would like to ask some questions about the future. After the child you are now expecting, would you like to have another child, or would you prefer not to have any more children?</b>	Have another child ..... 1 No more / No ..... 2 Undecided / Don't know ..... 8	1⇒UN7 2⇒UN13 8⇒UN13
<b>UN5. Check CP3. Currently using "Female sterilization"?</b> <input type="checkbox"/> Yes ⇒ Go to UN13 <input type="checkbox"/> No ⇒ Continue with UN6		
<b>UN6. Now I would like to ask you some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?</b>	Have (a/another) child ..... 1 No more / None ..... 2 Says she cannot get pregnant ..... 3 Undecided / Don't know ..... 8	2⇒UN9 3⇒UN11 8⇒UN9
<b>UN7. How long would you like to wait before the birth of (a/another) child?</b>	Months ..... 1 __ __ Years ..... 2 __ __ Soon / Now ..... 993 Says she cannot get pregnant ..... 994 After marriage ..... 995 Other ..... 996 Don't know ..... 998	994⇒UN11
<b>UN8. Check CP1. Currently pregnant?</b> <input type="checkbox"/> Yes, currently pregnant ⇒ Go to UN13 <input type="checkbox"/> No, unsure or DK ⇒ Continue with UN9		

<p><b>UN9. Check CP2. Currently using a method?</b></p> <p><input type="checkbox"/> Yes ⇒ Go to UN13</p> <p><input type="checkbox"/> No ⇒ Continue with UN10</p>		
<p><b>UN10. DO YOU THINK YOU ARE PHYSICALLY ABLE TO GET PREGNANT AT THIS TIME?</b></p>	<p>Yes ..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	<p>1 ⇒ UN13</p> <p>8 ⇒ UN13</p>
<p><b>UN11. WHY DO YOU THINK YOU ARE NOT PHYSICALLY ABLE TO GET PREGNANT?</b></p> <p><i>Circle all codes that apply.</i></p>	<p>Infrequent sex / No sex ..... A</p> <p>Menopausal ..... B</p> <p>Never menstruated ..... C</p> <p>Hysterectomy (surgical removal of uterus) ..... D</p> <p>Has been trying to get pregnant for 2 years or more without result ..... E</p> <p>Postpartum amenorrheic ..... F</p> <p>Breastfeeding ..... G</p> <p>Too old ..... H</p> <p>Fatalistic ..... I</p> <p>Other (<i>specify</i>) ..... X</p> <p>Don't know ..... Z</p>	
<p><b>UN12. Check UN11. "Never menstruated" mentioned?</b></p> <p><input type="checkbox"/> Mentioned ⇒ Go to Next Module</p> <p><input type="checkbox"/> Not mentioned ⇒ Continue with UN13</p>		
<p><b>UN13. WHEN DID YOUR LAST MENSTRUAL PERIOD START?</b></p>	<p>Days ago ..... 1 ___</p> <p>Weeks ago ..... 2 ___</p> <p>Months ago ..... 3 ___</p> <p>Years ago ..... 4 ___</p> <p>In menopause /</p> <p>Has had hysterectomy ..... 994</p> <p>Before last birth ..... 995</p> <p>Never menstruated ..... 996</p>	

**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 telling .....	1	2	8
[B] IF SHE NEGLECTS THE CHILDREN?	Neglects children.....	1	2	8
[C] IF SHE QUARRELS WITH HIM?	Quarrels with him .....	1	2	8
[D] IF SHE REFUSES TO HAVE SEX WITH HIM?	Refuses sex .....	1	2	8
[E] IF SHE BURNS THE FOOD?	Burns food.....	1	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 money .....	1	2	8

MARRIAGE/UNION		MA
MA1. ARE YOU CURRENTLY MARRIED OR LIVING WITH A MAN AS IF MARRIED?	Yes, currently married ..... 1 Yes, living with a man..... 2 No, not in union ..... 3	3⇒MA5
MA2. HOW OLD IS YOUR CURRENT HUSBAND/ PARTNER?  <i>Probe: HOW OLD WAS YOUR HUSBAND / PARTNER ON HIS LAST BIRTHDAY?</i>	Age in years ..... __ __  DK..... 98	
MA3. BESIDES YOURSELF, DOES YOUR HUSBAND/PARTNER HAVE ANY OTHER WIVES OR PARTNERS OR DOES HE LIVE WITH OTHER WOMEN AS IF MARRIED?	Yes..... 1 No ..... 2 DK..... 98	2⇒MA7 98⇒MA7
MA4. HOW MANY OTHER WIVES OR PARTNERS DOES HE HAVE?	Number ..... __ __  DK..... 98	⇒MA7 98⇒MA7
MA5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN AS IF MARRIED?	Yes, formerly married ..... 1 Yes, formerly lived with a man..... 2 No ..... 3	3 ⇒Next Module
MA6. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed ..... 1 Divorced ..... 2 Separated..... 3	
MA7. HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?	Only once ..... 1 More than once ..... 2	
MA8. IN WHAT MONTH AND YEAR DID YOU <u>FIRST</u> MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Date of first marriage/union Month ..... __ __ DK month ..... 98  Year ..... __ __ __ __ DK year ..... 9998	⇒Next Module
MA9. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND/PARTNER?	Age in years ..... __ __	

