Northeast Zone, Somalia

Final Report 2014

Monitoring the situation of children and women

Multiple Indicator Cluster Survey 2011

Ministry of Planning & International Cooperation

Wasaaradda Qorsheynta & Iskashiga Calamiga

Northeast Somalia

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unicef United Nations Children's Fund

MICS

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The North East Zone Multiple Indicator Cluster Survey (MICS) was carried out in 2011 by the Puntland Ministry Planning and International Cooperation with technical and financial support from UNICEF. MICS is an international household survey programme developed by UNICEF.

MICS was conducted as part of the fourth global round of MICS surveys (MICS4). It 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.

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Northeast Somalia
Multiple Indicator Cluster Survey
2011

Ministry of Planning and International
Cooperation

UNICEF
United Nations Children's Fund

March 2014

Summary Table of Findings

Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Northeast Zone, Somalia 2011.

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value and Units
NUTRITION				
Breastfeeding and infant feeding	2.4		Children ever breastfed	88.8 per cent
	2.5		Early initiation of breastfeeding	56.0 per cent
	2.6		Exclusive breastfeeding under 6 months	4.8 per cent
	2.7		Continued breastfeeding at 1 year	42.5 per cent
	2.8		Continued breastfeeding at 2 years	24.0 per cent
	2.9		Predominant breastfeeding under 6 months	26.9 per cent
	2.10		Duration of breastfeeding	14.5 months
	2.11		Bottle feeding	48.3 per cent
	2.12		Introduction of solid, semi-solid or soft foods	35.4 per cent
	2.13		Minimum meal frequency	57.0 per cent
	2.14		Age-appropriate breastfeeding	18.2 per cent
	2.15		Milk feeding frequency for non-breastfed children	26.8 per cent
Vitamin A	2.17		Vitamin A supplementation (children under age 5)	26.8 per cent
Infants weighed at birth	2.19		Infants weighed at birth	3.5 per cent
CHILD HEALTH				
Vaccinations	3.1		Tuberculosis immunization coverage	16.6 per cent
	3.2		Polio immunization coverage	8.3 per cent
	3.3		Immunization coverage for diphtheria, pertussis and tetanus (DPT)	7.2 per cent
	3.4	*4.3*	Measles immunization coverage	16.6 per cent
Tetanus toxoid	3.7		Neonatal tetanus protection	27.3 percent
Care of illness	3.8		Oral rehydration therapy with continued feeding	23.9 per cent
	3.9		Care seeking for suspected pneumonia	35.1 per cent
	3.10		Antibiotic treatment of suspected pneumonia	48.5 per cent
Solid fuel use	3.11		Solid fuels	97.6 per cent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value and Units
Malaria	3.12		Household availability of insecticide-treated nets (ITNs)	30.1 per cent
	3.13		Households protected by a vector control method	30.6 per cent
	3.14		Children under age 5 sleeping under any mosquito net	26.1 per cent
	3.15	*6.7*	Children under age 5 sleeping under insecticide-treated nets (ITNs)	25.3 per cent
	3.16		Malaria diagnostics usage	19.5 per cent
	3.17		Antimalarial treatment of children under 5 the same or next day	8.7 per cent
	3.18	*6.8*	Antimalarial treatment of children under age 5	19.8 per cent
	3.19		Pregnant women sleeping under insecticide-treated nets (ITNs)	21.4 per cent
	3.20		Intermittent preventive treatment for malaria	1.6 per cent
WATER AND SANITATION				
Water and sanitation	4.1	*7.8*	Use of improved drinking water sources	51.9 per cent
	4.2		Water treatment	6.0 per cent
	4.3	*7.9*	Use of improved sanitation	64.8 per cent
	4.4		Safe disposal of child's faeces	72.6 per cent
	4.5		Place for handwashing	78.5 per cent
	4.6		Availability of soap	58.8 per cent
REPRODUCTIVE HEALTH				
Contraception and unmet need	5.3	*5.3*	Contraceptive prevalence rate	2.6 per cent
	5.4	*5.6*	Unmet need	11.4 per cent
Maternal and new-born health			Antenatal care coverage	
	5.5a		At least once by skilled personnel	24.2 per cent
	5.5b	*5.5*	At least four times by any provider	3.3 per cent
	5.6		Content of antenatal care	15.7 per cent
	5.7	*5.2*	Skilled attendant at delivery	38.4 per cent
	5.8		Institutional deliveries	12.7 per cent
	5.9		Caesarean section	2.1 per cent
CHILD DEVELOPMENT				
Child development	6.1		Support for learning	57.5 per cent
	6.2		Father's support for learning	34.6 per cent
	6.3		Learning materials: children's books	0.6 per cent
	6.4		Learning materials: playthings	8.4 per cent
	6.5		Inadequate care	29.4 per cent
	6.6		Early child development index	34.9 per cent
	6.7		Attendance to early childhood education	1.7 per cent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value and Units
EDUCATION				
Literacy and education	7.1	*2.3*	Literacy rate among young women age 15-24 years	36.1 per cent
	7.2		School readiness	22.7 per ernt
	7.3		Net intake rate in primary education	16.5 per cent
	7.4	*2.1*	Primary school net attendance ratio (adjusted)	43.4 per cent
	7.5		Secondary school net attendance ratio(adjusted)	14.9 per cent
	7.6	*2.2*	Children reaching last grade of primary	74.5 per cent
	7.7		Primary completion rate	50.3 per cent
	7.8		Transition rate to secondary school	47.6 per cent
	7.9		Gender parity index (primary school)	0.87 ratio
	7.10		Gender parity index (secondary school)	0.61 ratio
CHILD PROTECTION				
Child labour	8.2		Child labour	26.2 per cent
	8.3		School attendance among child labourers	41.2 per cent
	8.4		Child labour among students	28.7 per cent
Child discipline	8.5		Violent discipline	75.2 per cent
Early marriage and polygyny	8.6		Marriage before age 15 women age 15-49 years	12.1 per cent
	8.7		Marriage before age 18 women age 20-49 years	38.1 per cent
	8.8		Young women age 15-19 currently married or in union	11.8 per cent
	8.9		Polygyny women age 15-49 years	19.8 per cent
	8.10		Spousal age difference	
	8.10a		Women age 15-19	35.0 per cent
	8.10b		Women age 20-24	29.8 per cent
Orphaned children	9.17		Children's living arrangements	12.1 per cent
	9.18		Prevalence of children with one or both parents dead	12.7 per cent
	9.19	*6.4*	School attendance of orphans	31.2 per cent
	9.20	*6.4*	School attendance of non-orphans	56.9 per cent
Female genital mutilation/cutting	8.11		Approval for female genital mutilation/cutting (FGM/C)	57.8 per cent
	8.12		Prevalence of female genital mutilation/cutting (FGM/C) among women	98.0 per cent
Domestic violence	8.14		Attitudes towards domestic violence	30.6 per cent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value and Units
HIV/AIDS				
HIV/AIDS knowledge and attitudes	9.1		Comprehensive knowledge about HIV prevention women age 15-49 years	8.9 per cent
	9.2	*6.3*	Comprehensive knowledge about HIV prevention among young people women age 15-24 years	9.7 per cent
	9.3		Knowledge of mother-to-child transmission of HIV women age 15-49 years	44.7 per cent
	9.4		Accepting attitude towards people living with HIV women age 15-49 years	8.6 per cent
	9.5		Women who know where to be tested for HIV	26.9 per cent
	9.6		Women who have been tested for HIV and know the results	2.0 per cent
	9.8		HIV counselling during antenatal care	3.3 per cent
	9.9		HIV testing during antenatal care	2.1 per cent
ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY				
Access to mass Media	MT.1		Exposure to mass media women age 15-49 years	4.7 per cent
Use of information/ communication technology	MT.2		Use of computers women age 15-24 years	7.7 per cent
	MT.3		Use of internet	9.9 per cent

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
BCG	Bacillis-Cereus-Geuerin (Tuberculosis)
CSPro	Census and Survey Processing System
DPT	Diphteria Pertussis Tetanus
EPI	Expanded Programme on Immunization
FGM/C	Female genital mutilation/cutting
GPI	Gender Parity Index
HIV	Human Immunodeficiency Virus
IDD	Iodine Deficiency Disorders
ITN	Insecticide Treated Net
IUD	Intrauterine Device
LAM	Lactational Amenorrhea Method
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MICS4	Fourth global round of Multiple Indicator Clusters Surveys programme
MoH	Ministry of Health
NAR	Net Attendance Rate
ORT	Oral rehydration treatment
ppm	Parts Per Million
SPSS	Statistical Package for Social Sciences
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children's Fund
WFFC	World Fit For Children
WHO	World Health Organization

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Disclaimer

For the purposes of this survey, the analysis and reporting refers to the Northeast Zone according to the prewar boundaries for Puntland and does not imply any recognition of administrative boundaries by the United Nations. This will allow some comparison with the previous MICS surveys.

Executive Summary

The Northeast Zone Multiple Indicator Survey is a representative sample survey of 4,954 households, out of which 4,785 were successfully interviewed including 5,492 women age 15 – 49 years and 4,714 mothers and caretakers of children less than five years old. The primary purpose of MICS is to provide policy makers and planners with reliable and detailed information needed to monitor the situation of women and children. Information on nutrition, child health, water and sanitation, reproductive health, child development, literacy and education, child protection, HIV/AIDS and orphan hood and access to mass media and use of information/communication technology is included.

Nutrition

- Fifty six percent of the children are breastfed within one hour of being born.
- Exclusive breastfeeding levels are very low, contrary to UNICEF/WHO recommendations, only 5 percent of children age 0 – 6 months are exclusively breastfed.
- Among children age 12 -15 months nearly half are still breastfeeding which falls to 24 percent among children age 20 – 23 months.
- Complimentary feeding in Northeast Zone is sub optimal. Only a third of the children 6 – 8 months receive appropriate complimentary feeding.

Immunization

- Immunisation coverage is low and only 3 percent of children age 12 -23 months are fully vaccinated at the time of the survey.
- Less than one percent of children received their vaccination by their first birthday.
- Twenty three percent of children age 12 – 23 months has received BCG vaccination while 25 percent have been vaccinated against measles.
- About 7 percent of children aged 12 – 23 months had received their third dose of DPT by their first birthday.
- Nearly two thirds of children aged 12 – 23 months have not received any of the basic vaccines
- Twenty seven percent of the women aged 15 – 49 years with a live birth in the last two years are protected against neonatal tetanus.

Diarrhoea

- One in every ten children under five years of age had diarrhoea at some point in the two weeks before the survey.
- Forty one percent of children who had diarrhoea received fluids from ORS packets or pre-packaged ORS fluids.
- Twenty four percent of children with diarrhoea received ORT with continued feeding.

Pneumonia

- Five percent of children under five years had suspect pneumonia in the two weeks before the survey.
- Thirty five percent of children under five with suspected pneumonia received treatment from an appropriate provider.
- About half of children with suspected pneumonia received antibiotics.

Malaria

- Thirty one percent of households own at least one mosquito net and close to one third own long lasting Insecticide Treated Net (ITN).
- One in every four children under age of five years slept under a bed net during the night prior to the interview; a similar number children sleeping under ITN.
- Twenty one percent of pregnant women slept under an ITN during the night prior to the interview.
- Eleven percent of children under age five had a fever at one point in the last two weeks before the survey; one in five received any antimalarial drug and only 9 percent received an antimalarial drug on the same or next day.