SEXUAL BEHAVIOUR		SB
<i>Check for the presence of others. Before continuing, ensure privacy.</i>		
SB1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME IMPORTANT LIFE ISSUES.  THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL.  HOW OLD WERE YOU WHEN YOU HAD SEXUAL INTERCOURSE FOR THE VERY FIRST TIME?	Never had intercourse ..... 00 Age in years ..... __ __ First time when started living with (first) husband/partner ..... 95 DK/Don't remember..... 98	00⇒Next Module
SB2. THE FIRST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?	Yes ..... 1 No..... 2 DK / Don't remember ..... 8	
SB3. WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE?  <i>Record 'years ago' only if last intercourse was one or more years ago. If 12 months or more the answer must be recorded in years.</i>	Days ago ..... 1 __ __ Weeks ago ..... 2 __ __ Months ago..... 3 __ __ Years ago..... 4 __ __	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 THIS PERSON WITH WHOM YOU LAST HAD SEXUAL INTERCOURSE?  <i>Probe to ensure that the response refers to the relationship at the time of sexual intercourse</i>  <i>If 'boyfriend', then ask:</i> WERE YOU LIVING TOGETHER AS IF MARRIED? <i>If 'yes', circle '2'. If 'no', circle '3'.</i>	Husband ..... 1 Cohabiting partner ..... 2 Boyfriend ..... 3 Casual acquaintance ..... 4 Other (specify) ..... 6	3⇒SB7 4⇒SB7 6⇒SB7
SB6. Check MA1:  <input type="checkbox"/> Currently married or living with a man (MA1 = 1 or 2) ⇒ Go to SB8  <input type="checkbox"/> Not married / Not in union (MA1 = 3) ⇒ Continue with SB7		
SB7. HOW OLD IS THIS PERSON?  <i>If response is DK, probe:</i> ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner ..... __ __ DK ..... 98	
SB8. HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes ..... 1 No..... 2	2⇒SB15
SB9. THE LAST TIME YOU HAD SEXUAL INTERCOURSE WITH THIS OTHER PERSON, WAS A CONDOM USED?	Yes ..... 1 No..... 2	

<p>SB10. WHAT WAS YOUR RELATIONSHIP TO THIS PERSON?</p> <p><i>Probe to ensure that the response refers to the relationship at the time of sexual intercourse</i></p> <p><i>If 'boyfriend' then ask:</i>          WERE YOU LIVING TOGETHER AS IF MARRIED?  <i>If 'yes', circle '2'. If 'no', circle '3'.</i></p>	Husband ..... 1 Cohabiting partner ..... 2 Boyfriend ..... 3 Casual acquaintance ..... 4  Other (specify) _____ 6	3⇒SB12 4⇒SB12  6⇒SB12
<p>SB11. Check MA1 and MA7:</p> <p><input type="checkbox"/> Currently married or living with a man (MA1 = 1 or 2)          AND          Married only once or lived with a man only once (MA7 = 1) ⇒ Go to SB13</p> <p><input type="checkbox"/> Else ⇒ Continue with SB12</p>		
<p>SB12. HOW OLD IS THIS PERSON?</p> <p><i>If response is DK, probe:</i>          ABOUT HOW OLD IS THIS PERSON?</p>	Age of sexual partner ..... __ __ DK ..... 98	
<p>SB13. OTHER THAN THESE TWO PERSONS, HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?</p>	Yes ..... 1 No ..... 2	2⇒SB15
<p>SB14. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN THE LAST 12 MONTHS?</p>	Number of partners ..... __ __	
<p>SB15. IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN YOUR LIFETIME?</p> <p><i>If a non-numeric answer is given, probe to get an estimate.</i></p> <p><i>If number of partners is 95 or more, write '95'.</i></p>	Number of lifetime partners ..... __ __ DK ..... 98	

HIV/AIDS		HA
HA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE.	Yes..... 1 No ..... 2	2⇒ NEXT MODULE
HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?	DK..... 8	
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..... 1 No ..... 2 DK..... 8	
HA3. CAN PEOPLE GET THE AIDS VIRUS BECAUSE OF OBEAH OR OTHER SUPERNATURAL MEANS?	Yes..... 1 No ..... 2 DK..... 8	
HA4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes..... 1 No ..... 2 DK..... 8	
HA5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?	Yes..... 1 No ..... 2 DK..... 8	
HA6. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS THE AIDS VIRUS?	Yes..... 1 No ..... 2 DK..... 8	
HA7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes..... 1 No ..... 2 DK..... 8	
HA8. CAN THE VIRUS THAT CAUSES AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY:		
[A] DURING PREGNANCY?	Yes No DK During pregnancy..... 1 2 8	
[B] DURING DELIVERY?	During delivery ..... 1 2 8	
[C] BY BREASTFEEDING?	By breastfeeding ..... 1 2 8	
HA9. IN YOUR OPINION, IF A FEMALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes..... 1 No ..... 2 DK/Not sure/Depends ..... 8	
HA10. WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS 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..... 1 No ..... 2 DK/Not sure/Depends ..... 8	
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..... 1 No ..... 2 DK/Not sure/Depends ..... 8	

<p>HA13. Check CMI3: Any live birth in last 2 years?</p> <p><input type="checkbox"/> No live birth in last 2 years ⇒ Go to HA24</p> <p><input type="checkbox"/> One or more live births in last 2 years ⇒ Continue with HA14</p>																						
<p>HA14. Check MNI: Received prenatal care?</p> <p><input type="checkbox"/> Received prenatal care ⇒ Continue with HA15</p> <p><input type="checkbox"/> Did not receive prenatal care ⇒ Go to HA24</p>																						
<p>HA15. DURING ANY OF THE PRENATAL VISITS FOR YOUR PREGNANCY WITH (name),</p> <p>WERE YOU GIVEN ANY INFORMATION ABOUT:</p> <p>[A] BABIES GETTING THE AIDS VIRUS FROM THEIR MOTHER?</p> <p>[B] THINGS THAT YOU CAN DO TO PREVENT GETTING THE AIDS VIRUS?</p> <p>[C] GETTING TESTED FOR THE AIDS VIRUS?</p> <p>WERE YOU:</p> <p>[D] OFFERED A TEST FOR THE AIDS VIRUS?</p>	<table border="1"> <thead> <tr> <th></th> <th>Y</th> <th>N</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>AIDS from mother .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>Things to do .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>Tested for AIDS.....</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td>Offered a test .....</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		Y	N	DK	AIDS from mother .....	1	2	8	Things to do .....	1	2	8	Tested for AIDS.....	1	2	8	Offered a test .....	1	2	8	
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Things to do .....	1	2	8																			
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<p>HA16. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS AS PART OF YOUR PRENATAL CARE?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK..... 8</p>	<p>2⇒HA19</p> <p>8⇒HA19</p>																				
<p>HA17. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK..... 8</p>	<p>2⇒HA22</p> <p>8⇒HA22</p>																				
<p>HA18. REGARDLESS OF THE RESULT, ALL WOMEN WHO ARE TESTED ARE SUPPOSED TO RECEIVE COUNSELING AFTER GETTING THE RESULT.</p> <p>AFTER YOU WERE TESTED, DID YOU RECEIVE COUNSELLING?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK..... 8</p>	<p>1⇒HA22</p> <p>2⇒HA22</p> <p>8⇒HA22</p>																				
<p>HA19. Check MNI7: Birth delivered by health professional (A, B or C)?</p> <p><input type="checkbox"/> Yes, birth delivered by health professional ⇒ Continue with HA20</p> <p><input type="checkbox"/> No, birth not delivered by health professional ⇒ Go to HA24</p>																						
<p>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?</p>	<p>Yes..... 1</p> <p>No ..... 2</p>	<p>2⇒HA24</p>																				
<p>HA21. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?</p>	<p>Yes..... 1</p> <p>No ..... 2</p>																					
<p>HA22. HAVE YOU BEEN TESTED FOR THE AIDS VIRUS SINCE THAT TIME YOU WERE TESTED DURING YOUR PREGNANCY?</p>	<p>Yes..... 1</p> <p>No ..... 2</p>	<p>1⇒HA25</p>																				