Water and sanitation

- Half of the population in Northeast Zone has access to an improved source of drinking water.
- Six percent of the population living in households using unimproved drinking water sources use an appropriate water treatment method.
- In sixty one percent of households without drinking water on premises, an adult woman bears the responsibility of collecting water.
- Seventeen percent of the population is living without any type of toilet facilities.
- Nearly two-thirds of the population are using unshared facilities with a sanitary means of excreta disposal; and the latest stool was safely disposed of for nearly three quarters of the children age 0 - 2 years.
- Thirty seven percent of the population is using an improved source of drinking water and improved sanitation; the proportion is more than twice as high in urban compared to rural areas.
- Water and soap for hand washing is available in 79 percent of households with a place for hand washing; and 59 percent of the households had soap anywhere in the dwelling.

Reproductive health

- Only three in ten married women are using any method of contraception; the most common non modern method is Lactational Amenorrhea Method (LAM) and the use of any modern method is very low.
- The unmet need for contraception is 11 percent.
- Nearly one in every four mothers with a live birth in the two years preceding the survey received ante natal care from a skilled provider (Doctor, Nurse or trained midwife).
- Among women with a live birth in the two years preceding the survey and who received Ante-Natal Care (ANC), 25 percent had blood pressure taken, 19 percent had urine sample taken and 21 percent had a blood test done.
- Only 3 percent of women with a live birth in the two years preceding the survey had four or more ANC visits but 72 percent did not receive ANC.
- Thirty eight percent of births in the two years prior to the survey were delivered with the assistance of a skilled attendance.
- Thirteen percent of the births were delivered in a health facility.

Child development

- Only 2 percent of children age 3 – 4 years are attending early childhood education programme.
- Fifty eight percent of children 3 – 4 years were engaged by adult household members in four or more playing activities that promote learning and school readiness during the last three days preceding the survey.
- Irrespective of the sex of the child, 29 percent of children under five years of age had been left with inadequate care a week before the survey.

Literacy and Education

- Four in every ten women 15 – 24 years are literate; among this group, literacy is almost twice in urban compared to rural areas and four times higher among the women in the richest quintile compared to those in the poorest quintile.
- Nearly one in every four in children first grade attended pre-school the previous year.
- Seventeen percent of primary school entry age children enter grade one and this is five times among children in the richest quintile compared to those in poorest quintile.
- Forty three percent of primary school age children are in primary school and this declines further to 15 percent of secondary school age children attending secondary school.
- For every 10 boys attending primary school there are 9 girls. This declines further in secondary school education with 6 girls attending for every 10 boys.
- Seventy three percent of children 5-17 ever attended non formal education; a similar percentage ever attended Koranic school.

Child protection

- About one in every four children is involved in child labour; and this if more common for girls than boys.
- Twenty nine percent of children who are in school are involved in child labour.
- Violent method of disciplining children and psychological aggression are very common.
- Almost all women aged 15 -49 years have undergone one form of FGM; the most common type is where they are sewn/closed.
- One in every four daughters aged 0 – 14 years have undergone FGM.
- Fifty-eight percent of women aged 15 – 49 years support continuation of FGM.
- About one third of women believe that a husband is justified to beat his wife/partner and mostly if she refuses sex with him.

HIV/AIDS

- Only 9 percent of women age 15 -49 years have comprehensive knowledge on HIV transmission and about three in every ten reject the two common misconceptions about HIV.
- One in ten women age 15-24 years have comprehensive knowledge of HIV transmission.
- Forty five percent of women can correctly identify the three means of HIV transmission from mother-to-child.
- Thirty percent of women know of a place they can be tested of HIV/AIDS and only 2 percent have been tested and know their result.
- Only 9 percent of women who have heard of HIV express accepting attitude towards people living with HIV/AIDS.

Access to mass media and information /communication technology

- Five percent of women aged 15 - 49 years have access to all three media (Newspaper, radio and television) at least once a week.
- Only 8 percent of women aged 15 -24 years have used a computer in the last 12 months; and 10 percent have used internet during the same period.

I. Introduction

Background

This report is based on the Northeast Zone Multiple Indicator Cluster Survey, conducted in 2011 by the Ministry of Planning and International Cooperation with technical and financial support from UNICEF Somalia country office.

The survey provides valuable information on the situation of children and women in Northeast Zone, 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 subnational 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."

This final report presents the results of the indicators and topics covered in the survey.

Survey Objectives

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

- To provide up-to-date information for assessing the situation of children and women in Northeast Zone;
- 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 Northeast Zone 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 Northeast Zone 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 zonal level, for urban and rural areas, and for three regions: Bari, Nugal and Mudug. 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, a specified number of census enumeration areas were selected systematically with probability proportional to size. After a household listing was carried out within the selected enumeration areas, a systematic sample of 18 households was drawn in each sample enumeration area. Thirteen (13) of the selected enumeration areas were not visited because they were inaccessible due to population movement during the fieldwork period. The sample is not self-weighting and for reporting national level results, sample weights are used. A more detailed description of the sample design can be found in Appendix A.

Questionnaires

Four 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 module.

The Household Questionnaire included the following modules:

- Household Listing Form
- Education
- Non Formal Education (non-MICS country specific module)
- Water and Sanitation
- Household Characteristics
- Insecticide Treated Nets
- Indoor Residual Spraying
- Child Labour
- Child Discipline
- Handwashing

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

- Women's Background
- Access to Mass Media and Use of Information/Communication Technology
- Child Mortality with Birth History
- Desire for Last Birth
- Maternal and Newborn Health
- Post-natal Health Checks
- Illness Symptoms
- Contraception
- Unmet Need
- Female Genital Mutilation/Cutting

- Attitudes Towards Domestic Violence
- Marriage/Union
- HIV/AIDS

The Questionnaire for Children Under Five was administered to mothers or caretakers of children under 5 years of age[1] 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:

- Age
- Early Childhood Development
- Breastfeeding
- Care of Illness
- Malaria
- Immunization

The questionnaires are based on the MICS4 model questionnaire[2]. From the MICS4 model English version, the questionnaires were translated into Somali and were pre-tested in Gabilely, Hargeisa during February 2011. Based on the results of the pre-test, modifications were made to the wording and translation of the questionnaires. A copy of the Northeast Zone MICS questionnaires is provided in Appendix F. In addition to the administration of questionnaires, fieldwork teams observed the place for hand washing.

The following modules were removed from the three sets of questionnaires each for the given reason. In the household questionnaire;

- Salt iodisation module was removed because there is more recent data from the Micronutrient Survey of 2009.

In the questionnaire for women 15- 49 years;

- Sexual behaviour module was not included as it was considered culturally sensitive in Somalia. Furthermore, it was not included in the 2006 MICS

In the questionnaire for children under five years;

- Birth registration was omitted based on observations in MICS3 that there are very few births registered in Somaliland as most women gave birth at home.
- The anthropometry module was excluded as there was more recent data in the micronutrient survey of 2009.

The following additions were made to the modules for specific questionnaires;
In the questionnaire for children under five years

- In the immunisation module treatment of diarrhoea using ORS distributed in the most recent Child Health Days i.e. December 2010 was added
- In the same module the type of card in which child immunisation was recorded included additional type of cards from the 2009 and 2010 child health days.

In the household questionnaire

- The Non Formal Education module was added. It was considered necessary to provide information for the continued intervention and support for Non Formal Education by the government and partners.

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

Training and Fieldwork

Training for the fieldwork was conducted for 14 days in March 2011. Training included lectures on interviewing techniques and the contents of the questionnaires, and mock interviews between trainees to gain practice in questionnaire administration. Towards the end of the training period, trainees spent two days in practice interviewing in Garowe town in an area not selected for actual data collection.

The data were collected by 10 teams; each comprised 6 interviewers, one sketch mapper, two field editors, a supervisor and a team leader. Fieldwork was conducted in three phases, in 2011, due to challenges relating to access. The first and major phase began on 2nd April – to 17th May 2011. Three areas with a total of 70 clusters could not be accessed and data collection was planned to take place later. In the second phase data was collected in the following areas; 41 clusters from South Galkayo and Hobyo (25th July – 16th August), 13 clusters in Haradhere (15th - 29th August) and 16 clusters from Allula/ Bargar/ Ishkushban (15th - 21st December). Before data collection from these areas was done, refresher training for the teams was done. The teams were selected from the same team that collected data in phase one.

Data Processing

Data were entered using the CSPro software. The data were entered on 12 computers and carried out by 12 data entry operators and one data entry supervisor and one data manager. 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 Northeast Zone questionnaire were used throughout. Data entry began in Garowe at Puntland State University (PSU) two weeks into data collection in April 2011 but was stopped in June 2011 due to technical and logistical challenges – the university uses a generator which kept on break down and affecting data entry and some clerks were caught trying to shorten the time taken in entering data by skipping sections of the questionnaire. Following consultations between UNICEF country office, the Ministry of Planning and International Cooperation in the Northeast Zone, it was decided to ship all the questionnaires to Nairobi and have data re-entered by a new set of data entry clerks. This second round of data entry started in September 2011 and was completed in January 2012. 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 4,954 households selected for the sample, excluding the households in the 13 clusters that were not surveyed, 4,904 were found to be occupied. Of these, 4,785 were successfully interviewed for a household response rate of 97.6 percent. In the interviewed households, 5,839 women (age 15-49 years) were identified. Of these, 5,492 were successfully interviewed, yielding a response rate of 94.1 percent within interviewed households. There were 4,827 children under age five listed in the household questionnaire. Questionnaires were completed for 4,714 of these children, which corresponds to a response rate of 97.7 percent within interviewed households. Overall response rates of 91.8 and 95.3 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, Northeast Zone, Somalia 2011

	Area		Region			
	Urban	Rural	Bari	Nugal	Mudug	Total
Households						
Sampled	3,193	1,761	2,211	989	1,754	4,954
Occupied	3,173	1,731	2,199	967	1,738	4,904
Interviewed	3,104	1,681	2,149	942	1,694	4,785
Household response rate	97.8	97.1	97.7	97.4	97.5	97.6
Women						
Eligible	3,950	1,889	2,757	1,177	1,905	5,839
Interviewed	3,688	1,804	2,586	1,070	1,836	5,492
Women's response rate	93.4	95.5	93.8	90.9	96.4	94.1
Women's overall response rate	91.3	92.7	91.7	88.6	93.9	91.8
Children under-5						
Eligible	3,117	1,710	1,986	1,029	1,812	4,827
Mothers/caretakers interviewed	3,036	1,678	1,949	989	1,776	4,714
Under-5's response rate	97.4	98.1	98.1	96.1	98.0	97.7
Under-5's overall response rate	95.3	95.3	95.9	93.6	95.5	95.3

The response rates were similar between rural and urban areas and for two regions namely Bari and Mudug. However, Nugal region had a response rate below 90 percent for women but all the response rates across regions and areas of residence were above 85 percent.

Characteristics of Households

The weighted age and sex distribution of survey population is provided in Table HH.2. The distribution was also used to produce the population pyramid in Figure HH.1. In the 4,785 households successfully interviewed in the survey, 28,537 household members were listed. Of these, 13,865 were males, and 14,670 were females.