HA23. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED FOR THE AIDS VIRUS?	Less than 12 months ago.....1 12-23 months ago.....2 2 or more years ago.....3	1, 2 & 3 ⇒NEXT 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 .....1 No.....2	2⇒HA27
HA25. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?	Less than 12 months ago .....1 12-23 months ago.....2 2 or more years ago .....3	
HA26. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes .....1 No.....2  DK .....8	1, 2 & 8 ⇒NEXT MODULE
HA27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes .....1 No.....2	

LIFE SATISFACTION		LS
<p>LS1. Check WB2: Age of respondent is between 15 and 24?</p> <p><input type="checkbox"/> Age 25-49 ⇒ Go to WM11</p> <p><input type="checkbox"/> Age 15-24 ⇒ Continue with LS2</p>		
<p>LS2. I WOULD LIKE TO ASK YOU SOME SIMPLE QUESTIONS ON HAPPINESS AND SATISFACTION.</p> <p>FIRST, TAKING ALL THINGS TOGETHER, WOULD YOU SAY YOU ARE VERY HAPPY, SOMEWHAT HAPPY, NEITHER HAPPY NOR UNHAPPY, SOMEWHAT UNHAPPY OR VERY UNHAPPY?</p> <p>YOU CAN ALSO LOOK AT THESE PICTURES TO HELP YOU WITH YOUR RESPONSE.</p> <p><i>Show side 1 of response card and explain what each symbol represents. Circle the response code pointed to by the respondent.</i></p>	<p>Very happy ..... 1</p> <p>Somewhat happy ..... 2</p> <p>Neither happy nor unhappy ..... 3</p> <p>Somewhat unhappy ..... 4</p> <p>Very unhappy ..... 5</p>	
<p>LS3. NOW I WILL ASK YOU QUESTIONS ABOUT YOUR LEVEL OF SATISFACTION IN DIFFERENT AREAS.</p> <p>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.</p> <p>AGAIN, YOU CAN LOOK AT THESE PICTURES TO HELP YOU WITH YOUR RESPONSE.</p> <p><i>Show side 2 of response card and explain what each symbol represents. Circle the response code shown by the respondent, for questions LS3 to LS13.</i></p> <p>HOW SATISFIED ARE YOU WITH YOUR FAMILY LIFE?</p>	<p>Very satisfied ..... 1</p> <p>Somewhat satisfied ..... 2</p> <p>Neither satisfied nor unsatisfied ..... 3</p> <p>Somewhat unsatisfied ..... 4</p> <p>Very unsatisfied ..... 5</p>	
<p>LS4. HOW SATISFIED ARE YOU WITH YOUR FRIENDSHIPS?</p>	<p>Very satisfied ..... 1</p> <p>Somewhat satisfied ..... 2</p> <p>Neither satisfied nor unsatisfied ..... 3</p> <p>Somewhat unsatisfied ..... 4</p> <p>Very unsatisfied ..... 5</p>	
<p>LS5. DURING THE CURRENT (2010-2011) SCHOOL YEAR, DID YOU ATTEND SCHOOL AT ANY TIME?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	2 ⇒ LS7

LS6. HOW SATISFIED ARE/WERE YOU WITH YOUR SCHOOL?	Very satisfied..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied..... 5	
LS7. HOW SATISFIED ARE YOU WITH YOUR CURRENT JOB?  <i>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.</i>	Does not have a job ..... 0  Very satisfied..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied..... 5	
LS8. HOW SATISFIED ARE YOU WITH YOUR HEALTH?	Very satisfied..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied..... 5	
LS9. HOW SATISFIED ARE YOU WITH WHERE YOU LIVE?  <i>If necessary, explain that the question refers to the living environment, including the neighbourhood and the dwelling.</i>	Very satisfied..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied..... 5	
LS10. HOW SATISFIED ARE YOU WITH HOW PEOPLE AROUND YOU GENERALLY TREAT YOU?	Very satisfied..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied..... 5	
LS11. HOW SATISFIED ARE YOU WITH THE WAY YOU LOOK?	Very satisfied..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied..... 5	
LS12. HOW SATISFIED ARE YOU WITH YOUR LIFE, OVERALL?	Very satisfied..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied..... 5	
LS13. HOW SATISFIED ARE YOU WITH YOUR CURRENT INCOME?  <i>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.</i>	Does not have any income ..... 0  Very satisfied..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied..... 5	
LS14. COMPARED TO THIS TIME LAST YEAR, WOULD YOU SAY THAT YOUR LIFE HAS IMPROVED, STAYED MORE OR LESS THE SAME, OR WORSENER, OVERALL?	Improved ..... 1 More or less the same ..... 2 Worsened..... 3	

LS15. AND IN ONE YEAR FROM NOW, DO YOU EXPECT THAT YOUR LIFE WILL BE BETTER, WILL BE MORE OR LESS THE SAME, OR WILL BE WORSE, OVERALL?	Better ..... 1 More or less the same ..... 2 Worse ..... 3	
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WM11. Record the time.	Hour, minutes and am/pm ..... ____ : ____	__ m
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WM12. Check Household Listing Form, column HL9.  
 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, column HL9.  
 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.

**Supervisor's Observations**

**Interviewer's Observations**

**Field Editor's Observations**

## APPENDIX J. QUESTIONNAIRE FOR CHILDREN UNDER FIVE



### QUESTIONNAIRE FOR CHILDREN UNDER FIVE BELIZE

UNDER-FIVE CHILD INFORMATION PANEL		UF
<p><i>This questionnaire is to be administered to all mothers or caretakers (see Household Listing Form, column HL9) who care for a child that lives with them and is under the age of 5 years (see Household Listing Form, column HL6). A separate questionnaire should be used for each eligible child.</i></p>		
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: Name _____	UF8. Day / Month / Year of interview: _____ / _____ / _____	

Repeat greeting if not already read to this respondent:

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 THIS. THE INTERVIEW WILL TAKE ABOUT 20 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE IDENTIFIED.

*If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:*

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT **(child's name from UF3)**'S HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 20 MINUTES. AGAIN, 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 record the time and then begin the interview.
- No, permission is not given ⇒ Complete UF9. Discuss this result with your supervisor.

UF9. Result of interview for children under 5  <i>Codes refer to mother/caretaker.</i>	Completed .....01 Not at home .....02 Refused .....03 Partly completed .....04 Incapacitated .....05 Other (specify) _____ 96
--	--

UF10. Field edited by (Name and number): Name _____	UF11. Data entry clerk (Name and number): Name _____
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UF12. <i>Record the time.</i>	Hour, minutes and am/pm..... ____ : ____	__ m
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AGE		AG
<p>AG1. NOW I WOULD LIKE TO ASK YOU ABOUT THE AGE OF (<i>name</i>).</p> <p>IN WHAT MONTH AND YEAR WAS (<i>name</i>) BORN?</p> <p><i>Probe:</i> WHAT IS HIS / HER BIRTHDAY?</p> <p><i>If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day</i></p> <p><b>Month and year must be recorded.</b></p>	<p>Date of birth</p> <p>Day ..... ____</p> <p>DK day ..... 98</p> <p>Month..... ____</p> <p>Year ..... ____</p>	
<p>AG2. HOW OLD IS (<i>name</i>)?</p> <p><i>Probe:</i> HOW OLD WAS (<i>name</i>) AT HIS / HER LAST BIRTHDAY?</p> <p><i>Record age in completed years.</i></p> <p><i>Record '0' if less than 1 year.</i></p> <p><i>Compare and correct AG1 and/or AG2 if inconsistent.</i></p>	<p>Age (in completed years)..... ____</p>	

BIRTH REGISTRATION		BR
BR1. DOES ( <i>name</i> ) HAVE A BIRTH CERTIFICATE?  <i>If yes, ask:</i> MAY I SEE IT?	Yes, seen ..... 1 Yes, not seen ..... 2 No ..... 3 DK ..... 8	1⇒Next Module 2⇒Next Module
BR2. HAS ( <i>name</i> )'S BIRTH BEEN REGISTERED WITH THE VITAL STATISTICS UNIT (REGISTRY), MAGISTRATE'S COURT, VILLAGE REGISTRAR OR HOSPITAL?	Yes ..... 1 No ..... 2 DK ..... 8	1⇒Next Module
BR3. DO YOU KNOW HOW TO REGISTER YOUR CHILD'S BIRTH?	Yes ..... 1 No ..... 2	



EARLY CHILDHOOD DEVELOPMENT		EC
<p>EC1. HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR <i>(name)</i>?</p>	<p>None ..... 00</p> <p>Number of children's books ..... 0__</p> <p>Ten or more books ..... 10</p>	
<p>EC2. I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT <i>(name)</i> PLAYS WITH WHEN HE/SHE IS AT HOME.</p> <p>WHAT DOES <i>(name)</i> PLAY WITH?</p> <p>DOES HE/SHE PLAY WITH: Y N DK</p> <p>[A] HOMEMADE TOYS (SUCH AS DOLLS, CARS, OR OTHER TOYS MADE AT HOME)?</p> <p>[B] TOYS FROM A SHOP OR MANUFACTURED TOYS?</p> <p>[C] HOUSEHOLD OBJECTS (SUCH AS BOWLS OR POTS) OR OBJECTS FOUND OUTSIDE (SUCH AS STICKS, ROCKS, ANIMAL SHELLS OR LEAVES)?</p> <p><i>If the respondent says "YES" to the categories above, then probe to learn specifically what the child plays with to confirm the response</i></p>	<p>Homemade toys ..... 1 2 8</p> <p>Toys from a shop ..... 1 2 8</p> <p>Household objects or outside objects ..... 1 2 8</p>	
<p>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.</p> <p>ON HOW MANY DAYS IN THE PAST WEEK WAS <i>(name)</i>:</p> <p>[A] LEFT ALONE FOR MORE THAN AN HOUR?</p> <p>[B] LEFT IN THE CARE OF ANOTHER CHILD, THAT IS, SOMEONE LESS THAN 10 YEARS OLD, FOR MORE THAN AN HOUR?</p> <p><i>If 'none' enter '0'. If 'don't know' enter '8'</i></p>	<p>Number of days left alone for more than an hour ..... ____</p> <p>Number of days left with other child for more than an hour ..... ____</p>	
<p>EC4. Check AG2: Age of child</p> <p><input type="checkbox"/> Child age 3 or 4 ⇒ Continue with EC5</p> <p><input type="checkbox"/> Child age 0, 1 or 2 ⇒ Go to Next Module</p>		
<p>EC5. DOES <i>(name)</i> ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	<p>2⇒EC7</p> <p>8⇒EC7</p>