Table HH.2: Household age distribution by sex

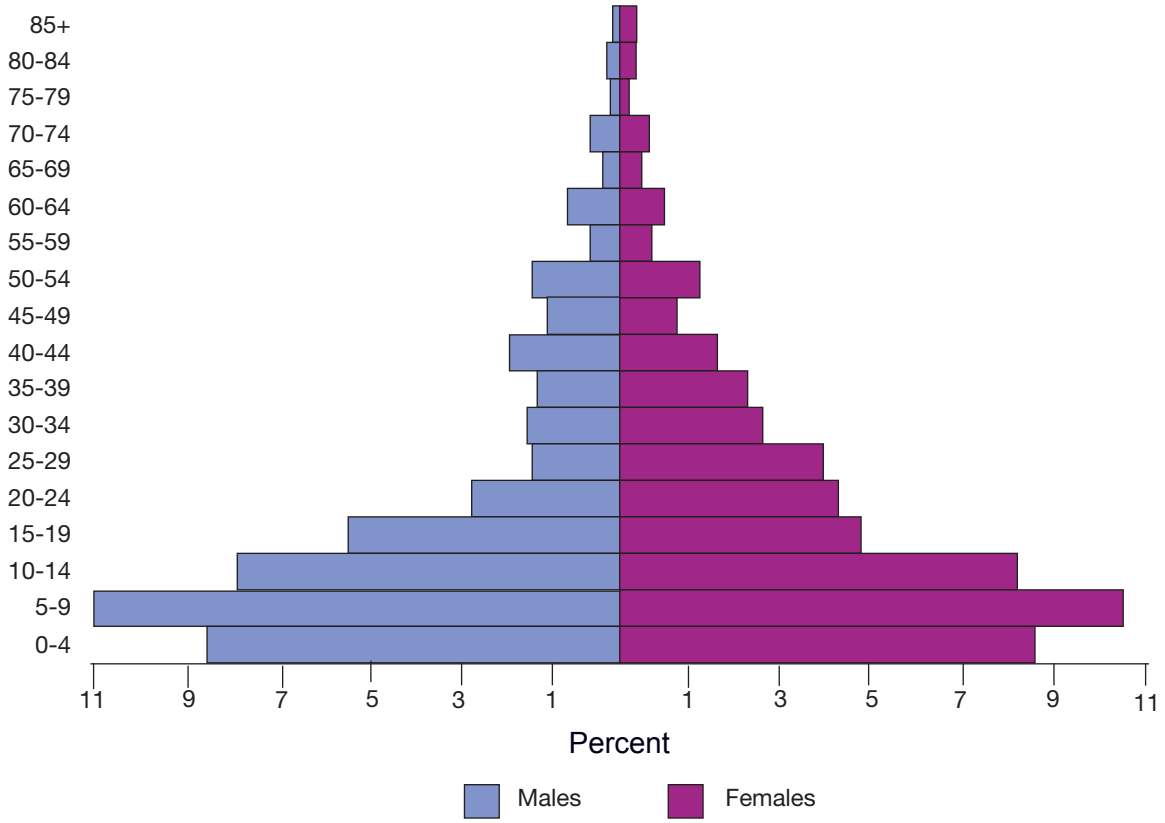
Percent and frequency distribution of the household population by five-year age groups, dependency age groups, and by child (age 0-17 years) and adult populations (age 18 or more), by sex, Northeast Zone, Somalia 2011

	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Age						
0-4	2,453	17.7	2,376	16.2	4,829	16.9
5-9	2,993	21.6	2,869	19.6	5,863	20.5
10-14	2,222	16.0	2,217	15.1	4,439	15.6
15-19	1,538	11.1	1,298	8.8	2,836	9.9
20-24	795	5.7	1,113	7.6	1,908	6.7
25-29	572	4.1	1,046	7.1	1,618	5.7
30-34	576	4.2	801	5.5	1,376	4.8
35-39	478	3.4	729	5.0	1,207	4.2
40-44	675	4.9	566	3.9	1,241	4.3
45-49	348	2.5	266	1.8	614	2.2
50-54	419	3.0	486	3.3	905	3.2
55-59	134	1.0	201	1.4	335	1.2
60-64	274	2.0	251	1.7	525	1.8
65-69	58	0.4	75	.5	133	0.5
70-74	164	1.2	179	1.2	344	1.2
75-79	32	0.2	40	0.3	72	0.3
80-84	76	0.5	77	0.5	154	0.5
85+	53	0.4	77	0.5	130	0.5
Missing/DK	4	0.0	4	0.0	8	0.0
Dependency age groups						
0-14	7,668	55.3	7,462	50.9	15,131	53.0
15-64	5,809	41.9	6,756	46.1	12,565	44.0
65+	383	2.8	448	3.1	833	2.9
Missing/DK	4	0.0	4	0.0	8	0.0
Child and adult populations						
Children age 0-17 years	8,623	62.2	8,228	56.1	16,853	59.1
Adults age 18+ years	5,237	37.8	6,437	43.9	11,677	40.9
Missing/DK	4	0.0	4	0.0	8	0.0
Total	13,865	100.0	14,670	100.0	28,537	100.0

The population pyramid in Figure HH.1, with a wide base, indicates a population that is still very young. Children under 15 years comprise 53 percent of the population is common in societies with high fertility levels. Nearly 60 percent of the population is aged between 0 and 17 years. With regard to dependency 44 percent of the population is between 15 - 64 years and only about 3 percent is 65 years and above.

In the absence of birth registration and other services relating to vital statistics, it is extremely difficult to get correct age related data. Many people do not know the year they were born in Northeast Zone. This affects the quality of data as seen in the data quality table (DQ.1) in Appendix D which presents ages in single year categories, the table shows a high level of digit preference for ages ending with zero and five.

Figure HH.1. Age and sex distribution of household population, Northeast Zone, 2011



Tables HH.3 - HH.5 provide basic information on the households, female respondents age 15-49, male respondents 15-49 and children under-5 by presenting the unweighted, as well as the weighted numbers. Information on the basic characteristics of households, women, men and children under-5 interviewed in the survey is essential for the interpretation of findings presented later in the report and also can provide an indication of the representativeness of the survey. The remaining tables in this report are presented only with weighted numbers. See Appendix A for more details about the weighting.

Table HH.3 provides basic background information on the households. Within households, the sex of the household head, region, residence, number of household members, education of 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.

The weighted and unweighted 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, at least one eligible woman age 15-49. The table also shows the weighted average household size estimated by the survey.

About a third of the households are headed by women and the rest by men. The households are typically quite large with an average household size of 6. Household heads are largely illiterate with nearly 3 in 4 household having no education at all. The households are mostly urban with only over one-third coming from rural areas. Ten percent of the households have ten or more members. Nearly two thirds of the households have at least one child under five and the households and about 89 percent of them have at least one woman aged 15 – 49 years.

Table HH.3: Household composition

Percent and frequency distribution of households by selected characteristics, Northeast Zone, Somalia 2011

		Number of households	
	Weighted percent	Weighted	Unweighted
Sex of household head			
Male	68.6	3,284	3,284
Female	31.3	1,499	1,499
Region			
Bari	45.0	2,152	2,149
Nugal	19.8	947	942
Mudug	35.2	1,686	1,694
Area			
Urban	62.0	2,967	3,104
Rural	38.0	1,818	1,681
Number of household members			
1	1.2	57	55
2	6.5	311	308
3	11.2	535	533
4	13.0	621	620
5	15.5	742	742
6	14.7	705	707
7	11.8	564	564
8	9.2	441	442
9	6.6	315	317
10+	10.3	493	497
Education of household head			
None	73.9	3,538	3,520
Primary	11.3	539	540
Secondary+	14.3	684	701
Missing/DK	0.5	24	24
Total	100.0	4,785	4,785
Households with at least			
One child age 0-4 years	61.1	4,785	4,785
One child age 0-17 years	91.5	4,785	4,785
One woman age 15-49 years	88.7	4,785	4,785
Mean household size	6.0	4,785	4,785

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

Tables HH.4 and HH.5 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 provides background characteristics of female respondents 15-49 years of age. The table includes information on the distribution of women according to region, area of residence, age, marital status, motherhood status, births in last two years, education[3], household wealth index quintiles[4].

Nearly two in three women reside in urban areas compared to one in three who reside in rural areas.

The population of women in each 5 year age group decreases with age from 22 percent in the 15 – 19 age category to 10 percent in the 45-49 age category. Over half of the women surveyed are married (58 percent), nearly a third has never been married and about 12 percent reported being widowed or divorced. Of all the women who reported ever being married, 65 percent had given birth.

The level of education among the surveyed women is very low. Majority of women have never received any kind of education (70 percent). About one in five have primary level education and only 10 percent have secondary school or higher level of education. The women are nearly equally distributed between five wealth quintiles at around 20 percent in each category.

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

4 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: main source of drinking water, toilet facility, number of persons per room used for sleeping, main materials for dwelling floor, main material of the roof, main material of the exterior walls, type of cooking fuel , radio, television, non-mobile telephone, refrigerator, charcoal stove/Jiko, wheel barrow, mat, vacuum flask, kerosene lamp, fan , bed , sofa, Somali stool, sitting cushion/pillow, watch, mobile phone, bicycle, motorcycle or scooter, car or truck, having a bank account and if the house has electricity. 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 Filmer, D. and Pritchett, L., 2001. *"Estimating wealth effects without expenditure data – or tears: An application to educational enrolments in states of India". Demography 38(1): 115-132. Gwatkin, D.R., Rutstein, S., Johnson, K. , Pande, R. and Wagstaff. A., 2000. Socio-Economic Differences in Health, Nutrition, and Population. HNP/Poverty Thematic Group, Washington, DC: World Bank. Rutstein, S.O. and Johnson, K., 2004. The DHS Wealth Index. DHS Comparative Reports No. 6. Calverton, Maryland: ORC Macro.*

Table HH.4: Women's background characteristics

Percent and frequency distribution of women age 15-49 years by selected background characteristics, Northeast Zone, Somalia 2011

	Weighted percent	Number of women	
		Weighted	Unweighted
Region			
Bari	47.1	2,586	2,586
Nugal	19.6	1,077	1,070
Mudug	33.3	1,830	1,836
Area			
Urban	64.9	3,563	3,688
Rural	35.1	1,929	1,804
Age			
15-19	21.7	1,191	1,193
20-24	18.6	1,021	1,021
25-29	18.6	1,020	1,021
30-34	14.0	767	765
35-39	12.8	705	707
40-44	10.0	551	547
45-49			
Marital/Union status			
Currently married/in union	57.9	3,179	3,175
Widowed	4.2	233	233
Divorced	7.9	433	432
Separated	0.3	17	17
Never married/in union	29.6	1,626	1,631
Missing /DK	0.1	4	4
Motherhood status			
Ever gave birth	65.4	3,589	3,585
Never gave birth	34.4	1,887	1,891
Missing /DK	0.3	16	16
Births in last two years			
Had a birth in last two years	27.9	1,530	1,526
Had no birth in last two years	71.9	3,946	3,950
Missing /DK	0.3	16	16
Education			
None	70.4	3,865	3,847
Primary	19.8	1,090	1,093
Secondary+	9.8	537	552
Wealth index quintile			
Poorest	17.9	985	952
Second	19.8	1,088	1,061
Middle	19.5	1,072	1,068
Fourth	20.6	1,129	1,153
Richest	22.2	1,217	1,258
Total	100.0	5,492	5,492

Table HH.5 presents some background characteristics of children under 5. These include distribution of children by several attributes: sex, region and area of residence, age in months, mother's or caretaker's education and wealth.