<p>EC6. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID <i>(name)</i> ATTEND?</p>	<p>Number of hours ..... _ _</p>																																				
<p>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 <i>(name)</i>:</p> <p><i>If yes, ask:</i> WHO ENGAGED IN THIS ACTIVITY WITH <i>(name)</i>? – THE MOTHER, THE CHILD’S FATHER OR ANOTHER ADULT MEMBER OF THE HOUSEHOLD (INCLUDING THE CARETAKER/RESPONDENT).</p> <p><i>Circle all that apply.</i></p> <p>[A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH <i>(name)</i>?</p> <p>[B] TOLD STORIES TO <i>(name)</i>?</p> <p>[C] SANG SONGS TO <i>(name)</i> OR WITH <i>(name)</i>, INCLUDING LULLABIES?</p> <p>[D] TOOK <i>(name)</i> OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?</p> <p>[E] PLAYED WITH <i>(name)</i>?</p> <p>[F] NAMED, COUNTED, OR DREW THINGS TO OR WITH <i>(name)</i>?</p>	<table border="1"> <thead> <tr> <th></th> <th>Mother</th> <th>Father</th> <th>Other</th> <th>No one</th> </tr> </thead> <tbody> <tr> <td>Read books</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Told stories</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Sang songs</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Took outside</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Played with</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Named/counted</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> </tbody> </table>		Mother	Father	Other	No one	Read books	A	B	X	Y	Told stories	A	B	X	Y	Sang songs	A	B	X	Y	Took outside	A	B	X	Y	Played with	A	B	X	Y	Named/counted	A	B	X	Y	
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Played with	A	B	X	Y																																	
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<p>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.</p> <p>CAN <i>(name)</i> IDENTIFY OR NAME AT LEAST TEN LETTERS OF THE ALPHABET?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p>EC9. CAN <i>(name)</i> READ AT LEAST FOUR SIMPLE, POPULAR WORDS?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p>EC10. DOES <i>(name)</i> KNOW THE NAME AND RECOGNIZE THE SYMBOL OF ALL NUMBERS FROM 1 TO 10?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p>EC11. CAN <i>(name)</i> PICK UP A SMALL OBJECT WITH TWO FINGERS, LIKE A STICK OR A ROCK FROM THE GROUND?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p>EC12. IS <i>(name)</i> SOMETIMES TOO SICK TO PLAY?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				

EC13. DOES <i>(name)</i> FOLLOW SIMPLE DIRECTIONS ON HOW TO DO SOMETHING CORRECTLY?	Yes..... 1 No ..... 2  DK..... 8	
EC14. WHEN GIVEN SOMETHING TO DO, IS <i>(name)</i> ABLE TO DO IT INDEPENDENTLY?	Yes..... 1 No ..... 2  DK..... 8	
EC15. DOES <i>(name)</i> GET ALONG WELL WITH OTHER CHILDREN?	Yes..... 1 No ..... 2  DK..... 8	
EC16. DOES <i>(name)</i> KICK, BITE, OR HIT OTHER CHILDREN OR ADULTS?	Yes..... 1 No ..... 2  DK..... 8	
EC17. DOES <i>(name)</i> GET DISTRACTED EASILY?	Yes..... 1 No ..... 2  DK..... 8	

BREASTFEEDING		BF
BF1. HAS ( <i>name</i> ) EVER BEEN BREASTFED?	Yes..... 1 No ..... 2 DK..... 8	2⇒BF3 8⇒BF3
BF2. IS HE/SHE STILL BEING BREASTFED?	Yes..... 1 No ..... 2 DK..... 8	
BF3. I WOULD LIKE TO ASK YOU ABOUT LIQUIDS THAT ( <i>name</i> ) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. I AM INTERESTED IN WHETHER ( <i>name</i> ) 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..... 1 No ..... 2 DK..... 8	
BF4. DID ( <i>name</i> ) DRINK INFANT FORMULA YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2 DK..... 8	2⇒BF6 8⇒BF6
BF5. HOW MANY TIMES DID ( <i>name</i> ) DRINK INFANT FORMULA?	Number of times..... _ _	
BF6. DID ( <i>name</i> ) DRINK MILK, SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2 DK..... 8	2⇒BF8 8⇒BF8
BF7. HOW MANY TIMES DID ( <i>name</i> ) DRINK TINNED, POWDERED OR FRESH ANIMAL MILK?	Number of times..... _ _	
BF8. DID ( <i>name</i> ) DRINK JUICE OR JUICE DRINKS YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2 DK..... 8	
BF9. DID ( <i>name</i> ) DRINK WATERY SOUP YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2 DK..... 8	
BF10. DID ( <i>name</i> ) DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2 DK..... 8	
BF11. DID ( <i>name</i> ) DRINK ORS (ORAL RE-HYDRATION SOLUTION) YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2 DK..... 8	

BF12. DID ( <i>name</i> ) DRINK ANY OTHER LIQUIDS YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2  DK..... 8	
BF13. DID ( <i>name</i> ) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2  DK..... 8	2⇒BF15  8⇒BF15
BF14. HOW MANY TIMES DID ( <i>name</i> ) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?	Number of times..... _ _	
BF15. DID ( <i>name</i> ) EAT PORRIDGE/LAB YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2  DK..... 8	
BF16. DID ( <i>name</i> ) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT?	Yes..... 1 No ..... 2  DK..... 8	2⇒BF18  8⇒BF18
BF17. HOW MANY TIMES DID ( <i>name</i> ) 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 ( <i>name</i> ) DRINK ANYTHING FROM A BOTTLE WITH A NIPPLE?	Yes..... 1 No ..... 2  DK..... 8	

CARE OF ILLNESS		CA
<p>CA1. HAS (<i>name</i>) HAD DIARRHOEA IN THE LAST TWO WEEKS, THAT IS, SINCE (<i>day of the week</i>) OF THE WEEK BEFORE LAST?</p> <p><i>Diarrhoea is determined as perceived by mother or caretaker, or as three or more loose or watery stools per day, or blood in stool.</i></p>	<p>Yes..... 1  No ..... 2  DK..... 8</p>	<p>2⇒CA7  8⇒CA7</p>
<p>CA2. I WOULD LIKE TO KNOW HOW MUCH (<i>name</i>) WAS GIVEN TO DRINK DURING THE DIARRHOEA (INCLUDING BREAST MILK).</p> <p>DURING THE TIME (<i>name</i>) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO DRINK, ABOUT THE SAME AMOUNT, MORE THAN USUAL OR NOTHING TO DRINK?</p> <p><i>If less, probe:</i>  WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO DRINK, OR SOMEWHAT LESS?</p>	<p>Much less..... 1  Somewhat less..... 2  About the same..... 3  More..... 4  Nothing to drink..... 5  DK..... 8</p>	
<p>CA3. DURING THE TIME (<i>name</i>) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO EAT, ABOUT THE SAME AMOUNT, MORE THAN USUAL, OR NOTHING TO EAT?</p> <p><i>If "less", probe:</i>  WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO EAT OR SOMEWHAT LESS?</p>	<p>Much less..... 1  Somewhat less..... 2  About the same..... 3  More..... 4  Stopped food..... 5  Never gave food..... 6  DK..... 8</p>	
<p>CA4. DURING THE EPISODE OF DIARRHOEA, WAS (<i>name</i>) GIVEN TO DRINK ANY OF THE FOLLOWING:</p> <p><i>Read each item aloud and record response before proceeding to the next item.</i></p> <p>[A] A FLUID MADE FROM ORAL REHYDRATION SALT?</p> <p>[B] A PRE-PACKAGED ORS FLUID FOR DIARRHOEA?</p> <p>[C] PEDIALYTE?</p>	<p style="text-align: right;">Y N DK</p> <p>Fluid from ORS ..... 1 2 8</p> <p>Pre-packaged ORS fluid ..... 1 2 8</p> <p>Pedialyte ..... 1 2 8</p>	
<p>CA5. WAS ANYTHING (ELSE) GIVEN TO TREAT THE DIARRHOEA?</p>	<p>Yes..... 1  No ..... 2  DK..... 8</p>	<p>2⇒CA7  8⇒CA7</p>

<p>CA6. WHAT (ELSE) WAS GIVEN TO TREAT THE DIARRHOEA?</p> <p><i>Probe:</i> ANYTHING ELSE?</p> <p><i>Record all treatments given. Write brand name(s) of all medicines mentioned.</i></p> <p>_____</p> <p>(Name)</p>	<p>Pill or Syrup</p> <p>Antibiotic..... A</p> <p>Antimotility (anti-diarrhoea)..... B</p> <p>Zinc ..... C</p> <p>Other (Not antibiotic, Antimotility or zinc) ..... G</p> <p>Unknown pill or syrup ..... H</p> <p>Injection</p> <p>Antibiotic..... L</p> <p>Non-antibiotic ..... M</p> <p>Unknown injection ..... N</p> <p>Intravenous/drip ..... O</p> <p>Home remedy / Herbal medicine ..... Q</p> <p>Other (<i>specify</i>) _____ X</p>	
<p>CA7. AT ANY TIME IN THE LAST TWO WEEKS, HAS (name) HAD AN ILLNESS WITH A COUGH?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK..... 8</p>	<p>2⇒CA14</p> <p>8⇒CA14</p>
<p>CA8. WHEN (name) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, RAPID BREATHS OR HAVE DIFFICULTY BREATHING?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK..... 8</p>	<p>2⇒CA14</p> <p>8⇒CA14</p>
<p>CA9. WAS THE FAST OR DIFFICULT BREATHING DUE TO A PROBLEM IN THE CHEST OR A BLOCKED OR RUNNY NOSE?</p>	<p>Problem in chest only..... 1</p> <p>Blocked or runny nose only ..... 2</p> <p>Both ..... 3</p> <p>Other (<i>specify</i>) _____ 6</p> <p>DK..... 8</p>	<p>2⇒CA14</p> <p>6⇒CA14</p>
<p>CA10. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK..... 8</p>	<p>2⇒CA12</p> <p>8⇒CA12</p>
<p>CA11. FROM WHERE DID YOU SEEK ADVICE OR TREATMENT?</p> <p><i>Probe:</i> ANYWHERE ELSE?</p> <p><i>Circle all providers mentioned, but do NOT prompt with any suggestions.</i></p> <p><i>Probe to identify each type of source.</i></p> <p><i>If source is hospital, health centre, or clinic, write the name of the place below. If unable to determine if public or private sector, write the name of the place below.</i></p> <p>_____</p> <p>(Name of place)</p>	<p>Public sector</p> <p>Govt. hospital ..... A</p> <p>Govt. health centre ..... B</p> <p>Govt. health post ..... C</p> <p>Village health worker ..... D</p> <p>Mobile / Outreach clinic ..... E</p> <p>Other public (<i>specify</i>) _____ H</p> <p>Private medical sector</p> <p>Private hospital / clinic ..... I</p> <p>Private physician ..... J</p> <p>Private pharmacy ..... K</p> <p>Mobile clinic ..... L</p> <p>Other private medical (<i>specify</i>) _____ O</p> <p>Other source</p> <p>Relative / Friend ..... P</p> <p>Shop ..... Q</p> <p>Traditional practitioner ..... R</p> <p>Other (<i>specify</i>) _____ X</p>	

<p>CA12. WAS (<i>name</i>) GIVEN ANY MEDICINE TO TREAT THIS ILLNESS?</p>	<p>Yes..... 1  No ..... 2  DK..... 8</p>	<p>2⇒CA14  8⇒CA14</p>
<p>CA13. WHAT MEDICINE WAS (<i>name</i>) GIVEN?</p> <p><i>Probe:</i>  ANY OTHER MEDICINE?</p> <p><i>Circle all medicines given. Write brand name(s) of all medicines mentioned.</i></p> <p>_____</p> <p>(<i>Names of medicines</i>)</p>	<p>Antibiotic  Pill / Syrup ..... A  Injection..... B</p> <p>Anti-malarial ..... M</p> <p>Paracetamol / Panadol / Acetaminophen ... P  Aspirin ..... Q  Ibuprofen..... R</p> <p>Other (<i>specify</i>) _____ X  DK..... Z</p>	
<p>CA14. Check AG2: Child aged under 3?</p> <p><input type="checkbox"/> Yes ⇒ Continue with CA15</p> <p><input type="checkbox"/> No ⇒ Go to Next Module</p>		
<p>CA15. THE LAST TIME (<i>name</i>) PASSED STOOLS, WHAT WAS DONE TO DISPOSE OF THE STOOLS?</p>	<p>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</p> <p>Other (<i>specify</i>) _____ 96  DK..... 98</p>	