The proportion of boys and girls surveyed was similar (51 versus 49 percent). No major differences were observed between the weighted and unweighted categories for the children. Nearly two in three of the children reside in urban areas and the rest in rural areas. The proportion of children in the 0-5 months and 6-11 months age groups were the lowest at 10 and 8 percent. The highest proportions of children were within the age groups of 24-35, 36 – 47 and 48-59 months (22, 23 and 21 percent respectively). Education of mothers/caretakers for children under-five is quite low with about 77 percent having no education. Six percent of the mothers/caretakers had attended secondary education or higher while 17 percent had primary education.

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

Percent and frequency distribution of children under five years of age by selected characteristics, Northeast Zone Somalia, 2011

	Weighted percent	Number of under-5 children	
		Weighted	Unweighted
Sex			
Male	50.8	2,395	2,394
Female	49.2	2,319	2,320
Region			
Bari	41.4	1,952	1,949
Nugal	21.1	993	989
Mudug	37.5	1,768	1,776
Area			
Urban	61.7	2,908	3,036
Rural	38.3	1,806	1,678
Age			
0-5 months	10.2	481	480
6-11 months	8.0	376	377
12-23 months	16.8	792	793
24-35 months	21.8	1,027	1,024
36-47 months	22.6	1,067	1,068
48-59 months	20.6	972	972
Mother's education[a]			
None	76.9	3,624	3,613
Primary	16.9	797	801
Secondary+	6.2	293	300
Wealth index quintile			
Poorest	21.3	1,003	969
Second	20.6	971	947
Middle	19.8	932	931
Fourth	20.2	954	977
Richest	18.1	855	890
Total	100.0	4,714	4,714

[a] Mother's education refers to educational attainment of mothers and caretakers of children under 5.

IV. Nutrition

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.1 shows the proportion of children born in the two years preceding the survey who were ever breastfed, those who were first breastfed within one hour and one day of birth, and those who received a prelacteal feed. Breast feeding within one hour of birth is a very important step in management of lactation and establishment of a physical and emotional relationship between the baby and the mother. In Northeast Zone, slightly above half (56 %) of babies are breastfed for the first time within one hour of birth, while 82 percent of newborns start breastfeeding within one day of birth. On overall, 89 percent of the children were ever breastfed. Initiation of breastfeeding was similar in rural areas and urban areas (Figure NU.1). There were minimal regional differentials in the percent of mothers who started breastfeeding within one hour and within one day of life.

Table NU.1: 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 prelacteal feed, Northeast Zone, Somalia 2011

	Percentage who were ever breastfed[1]	Percentage who were first breastfed:		Percentage who received a prelacteal feed	Number of last-born children in the two years preceding the survey
		Within one hour of birth[2]	Within one day of birth		
Region					
Bari	88.0	54.4	79.8	46.0	646
Nugal	88.0	52.0	78.6	49.6	332
Mudug	90.3	60.2	85.8	53.2	553
Area					
Urban	87.6	54.0	80.1	49.6	955
Rural	90.9	59.2	84.4	49.0	576
Months since last birth					
0-11 months	90.0	58.6	83.5	46.8	844
12-23 months	88.3	53.4	80.4	52.7	650
Assistance at delivery[a]					
Skilled attendant	91.1	53.3	83.2	47.9	589
Traditional birth attendant	91.4	60.3	84.5	52.7	853
Other	(84.4)	(52.)5	(77.6)	(48.2)	44
Place of delivery					
Public sector health facility	92.1	59.2	83.9	48.8	140
Private sector health facility	83.7	38.4	72.8	45.3	54
Home	91.0	57.9	84.0	51.0	1,291
Other/Missing	(22.2)	(13.5)	(22.2)	(9.3)	46
Mother's education					
None	88.4	56.5	81.7	49.6	1,178
Primary	91.5	54.7	82.8	50.4	260
Secondary+	86.1	53.6	78.8	43.1	93
Wealth index quintile					
Poorest	89.8	64.4	85.7	47.8	302
Second	89.2	55.6	79.6	50.5	322
Middle	89.4	53.9	80.7	54.3	299
Fourth	86.2	52.4	81.5	47.0	312
Richest	89.5	53.8	81.0	47.2	295
Total	88.8	56.0	81.7	49.4	1,531

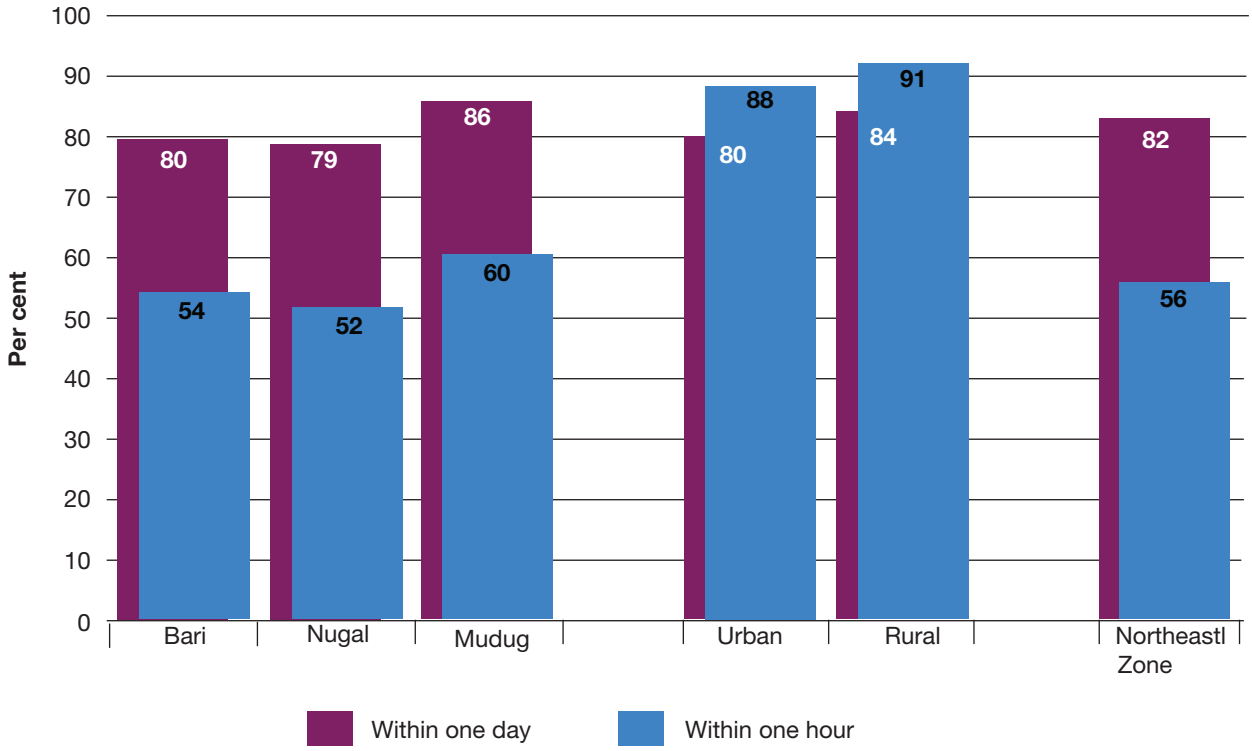
[1] MICS indicator 2.4

[2] MICS indicator 2.5

[a] Total includes 46 cases of children with missing information on assistance at delivery that are not shown separately

( ) Figures that are based on 25-49 unweighted cases

Figure NU.1. Percentage of mothers who started breastfeeding within one hour and within one day of birth, Northeast Zone, Somalia 2011



In Table NU.2, 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.2: Breastfeeding

Percentage of living children according to breastfeeding status at selected age groups, Northeast Zone, Somalia 2011

	Children age 0-5 months			Children age 12-15 months		Children age 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	4.1	27.6	247	48.2	187	24.1	93
Female	5.5	26.3	234	37.4	210	23.9	72
Region							
Bari	6.2	32.5	194	40.7	154	17.3	71
Nugal	6.5	23.8	93	40.4	98	(19.5)	46
Mudug	2.6	22.8	194	45.8	145	(38.5)	48
Area							
Urban	4.6	23.0	291	41.6	235	18.7	103
Rural	5.1	33.0	189	43.7	162	32.8	62
Mother's education							
None	5.2	27.6	370	43.4	301	25.9	137
Primary	2.4	21.7	84	41.9	80	(*)	18
Secondary+	7.3	(33.6)	26	(*)	17	(*)	10
Wealth index quintile							
Poorest	4.8	41.0	104	40.7	92	(26.9)	31
Second	4.2	29.1	99	41.2	90	(15.2)	28
Middle	5.9	20.6	103	45.2	79	(36.0)	31
Fourth	6.1	20.4	96	44.3	76	(19.0)	42
Richest	2.4	21.9	79	41.3	60	(23.7)	33
Total	4.8	26.9	481	42.5	397	24.0	165

[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 unweighted cases

(*) Figures that are based on less than 25 unweighted cases

Approximately 5 percent of children aged less than six months are exclusively breastfed, a level considerably much lower than recommended. (Table NU.2) About 43 percent of the children are still being breastfed by one year and 24 percent are still breastfed by 2 years of age. Breastfeeding rates are similar between girls and boys except for the 1 year olds whereby breastfeeding rate slightly differs between the boys (48 percent) compared to the girls (37 percent). The percent who are predominantly breastfed between 0-5 months was highest among the poorest households (41 percent), Bari region (33 percent) and in rural areas (33 percent).

Figure NU.2 shows the detailed pattern of breastfeeding by the child's age in months. Even at the earliest ages, the majority of children are receiving liquids or foods other than breast milk. By the end of the sixth month, the percentage of children exclusively breastfed is below 3 percent. Only about 20 percent of children are receiving breast milk up to 2 years.

Figure NU.2: Infant feeding patterns by age, Northeast Zone, Somalia 2011

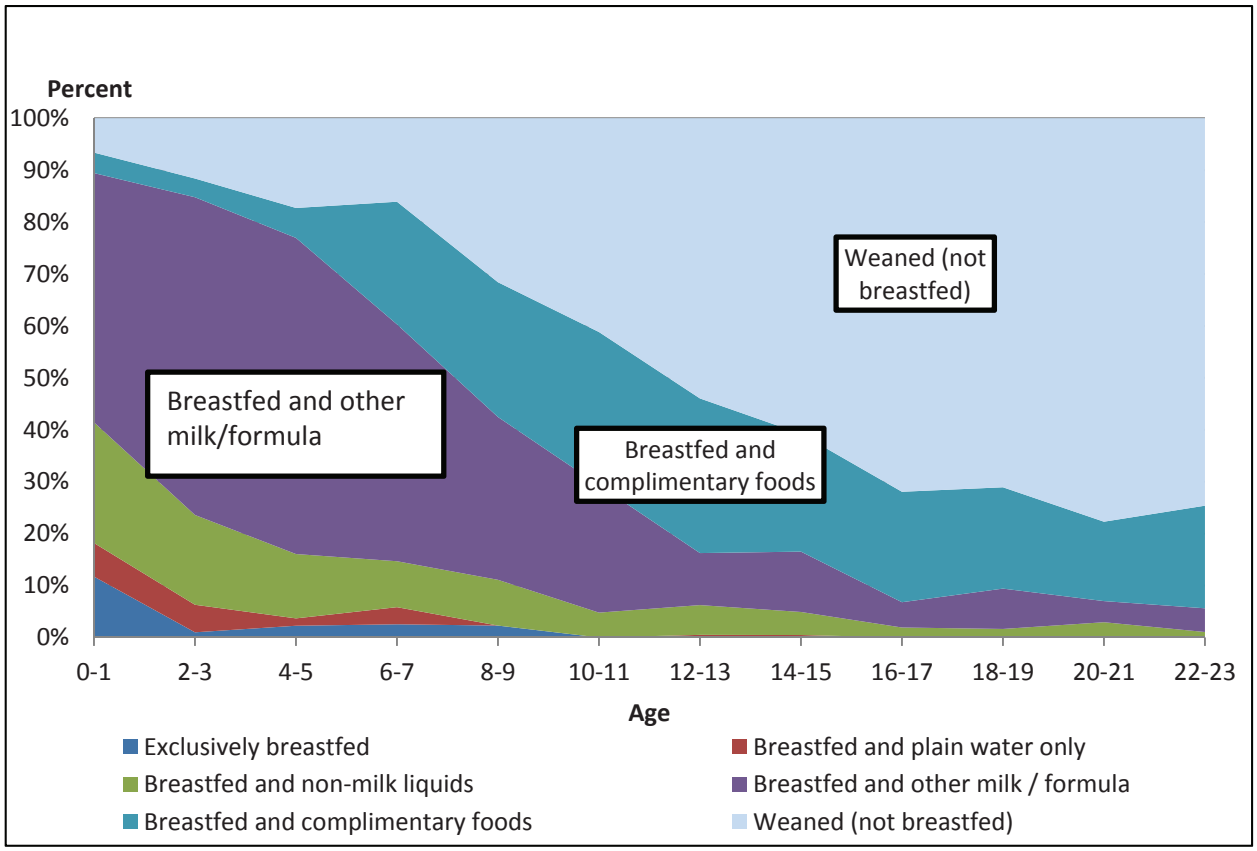


Table NU.3 shows the median duration of breastfeeding by selected background characteristics. Among children under age 3, the median duration is 12 months for any breastfeeding, less than 1 month (12 days) for exclusive breastfeeding, and for predominant breastfeeding. Boys are breastfed for about 2 months longer than girls for any breastfeeding while the median duration of exclusive breastfeeding did not differ based on background characteristics.

Table NU.3: Duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children age 0-35 months, Northeast Zone, Somalia 2011.

	Median duration (in months) of			Number of children age 0-35 months
	Any breastfeeding[1]	Exclusive breastfeeding	Predominant breastfeeding	
Sex				
Male	12.6	0.4	0.7	1,362
Female	10.9	0.4	0.6	1,314
Region				
Bari	11.7	0.4	0.7	1,108
Nugal	11.0	0.5	0.6	576
Mudug	11.9	0.4	0.6	991
Area				
Urban	11.4	0.4	0.6	1,635
Rural	11.9	0.4	1.1	1,041
Mother's education				
None	11.9	0.4	0.6	2,054
Primary	10.4	0.4	0.6	462
Secondary+	10.7	0.4	1.1	159
Wealth index quintile				
Poorest	10.7	0.4	0.7	549
Second	11.7	0.4	0.6	559
Middle	11.3	0.5	0.8	529
Fourth	12.0	0.4	0.6	555
Richest	12.0	0.4	0.5	483
Median	11.6	0.4	0.6	2,676
Mean for all children (0-35 months)	14.5	0.4	2.6	2,676

[1] **MICS indicator 2.10**

The adequacy of infant feeding in children under 24 months is provided in Table NU.4. 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. Only 24 percent of children aged 6 – 23 months are breastfeeding while receiving solid, semi-solid or soft foods and only 18 percent of children aged 0-23 months are being appropriately fed. Age-appropriate feeding among all infants age 0-5 months is 5 percent.

Table NU.4: Age-appropriate breastfeeding

Percentage of children age 0-23 months who were appropriately breastfed during the previous day, Northeast Zone, Somalia 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	4.1	247	23.8	588	18.0	835
Female	5.5	234	23.6	581	18.4	814
Region						
Bari	6.2	194	20.9	498	16.8	692
Nugal	6.5	93	25.1	272	20.4	365
Mudug	2.6	194	26.2	399	18.5	592
Area						
Urban	4.6	291	22.5	734	17.4	1,025
Rural	5.1	189	25.7	435	19.5	624
Mother's education						
None	5.2	370	24.3	877	18.6	1,247
Primary	2.4	84	24.5	222	18.4	306
Secondary+	7.3	26	14.0	70	12.1	97
Wealth index quintile						
Poorest	4.8	104	25.5	222	18.9	326
Second	4.2	99	24.7	247	18.8	345
Middle	5.9	103	21.8	210	16.6	314
Fourth	6.1	96	22.3	257	17.9	353
Richest	2.4	79	24.0	233	18.6	311
Total	4.8	481	23.7	1,169	18.2	1,649

[1] **MICS indicator 2.6**

[2] **MICS indicator 2.14**

Appropriate complementary feeding of children from 6 months to two years of age is particularly important for growth and development and the prevention of under nutrition. Continued breastfeeding beyond six months should be accompanied by consumption of nutritionally adequate, safe and appropriate complementary foods that help meet nutritional requirements when breastmilk 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.

Overall, one third of infants age 6-8 received solid, semi-solid, or soft foods (Table NU.5). Among currently breastfeeding infants this percentage is 33 while it is 42 percent among infants currently not breastfeeding.

Table NU.5: Introduction of solid, semi-solid or soft foods

Percentage of infants age 6-8 months who received solid, semi-solid or soft foods during the previous day, Northeast Zone, Somalia 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	28.5	94	(*)	24	31.9	118
Female	38.4	91	(40.2)	30	38.9	121
Area						
Urban	32.8	117	(45.7)	34	35.7	150
Rural	34.4	69	(*)	20	34.9	89
Total	33.4	186	42.4	54	35.4	240

[1] **MICS indicator 2.12**

( ) Figures that are based on 25-49 unweighted cases

(*) Figures that are based on less than 25 unweighted cases

Table NU.6 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 day or night preceding the interview by breastfeeding status (see the note in Table NU.6 for a definition of minimum number of times for different age groups). Among currently breastfeeding children age 6-23 months, slightly more than one quarter of them (28 percent) were receiving solid, semi-solid and soft foods the minimum frequency and this proportion was highest in Nugal region and among the poorest wealth index quintile (35 percent). Among non-breastfeeding children, majority (83 percent) of the children received solid, semi-solid and soft foods or milk feeds 4 times or more. The proportion of children with the minimum meal frequency increased with age from 39 percent for children 6 to 8 months old to 69 percent for children 18 -23 months of age.

Table NU.6: 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, Northeast Zone, Somalia 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	26.9	282	89.5	82.9	305	56.0	587
Female	28.7	265	88.7	82.7	316	58.1	581
Age							
6-8 months	26.9	186	96.5	81.2	54	39.1	240
9-11 months	21.7	87	94.1	(87.7)	49	45.4	136
12-17 months	29.8	198	87.4	82.7	305	61.8	503
18-23 months	31.7	76	88.6	82.3	214	69.0	290
Region							
Bari	28.4	236	89.2	83.6	262	57.5	498
Nugal	35.0	118	86.2	78.0	154	59.4	272
Mudug	22.6	194	91.3	85.4	205	54.8	399
Area							
Urban	27.7	335	90.9	85.3	399	59.0	734
Rural	27.9	212	86.0	78.3	223	53.7	435
Mother's education							
None	29.1	422	87.8	81.5	455	56.3	877
Primary	23.4	97	93.5	88.7	124	60.0	222
Secondary+	(24.2)	28	90.9	(79.5)	42	57.2	70
Wealth index quintile							
Poorest	35.3	96	82.2	77.2	126	59.1	222
Second	24.6	122	85.6	74.0	125	49.6	247
Middle	25.0	96	92.0	84.3	114	57.2	210
Fourth	24.9	122	90.0	87.9	135	57.9	257
Richest	30.4	111	96.1	90.6	122	61.9	233
Total	27.8	547	89.1	82.8	621	57.0	1,169

[1] **MICS indicator 2.15**
[2] **MICS indicator 2.13**
( ) Figures that are based on 25-49 unweighted 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.7 shows that bottle-feeding is prevalent in Northeast Zone as 48 percent of children 0-23 months are fed using a bottle with a nipple. This is twice as much among younger children less than one year old (62 percent) compared to 33 percent of those between 12 to 23 months of age.

Table NU.7: Bottle feeding

Percentage of children age 0-23 months who were fed with a bottle with a nipple during the previous day, Northeast Zone, Somalia 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	49.7	835
Female	46.9	814
Age		
0-5 months	62.3	481
6-11 months	62.4	376
12-23 months	33.2	792
Region		
Bari	51.9	692
Nugal	48.6	365
Mudug	43.9	592
Area		
Urban	53.2	1,025
Rural	40.3	624
Mother's education		
None	45.6	1,247
Primary	55.0	306
Secondary+	62.1	97
Wealth index quintile		
Poorest	35.2	326
Second	49.3	345
Middle	49.2	314
Fourth	53.3	353
Richest	54.4	311
Total	48.3	1,649

[1] **MICS indicator 2.11**

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.

In Northeast Zone, vitamin A supplementation of young children is carried out via Child Health Days while for post-partum supplementation for mothers within eight weeks of giving birth is given through the health facilities.

Within the six months prior to the MICS, 27 percent of children aged 6-59 months received a high dose Vitamin A supplement (Table NU.8). Vitamin A supplementation coverage is lower in the rural areas, among children 6 – 11 months old, and among children whose mothers have no education.

The age pattern of Vitamin A supplementation shows that supplementation in the last six months rises from 19 percent among children aged 6-11 months to 28 percent among children aged 36-47 months.

Table NU.8: Children's vitamin A supplementation

Percentage of children age 6-59 months receiving a high dose vitamin A supplement in the last 6 months, Northeast Zone, Somalia 2011

	Percentage who received Vitamin A in the last 6 months according to:		Percentage of children who received Vitamin A in the last 6 months[1]	Number of children age 6-59 months
	Child health book/card/vaccination card	Mother's report		
Sex				
Male	2.4	26.0	26.7	2,148
Female	2.4	26.4	26.9	2,086
Region				
Bari	3.0	28.4	29.1	1,759
Nugal	2.7	25.0	25.3	900
Mudug	1.6	24.5	25.2	1,575
Area				
Urban	2.7	30.0	30.6	2,617
Rural	1.9	20.1	20.6	1,616
Age				
6-11 months	4.7	17.6	19.2	376
12-23 months	3.4	25.4	26.2	792
24-35 months	2.2	27.2	28.2	1,027
36-47 months	2.2	28.2	28.4	1,067
48-59 months	1.1	27.0	27.1	972
Mother's education				
None	2.4	24.2	24.8	3,254
Primary	2.5	33.6	34.0	713
Secondary+	2.2	31.3	32.4	266
Wealth index quintile				
Poorest	0.8	21.4	21.5	900
Second	2.8	27.6	28.4	866
Middle	2.4	27.5	28.3	817
Fourth	3.0	24.8	25.7	869
Richest	3.2	30.4	30.9	781
Total	2.4	26.2	26.8	4,233

[1] **MICS indicator 2.17**

Weighing children at birth

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. 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. The percent of live birth below 2,500 grams is not presented here as the method of calculation would introduce significant bias on the estimate due to the low percentage of children actually weighed and the distribution of these across socio-economic and demographic groups. In the Northeast Zone MICS, only 4 percent of infants were weighted at birth (Table NU.9).