**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?  (If yes) MAY I SEE IT PLEASE?		Yes, seen ..... 1 Yes, not seen ..... 2 No card ..... 3	1⇒IM3 2⇒IM6						
IM2. DID YOU EVER HAVE A VACCINATION CARD FOR (name)?		Yes..... 1 No ..... 2	1⇒IM6 2⇒IM6						
IM3. (a) Copy dates for each vaccination from the card. (b) Write '44' in day column if card shows that vaccination was given but no date recorded.		Date of Immunization							
		Day	Month	Year					
BCG	BCG								
POLIO 1	OPV1								
POLIO 2	OPV2								
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 COUGH, TETANUS)	BOOSTER								
DTaP-P1 (DIPHTERIA, WHOOPING COUGH, TETANUS, POLIO)	DTaP-P1								
DTaP-P2	DTaP-P2								
DTaP-P3	DTaP-P3								
DTaP-P4	DTaP-P4								
HAEMOPHILUS INFLUENZAE B 1 (FLU)	Hib1								
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								
<p><b>IM4. Check IM3. Are all vaccines (BCG to Measles (or MMR)) recorded?</b></p> <p><input type="checkbox"/> Yes ⇒ Go to IM18</p> <p><input type="checkbox"/> No ⇒ Continue with IM5</p>									
<p><b>IM5. IN ADDITION TO WHAT IS RECORDED ON THIS CARD, DID (name) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS?</b></p> <p><i>Record 'Yes' only if respondent mentions vaccines shown in the table above.</i></p>		<p>Yes..... 1 <i>(Probe for vaccinations and write '66' in the corresponding day column for each vaccine mentioned. Then skip to IM18)</i></p> <p>No ..... 2    2⇒IM18 DK..... 8    8⇒IM18</p>							
<p><b>IM6. HAS (name) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY?</b></p>		<p>Yes..... 1</p> <p>No ..... 2    2⇒IM18 DK..... 8    8⇒IM18</p>							
<p><b>IM7. HAS (name) EVER RECEIVED A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION IN THE ARM OR SHOULDER THAT USUALLY CAUSES A SCAR?</b></p>		<p>Yes..... 1</p> <p>No ..... 2 DK..... 8</p>							
<p><b>IM8. HAS (name) EVER RECEIVED ANY “VACCINATION DROPS IN THE MOUTH” TO PROTECT HIM/HER FROM GETTING DISEASES – THAT IS, POLIO?</b></p>		<p>Yes..... 1</p> <p>No ..... 2    2⇒IM11A DK..... 8    8⇒IM11A</p>							
<p><b>IM10. HOW MANY TIMES WAS HE/SHE GIVEN THESE DROPS?</b></p>		<p>Number of times..... _</p>							
<p><b>IM11A. HAS (name) EVER RECEIVED A PENTAVALENT VACCINATION – THAT IS, AN INJECTION TO PREVENT HIM/HER FROM GETTING DIPHTHERIA, WHOOPING COUGH, TETANUS, HEPATITIS B, INFLUENZAE B?</b></p> <p><i>Probe by indicating that Pentavalent vaccination is sometimes given at the same time as Polio.</i></p>		<p>Yes..... 1</p> <p>No ..... 2    2⇒IM12A DK..... 8    8⇒IM12A</p>							
<p><b>IM11B. HOW MANY TIMES WAS A PENTAVALENT VACCINE RECEIVED?</b></p>		<p>Number of times..... _</p>							
<p><b>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?</b></p> <p><i>Probe by indicating that DPT vaccination is sometimes given at the same time as polio</i></p>		<p>Yes..... 1    1⇒IM16</p> <p>No ..... 2    2⇒IM12A DK..... 8    8⇒IM12A</p>							

IM12A. HAS ( <i>name</i> ) EVER RECEIVED A DTaP-P1 VACCINATION – THAT IS, AN INJECTION TO PREVENT HIM/HER FROM GETTING DIPHTHERIA, WHOOPING COUGH, TETANUS, POLIO?	Yes..... 1 No ..... 2 DK..... 8	2⇒IM12C 8⇒IM12C
IM12B. HOW MANY TIMES WAS A DTaP-P1 VACCINE RECEIVED?	Number of times..... _	
IM12C. HAS ( <i>NAME</i> ) EVER RECEIVED A Hib1 VACCINATION – THAT IS, AN INJECTION TO PREVENT HIM/HER FROM GETTING HAEMOPHILUS INFLUENZAE TYPE B (FLU)?	Yes..... 1 No ..... 2 DK..... 8	2⇒IM13 8⇒IM13
IM12D. HOW MANY TIMES WAS A Hib1 VACCINE RECEIVED?	Number of times..... _	
IM13. HAS ( <i>name</i> ) EVER BEEN GIVEN A HEPATITIS B VACCINATION – THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS – TO PREVENT HIM/HER FROM GETTING HEPATITIS B?  <i>Probe by indicating that the hepatitis B vaccine is sometimes given at the same time as polio and DPT vaccines</i>	Yes..... 1 No ..... 2 DK..... 8	2⇒IM16 8⇒IM16
IM14. WAS THE FIRST HEPATITIS B VACCINE RECEIVED WITHIN 24 HOURS AFTER BIRTH, OR LATER?	Within 24 hours ..... 1 Later..... 2 DK..... 8	
IM15. HOW MANY TIMES WAS A HEPATITIS B VACCINE RECEIVED?	Number of times..... _	
IM16. HAS ( <i>name</i> ) 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..... 1 No ..... 2 DK..... 8	2⇒IM18 8⇒IM18
IM16A. HOW MANY TIMES WAS A MEASLES INJECTION OR AN MMR INJECTION VACCINE RECEIVED?	Number of times..... _	
IM18. HAS ( <i>name</i> ) RECEIVED A VITAMIN A DOSE WITHIN THE LAST 6 MONTHS?  <i>Show picture of common types of ampules / capsules / syrups</i>	Yes..... 1 No ..... 2 DK..... 8	

UF13. Record the time.

Hour, minutes and am/pm ..... \_\_\_\_ : \_\_\_\_

\_\_ m

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

UF15. Does any child age 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 ⇒ End the interview with this respondent by thanking him/her for his/her cooperation and tell her/him that you will need to measure the weight and height of the child

Check to see if there are other woman's or under-5 questionnaires to be administered in this household.

Move to another woman's or under-5 questionnaire, or start making arrangements for anthropometric measurements of all eligible children in the household.

ANTHROPOMETRY		AN
<p>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.</p>		
AN1. Measurer's name and number:	Name _____	
AN2. Result of height / length and weight measurement	Either or both measured.....	1
	Child not present.....	2 2⇒AN6
	Child or caretaker refused.....	3 3⇒AN6
	Other (specify) _____	6 6⇒AN6
AN3. Child's weight	Kilograms (kg).....	____ . ____
	Weight not measured.....	99.9
AN4. Child's length or height		
Check age of child in AG2:		
<input type="checkbox"/> Child under 2 years old. ⇒ Measure length (lying down).	Length (cm) Lying down.....	1 ____ . ____
<input type="checkbox"/> 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.