Table NU.9: Infants weighed at birth

Percentage of live births last-born of children in the 2 years preceding the survey that were weighed at birth, North East Zone, Somalia 2011

	Percent of live births weighed at birth[1]	Number of last-born children in the two years preceding the survey
Region		
Bari	5.2	646
Nugal	3.6	332
Mudug	1.4	553
Area		
Urban	4.4	955
Rural	2.0	576
Mother's education		
None	2.6	1,178
Primary	4.2	260
Secondary	12.6	93
Wealth index quintile		
Poorest	1.4	302
Second	1.3	322
Middle	2.4	299
Fourth	5.1	312
Richest	7.5	295
Total	3.5	1,531

[1]**MICS indicator 2.19**

V. 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 12 months.

Information on vaccination coverage was collected for all children under five years of age. All mothers or caretakers were asked to provide vaccination cards. If the vaccination card for a child was available, interviewers copied vaccination information from the cards onto the MICS questionnaire. If no vaccination card was available for the child, the interviewer proceeded to ask the mother to recall whether or not the child had received each of the vaccinations, and for Polio, DPT and Hepatitis B, how many doses were received. The final vaccination coverage estimates are based on both information obtained from the vaccination card and the mother's report of vaccinations received by the child.

The percentage of children age 12 to 23 months who have received each of the specific vaccinations by source of information (vaccination card and mother's recall) 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. In the first three columns of the table, 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 last column, only those children 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.

Table CH.1: Vaccinations in first year of life

Percentage of children age 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, Northeast Zone, Somalia 2011

	Vaccinated at any time before the survey according to:			
	Vaccination card	Mother's report	Either	Vaccinated by 12 months of age
BCG[1]	6.4	16.6	23.0	16.6
Polio				
At birth	4.0	9.6	13.7	12.0
1	7.0	19.5	26.5	19.2
2	4.1	15.3	19.4	17.2
3[2]	2.4	7.2	9.7	8.3
DPT				
1	8.5	15.6	24.1	18.8
2	5.7	10.3	16.0	12.7
3[3]	4.1	5.3	9.4	7.2
Measles[4]	9.3	16.2	25.4	16.6
All vaccinations	1.6	1.7	3.4	0.4
No vaccinations	0.1	65.0	65.1	65.1
Number of children age 12-23 months	792	792	792	792

[1] MICS indicator 3.1;

[2] MICS indicator 3.2;

[3] MICS indicator 3.3

[4] MICS indicator 3.4; MDG indicator 4.3

Approximately 17 percent of children age 12-23 months received a BCG vaccination by the age of 12 months and 19 percent of children had received their first dose of DPT by 12 months of age. The percentage declines for subsequent doses of DPT to 13 percent for the second dose, and 7 percent for the third dose (Figure CH.1). Similarly, 19 percent of children received Polio 1 by the age of 12 months but the proportion declines to 8 percent by the third dose. The coverage for measles vaccine by 12 months is 17 percent although 25 percent of children 12 – 23 months had received measles vaccination any time before the survey. As a result, the percentage of children who had all the recommended vaccinations (excluding polio at birth) by their first birthday is very low; below 1 percent.

Figure CH.1. Percentage of children aged 12 – 23 months who received the recommended vaccinations by 12 months, Northeast Zone, Somalia 2011

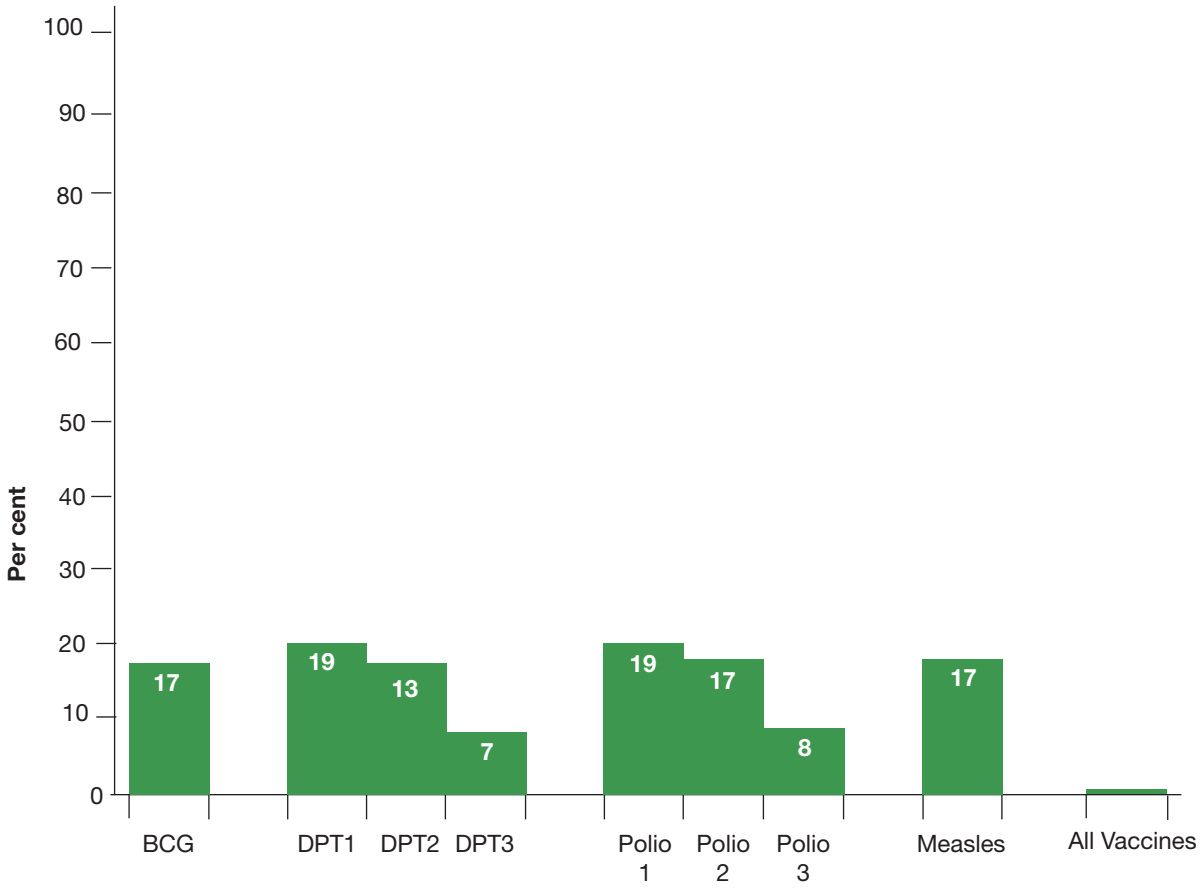


Table CH.2 presents vaccination coverage estimates among children 12-23 months by background characteristics. The figures indicate children receiving the vaccinations at any time up to the date of the survey, based on information from both the vaccination cards and mothers'/caretakers' reports. Vaccination cards have been seen by the interviewer for only 13 percent of children.

Vaccination coverage tends to be lower in the rural areas than urban areas with differences sometimes as larger as 10 percentage points.

Table CH.2: Vaccinations by background characteristics

Percentage of children age 12-23 months currently vaccinated against childhood diseases, Northeast Zone, Somalia 2011

	Percentage of children who received:											Percentage with vaccination card seen	Number of children age 12-23 months
		Polio				DPT							
	BCG	At birth	1	2	3	1	2	3	Measles	None	All		
Sex													
Male	20.9	11.8	25.1	17.3	9.1	22.3	13.2	9.6	23.1	66.7	3.5	14.3	399
Female	25.1	15.6	27.8	21.6	10.2	25.8	18.8	9.3	27.8	63.5	3.2	11.7	394
Region													
Bari	23.9	14.5	27.8	19.1	10.6	26.1	17.4	10.0	27.7	63.0	4.3	15.8	323
Nugal	22.1	11.4	27.1	20.9	12.6	22.8	14.6	13.0	26.3	60.9	4.9	17.6	184
Mudug	22.5	14.2	24.5	18.9	6.7	22.6	15.2	6.6	22.3	70.2	1.4	6.8	285
Area													
Urban	25.0	14.9	30.1	22.6	10.2	27.0	19.7	11.4	27.9	60.9	3.7	14.8	493
Rural	19.6	11.6	20.5	14.2	8.7	19.3	9.8	6.2	21.5	72.0	2.9	10.1	299
Mother's education													
None	21.9	12.6	25.2	17.5	8.8	22.4	14.7	8.4	23.6	66.7	2.6	12.8	607
Primary	26.9	17.7	31.9	25.2	11.4	31.7	19.6	13.3	31.2	58.4	5.6	14.6	142
Secondary+	(24.8)	(15.5)	(26.7)	(26.7)	(15.3)	(22.1)	(22.1)	(10.9)	(31.8)	(64.6)	(6.5)	(10.9)	44
Wealth index quintile													
Poorest	21.1	11.2	23.1	16.2	8.1	19.9	16.8	5.5	21.8	69.5	1.3	6.7	165
Second	27.4	16.8	26.3	20.0	10.7	28.3	16.1	11.2	29.0	61.6	4.4	15.7	163
Middle	24.3	12.1	29.1	17.6	11.4	26.6	13.0	12.5	27.3	64.1	3.5	15.3	145
Fourth	19.0	12.8	26.7	18.2	8.2	21.6	13.3	7.1	24.9	65.9	2.7	13.0	177
Richest	23.8	15.6	27.7	25.8	10.2	24.4	21.1	11.5	24.1	64.0	5.4	14.8	142
Total	23.0	13.7	26.5	19.4	9.7	24.1	16.0	9.4	25.4	65.1	3.4	13.0	792

( ) Figures that are based on 25-49 unweighted cases

Neonatal Tetanus Protection

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

The strategy for preventing maternal and neonatal tetanus is to ensure all pregnant women receive at least two doses of tetanus toxoid vaccine. If a woman has not received at least two doses of tetanus toxoid during a particular pregnancy, she (and her newborn) is also considered to be protected against tetanus if she:

- 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 5 or more 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 shows the protection status from tetanus of women who have had a live birth within the last 2 years. Only 17 percent of women had received at least two doses during the last pregnancy. Another 9 percent had received 2 doses within three years prior to the birth. Overall 27 percent of women are protected against tetanus.

Table CH.3: Neonatal tetanus protection

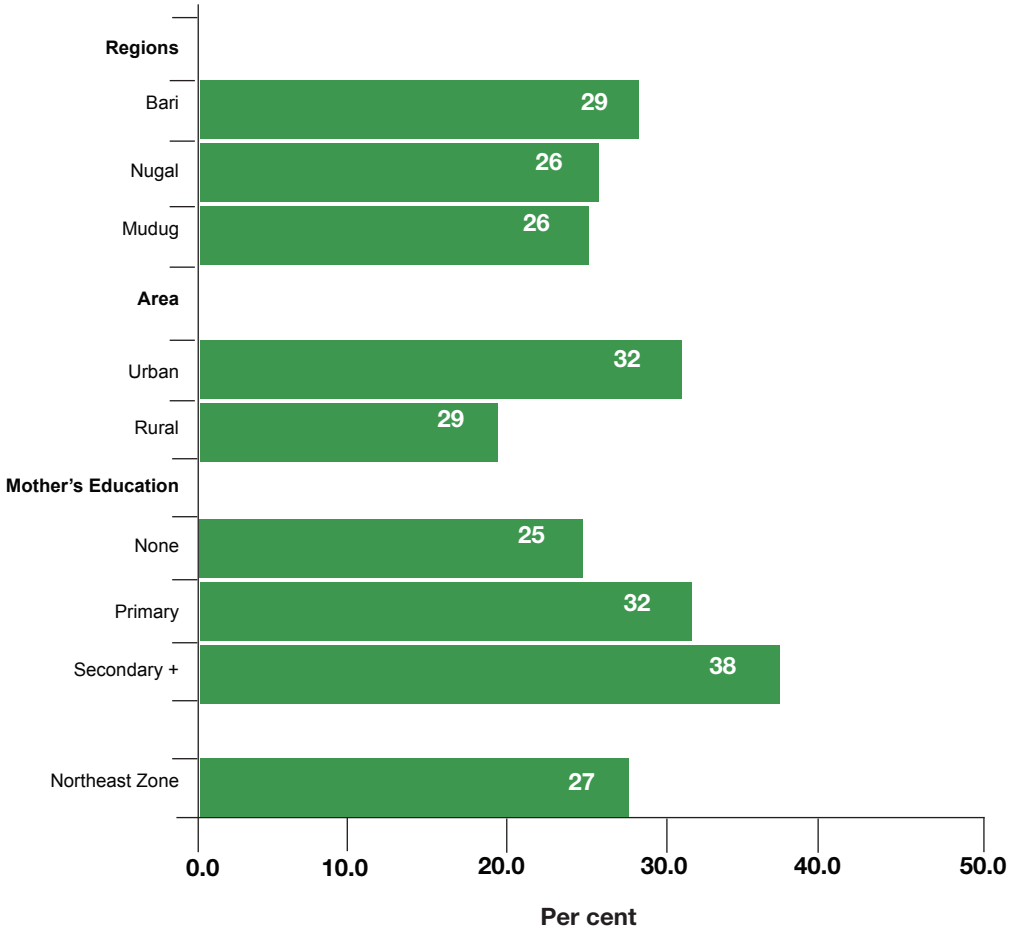
Percentage of women age 15-49 years with a live birth in the last 2 years protected against neonatal tetanus, Northeast Zone, 2011

	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:					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	Protected against tetanus[1]	
Region							
Bari	17.9	9.9	0.6	0.4	0.3	28.8	646
Nugal	15.0	9.6	1.8	0.4	0.0	26.4	332
Mudug	16.9	7.0	1.1	0.5	0.4	25.3	553
Area							
Urban	20.4	9.7	1.2	0.0	0.3	31.7	955
Rural	11.1	7.2	0.7	0.5	0.2	19.3	576
Education							
None	16.0	7.9	0.9	0.5	0.3	25.1	1,178
Primary	18.0	13.0	1.2	0.0	0.0	32.1	260
Secondary+	26.3	8.3	2.1	0.0	1.0	37.7	93
Wealth index quintile							
Poorest	12.0	8.5	1.4	0.0	0.0	21.9	302
Second	13.7	8.8	1.5	0.9	0.6	24.7	322
Middle	17.4	9.1	0.0	0.7	0.3	26.8	299
Fourth	21.4	7.8	1.5	0.0	0.0	30.7	312
Richest	20.3	9.8	0.7	0.3	0.3	31.1	295
Total	16.9	8.8	1.0	0.1	0.3	27.2	1,531

[1] **MICS indicator 3.7**

As shown in figure CH.2 Women in urban areas are more likely to vaccinate against tetanus compared to women in rural areas (32 percent versus 19 percent). Vaccination against tetanus is associated to the level of maternal education; 25 percent of women with no education are protected against tetanus compared to 38 percent of women with secondary or higher education. Furthermore, women from the wealthiest households are more likely to be protected from tetanus compared to those from the poorest households (31 percent versus 22 percent). Figure CH.2 shows the protection of women against neonatal tetanus by major background characteristics.

Figure CH.2. Percentage of women with a live birth in the last 12 months who are protected against neonatal tetanus, Northeast Zone, Somalia 2011



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.

In the MICS, prevalence of diarrhoea[5] was estimated by asking mothers or caretakers whether their child under age five years had an episode of diarrhoea in the two weeks prior to the survey. In cases where mothers reported that the child had diarrhoea, a series of questions were asked about the treatment of the illness, including what the child had to drink and eat during the episode and whether this was more or less than the child usually drinks and eats.

5 The validity of this indicator is affected by the mother's perception of diarrhoea as an illness and her capacity to recall the events. Moreover, the prevalence of diarrhea varies seasonally. Thus, this variable should be interpreted with caution.

Overall, 10 percent of under five children had diarrhoea in the two weeks preceding the survey (Table CH.4).

Table CH.4: Oral rehydration solutions

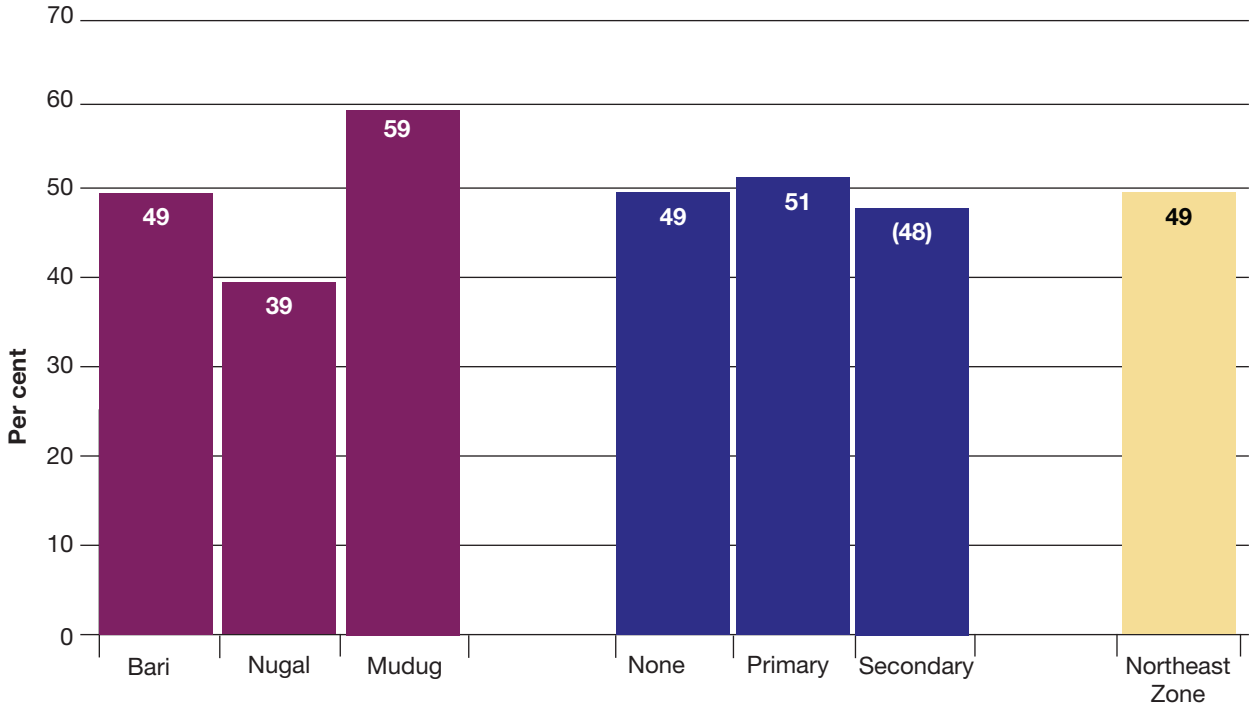
Percentage of children age 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration solutions, Northeast Zone, Somalia 2011

	Had diarrhoea in last two weeks	Number of children age 0-59 months	Children with diarrhoea who received ORS (Fluid from ORS packet or pre-packaged ORS fluid)	Number of children age 0-59 months with diarrhoea in last two weeks
Sex				
Male	10.7	2,395	43.0	256
Female	9.9	2,319	38.1	231
Region				
Bari	11.6	1,952	44.2	226
Nugal	12.2	993	34.5	121
Mudug	7.9	1,768	40.4	139
Area				
Urban	9.7	2,908	46.8	281
Rural	11.4	1,806	32.5	206
Age				
0-11 months	12.7	857	37.4	109
12-23 months	12.4	792	45.4	98
24-35 months	11.3	1,027	41.4	116
36-47 months	7.9	1,067	40.0	84
48-59 months	8.2	972	39.3	79
Mother's education				
None	10.4	3,624	40.5	376
Primary	10.1	797	41.2	80
Secondary+	10.3	293	(42.1)	30
Wealth index quintile				
Poorest	12.8	1,004	28.7	129
Second	13.0	965	38.9	125
Middle	10.2	920	40.4	94
Fourth	8.8	965	45.4	85
Richest	6.2	860	67.2	53
Total	10.3	4,714	40.7	486

( ) Figures that are based on 25-49 unweighted cases

Table CH.4 also shows the percentage of children receiving oral rehydration solutions during the episode of diarrhoea. About 41 percent received fluids from ORS packets or pre-packaged ORS fluids. More children in urban (47 percent) than rural (33 percent) areas received ORS during diarrhoea episode. Furthermore, children in the richest households were more likely to get treatment with ORS when they got diarrhoea compared to those from the poorest households (29 percent versus 67 percent). Nearly a half (49 percent) of the children who got diarrhoea received oral rehydration solution (Figure CH.3). Oral rehydration solution treatment was highest in Mudug and lowest in Nugal region.

Figure CH.3. Percentage of children under age 5 with diarrhoea who received oral rehydration solution, Northeast Zone, Somalia 2011



( ) Figures in parenthesis represent less than 50 unweighted cases

About 16 percent of under five children with diarrhoea drank more than usual while 84 percent drank the same, somewhat less, much less or nothing (Table CH.5). About 53 percent ate somewhat less, same or more (continued feeding), but 37 percent ate much less or ate nothing. The eating and feeding practices during diarrhoea gives a mixed picture across social demographic characteristics with not clear trend in variability between categories of different variables.

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, 49 percent of children with diarrhoea received ORT (ORS or recommended homemade fluids or increased fluids). Combining the information in Table CH.5 with that in Table CH.4 on oral rehydration therapy, it is observed that 24 percent of children either received ORT and, at the same time, feeding was continued, as is the recommendation.