No ⇒ Continue with the interviews.

**Interviewer's Observations**

**Field Editor's Observations**

**Supervisor's Observations**



**QUESTIONNAIRE FORM FOR CHILD DISABILITY**

CHILD DISABILITY QUESTIONNAIRE FORM		DA
<p><i>This questionnaire is to be administered to all mothers or caretakers (see Household Listing Form, column HL9) who care for a child that lives with them and is age 2 through 9 years (see Household Listing Form, column HL6). A separate questionnaire should be used for each eligible child.</i></p>		
DA1. Cluster number _____	_____	DA2. Household number: _____
DA3. Child's name: Name _____	_____	DA4. Child's line number: _____
DA5. Mother's / Caretaker's name: Name _____	_____	DA6. Mother's / Caretaker's line number: _____
DA7. Interviewer name and number: Name _____	_____	DA8. Day / Month / Year of interview: ____ / ____ / _____

*Repeat greeting if not already read to this respondent:*

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 *(name)*'S HEALTH CONDITION. THIS WILL TAKE ONLY A FEW MINUTES. ALL THE INFORMATION YOU GIVE ME WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OUTSIDE OF THE TEAM WITHOUT YOUR WRITTEN PERMISSION.

*If greeting at the beginning of the household questionnaire has already been read to this respondent, then read the following:*

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT ***(child's name from HL2)***'S HEALTH CONDITION. THIS WILL TAKE ONLY A FEW MINUTES. AGAIN, ALL THE INFORMATION YOU GIVE ME WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OUTSIDE OF THE TEAM WITHOUT YOUR WRITTEN PERMISSION.

MAY I START NOW?

- Yes, permission is given ⇒ Go to DA12 to begin the interview.
- No, permission is not given ⇒ Complete DA9. Discuss this result with your supervisor

DA9. Result of interview for child disability  <i>Codes refer to mother/caretaker.</i>	Completed..... 01 Not at home ..... 02 Refused..... 03 Partly completed ..... 04 Incapacitated..... 05  Other ( <i>specify</i> ) _____ 96	
DA10. Field edited by (Name and number):  Name _____ _ _	DA11. Data entry clerk (Name and number):  Name _____ _ _	
DA11A. <i>Record the time.</i>	Hour, minutes and am/pm ..... _ _ : _ _	_ m



CHILD DISABILITY		DA
<i>To be administered to mothers or caretakers of children age 2-9 years.</i>		
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 ( <i>name</i> ) HAVE ANY SERIOUS DELAY IN SITTING, STANDING, OR WALKING?	Yes..... 1 No ..... 2	
DA14. COMPARED WITH OTHER CHILDREN, DOES ( <i>name</i> ) HAVE DIFFICULTY SEEING, EITHER IN THE DAYTIME OR AT NIGHT?	Yes..... 1 No ..... 2	
DA15. DOES ( <i>name</i> ) APPEAR TO HAVE ANY DIFFICULTY HEARING? (USES HEARING AID, HEARS WITH DIFFICULTY OR COMPLETELY DEAF)?	Yes..... 1 No ..... 2	
DA16. WHEN YOU TELL ( <i>name</i> ) TO DO SOMETHING, DOES HE/SHE SEEM TO UNDERSTAND WHAT YOU ARE SAYING?	Yes..... 1 No ..... 2	
DA17. DOES ( <i>name</i> ) HAVE DIFFICULTY IN WALKING OR MOVING HIS/HER ARMS OR DOES HE/SHE HAVE WEAKNESS AND/OR STIFFNESS IN THE ARMS OR LEGS?	Yes..... 1 No ..... 2	
DA18. DOES ( <i>name</i> ) SOMETIMES HAVE FITS, BECOME RIGID, OR LOSE CONSCIOUSNESS?	Yes..... 1 No ..... 2	
DA19. DOES ( <i>name</i> ) LEARN TO DO THINGS LIKE OTHER CHILDREN HIS/HER AGE?	Yes..... 1 No ..... 2	
DA20. DOES ( <i>name</i> ) SPEAK AT ALL (CAN HE/SHE MAKE HIM OR HERSELF UNDERSTOOD IN WORDS; CAN HE/SHE SAY ANY RECOGNIZABLE WORDS)?	Yes..... 1 No ..... 2	
DA21. Check DA12: Age of child		
<input type="checkbox"/> Child age 3 through 9 ⇒ Continue with DA22 <input type="checkbox"/> Child age 2 ⇒ Go to DA23		
DA22. IS ( <i>name</i> )'S SPEECH IN ANY WAY DIFFERENT FROM NORMAL (NOT CLEAR ENOUGH TO BE UNDERSTOOD BY PEOPLE OTHER THAN THE IMMEDIATE FAMILY)?	Yes..... 1 No ..... 2	1⇒DA24 2⇒DA24
DA23. CAN ( <i>name</i> ) NAME AT LEAST ONE OBJECT (FOR EXAMPLE, AN ANIMAL, A TOY, A CUP, A SPOON)?	Yes..... 1 No ..... 2	

<p>DA24. COMPARED WITH OTHER CHILDREN OF THE SAME AGE, DOES (<i>name</i>) APPEAR IN ANY WAY SLOW?</p>	<p>Yes..... 1</p> <p>No ..... 2</p>	
<p>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 (<i>name</i>).</p> <p>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.</p>	<p>Respondent has no objections to additional visit..... 1</p> <p>Respondent uncertain about additional visit/Depends..... 2</p> <p>Refused additional visit ..... 3</p>	

<p>DA26. <i>Record the time.</i></p>	<p>Hour, minutes and am/pm      ___ : ___ : ___ m</p>
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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*

DA28. *Does any eligible woman age 15-49 reside in the household?*

*Check Household Listing Form, column HL7 for any eligible woman.*

*You should have a questionnaire with the Information Panel filled in for each eligible woman.*

*Yes ⇒ Go to QUESTIONNAIRE FOR INDIVIDUAL WOMEN to administer the questionnaire to the first eligible woman.*

**NO** ⇒ *End the interview by thanking the respondent for his/her cooperation. Gather together all questionnaires for this household and complete HH8 to HH15 on the cover page of the Household Questionnaire*

**Interviewer's Observations**

**Field Editor's Observations**

**Supervisor's Observations**