Although it is not the recommended treatment for children with diarrhoea, 17 percent of children received antibiotics and a further 17 percent received anti-motility treatments. On the other hand, zinc treatment which is recommended for decreasing the intensity and frequency of diarrhoea was given in 1 per cent of the cases. There are differences in the home management of diarrhoea by background characteristics (Figure CH.4). In Nugal region only 18 percent of children received ORT and continued feeding, while the figure is 37 percent in Mudug region. A child living in the richest households is more than twice as likely to be receiving the recommended treatment during diarrhoea compared to children in the poorest households (17 percent versus 38 percent; Table CH.5). In addition, the age of a child also determines if they will receive ORT treatment with continued feeding with and is lowest among those less than one year (15 percent) compared to those children who are four years old (30 percent).

Table CH.5: Feeding practices during diarrhea

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, Northeast Zone, Somalia 2011

			Drinking practices during diarrhoea:							Eating practices during diarrhoea:								
	Had diarrhoea in last two weeks	Number of children age 0-59 months	Given much less to drink	Given some what less to drink	Given about the same to drink	Given more to drink	Given nothing to drink	Missing/DK	Total	Given much less to eat	Given some-what less to eat	Given about the same to eat	Given more to eat	Stop-ped food	Had never been given food	Missing/ DK	Total	Number of children age 0-59 months with diarrhoea in last two weeks
Sex																		
Male	10.7	2395	21.9	32.7	22.3	18.4	3.6	1.2	100.0	22.7	27.4	14.6	10.6	13.6	9.5	1.6	100.0	256
Female	9.9	2319	26.4	38.9	16.3	12.3	5.7	0.4	100.0	27.8	31.4	14.6	6.7	10.8	7.8	0.9	100.0	231
Region																		
Bari	11.6	1952	31.5	32.3	19.5	11.1	5.0	0.4	100.0	30.8	24.2	15.5	5.0	15.1	8.0	1.4	100.0	226
Nugal	12.2	993	20.3	41.3	20.5	10.7	6.4	0.9	100.0	18.2	35.2	11.5	8.3	13.8	12.2	0.9	100.0	121
Mudug	7.9	1768	15.0	36.0	18.6	26.8	2.2	1.4	100.0	22.0	32.5	15.8	15.3	6.3	6.7	1.5	100.0	139
Area																		
Urban	9.7	2908	20.5	37.5	21.5	15.4	4.1	1.0	100.0	26.6	26.6	15.7	7.2	14.3	8.9	0.7	100.0	281
Rural	11.4	1806	28.8	33.0	16.8	15.7	5.2	0.5	100.0	23.0	33.0	13.1	11.0	9.4	8.4	2.1	100.0	206
Age																		
0-11 months	12.7	857	27.9	31.6	28.3	8.4	3.8	0.0	100.0	27.7	19.1	20.2	5.6	7.0	18.4	1.9	100.0	109
12-23 months	12.4	792	23.9	31.6	19.0	16.5	6.0	3.0	100.0	21.0	31.2	11.2	10.2	15.1	11.2	0.0	100.0	98
24-35 months	11.3	1027	21.9	38.2	16.7	19.7	3.5	0.0	100.0	28.5	25.3	14.7	9.9	13.0	6.8	1.9	100.0	116
36-47 months	7.9	1067	25.5	36.7	15.4	15.5	5.8	1.1	100.0	23.6	38.0	13.1	7.3	14.4	1.3	2.4	100.0	84
48-59 months	8.2	972	20.2	41.2	16.5	18.0	4.1	0.0	100.0	23.3	37.6	12.5	11.3	12.5	2.7	0.0	100.0	79
Mother's education																		
None	10.4	3624	23.8	35.4	19.7	15.0	5.1	1.1	100.0	25.9	28.4	15.4	9.5	11.4	8.0	1.4	100.0	376
Primary	10.1	797	25.4	36.9	16.3	19.0	2.5	0.0	100.0	27.5	36.0	9.0	4.9	11.5	10.0	1.2	100.0	80
Secondary+	10.3	293	(23.0)	(34.9)	(25.4)	(13.1)	(3.6)	(0.0)	100.0	(9.5)	(22.6)	(19.1)	(9.9)	(25.4)	(13.5)	(0.0)	100.0	30
Wealth index quintile																		
Poorest	12.8	1004	25.9	34.7	20.6	14.0	4.2	0.7	100.0	25.6	30.2	16.7	8.9	8.1	9.7	0.8	100.0	129
Second	13.0	965	28.0	33.0	17.0	13.2	7.9	0.9	100.0	22.3	34.4	9.2	8.3	13.7	10.4	1.7	100.0	125
Middle	10.2	920	17.4	42.5	13.8	22.0	3.3	1.0	100.0	26.1	21.1	13.7	10.9	18.8	8.3	1.1	100.0	94
Fourth	8.8	965	23.7	34.0	23.0	17.0	1.1	1.1	100.0	29.4	28.6	18.3	9.0	7.9	5.8	1.1	100.0	85
Richest	6.2	860	22.2	34.4	27.2	10.9	5.4	0.0	100.0	21.9	30.8	18.1	5.4	14.5	7.5	1.8	100.0	53
Total	10.3	4714	24.0	35.6	19.5	15.5	4.6	0.8	100.0	25.1	29.3	14.6	8.8	12.3	8.7	1.3	100.0	486

( ) Figures that are based on 25-49 unweighted cases

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

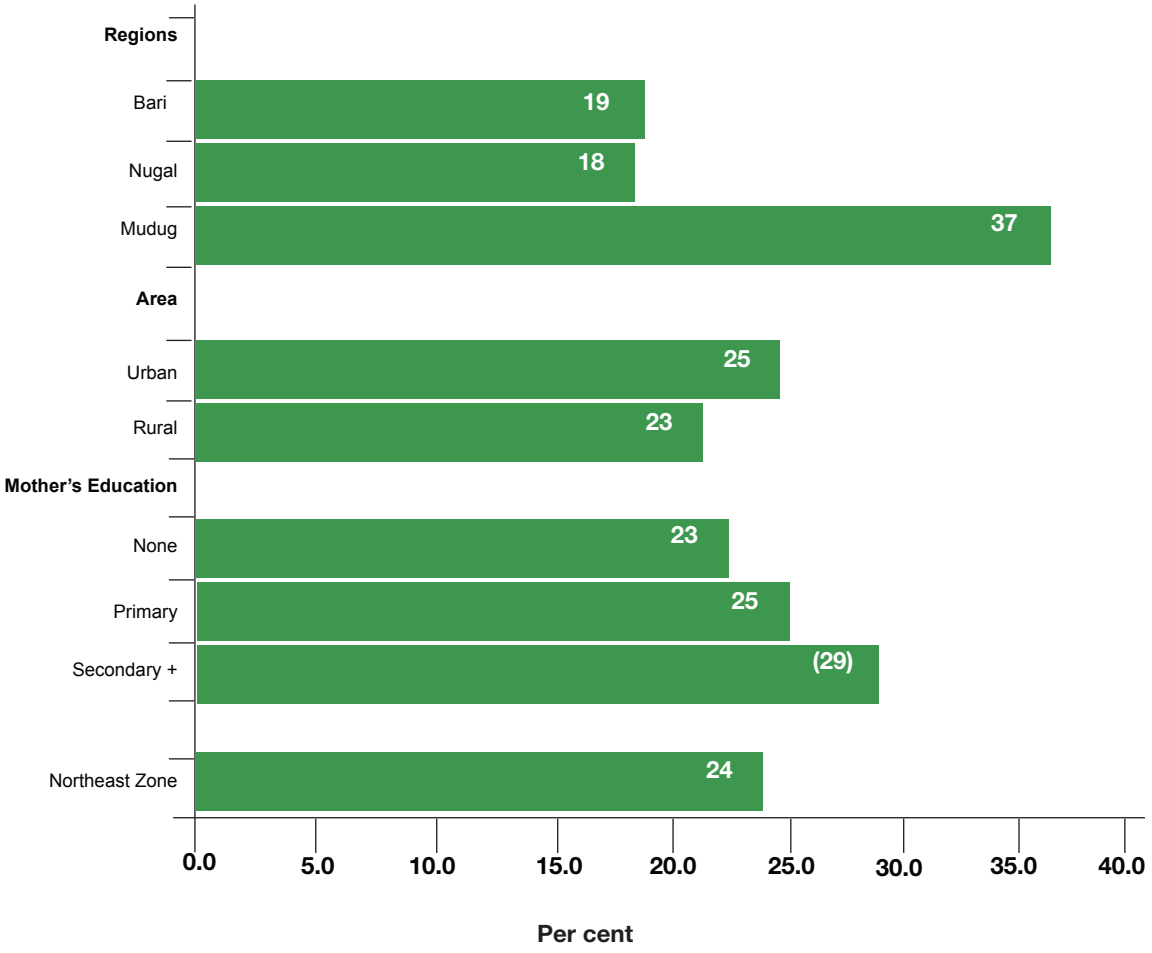
Percentage of children age 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and percentage of children with diarrhoea who received other treatments, Northeast Zone, Somalia 2011

			Other treatments:										
			Pill or syrup				Injection						
	ORT (ORS or increased fluids)	ORT with continued feeding[1]	Anti-biotic	Anti-motility	Zinc	Unknown	Anti-biotic	Non-antibiotic	Intra-venous	Home remedy, herbal medicine	Other	Not given any treatment or drug	Number of children age 0-59 months with diarrhoea in last two weeks
Sex													
Male	51.4	25.9	17.0	18.0	1.2	2.2	1.9	0.4	2.0	5.4	1.6	35.8	256
Female	47.0	21.6	16.1	15.7	1.2	3.0	2.5	0.0	1.3	3.6	1.2	37.1	231
Region													
Bari	48.7	18.7	20.5	14.7	2.6	2.6	3.5	0.5	1.8	5.8	1.4	33.2	226
Nugal	39.4	18.1	15.4	11.6	0.0	5.6	1.6	0.0	1.6	3.4	2.5	44.1	121
Mudug	58.7	37.4	11.3	25.1	0.0	0.0	0.7	0.0	1.5	3.5	0.7	34.9	139
Area													
Urban	53.9	24.9	21.5	20.5	1.7	3.8	3.1	0.0	1.7	4.4	1.4	29.7	281
Rural	42.9	22.5	9.9	12.0	0.5	1.0	1.0	0.5	1.6	4.7	1.6	45.5	206
Age													
0-11 months	43.1	14.5	12.3	13.6	1.8	1.8	3.5	0.0	2.8	3.6	0.9	39.9	109
12-23 months	50.5	27.6	22.8	12.1	1.0	2.0	4.1	0.0	0.0	8.3	2.1	34.0	98
24-35 months	55.1	24.5	21.7	22.5	0.9	6.0	0.0	0.0	1.8	4.3	1.8	28.2	116
36-47 months	48.4	24.9	8.5	16.1	1.1	0.0	0.0	0.0	1.1	4.7	1.3	43.4	84
48-59 months	48.6	30.4	16.0	20.1	1.2	2.4	3.6	1.4	2.6	1.4	1.2	39.1	79
Mother's education													
None	48.9	23.3	14.6	16.6	1.1	2.6	2.9	0.3	1.9	4.1	0.8	38.6	376
Primary	51.2	24.6	22.8	16.4	1.2	2.4	0.0	0.0	0.0	7.2	5.2	26.3	80
Secondary+	(48.4)	(29.4)	(25.8)	(22.2)	(3.2)	(3.2)	(0.0)	(0.0)	(3.2)	(3.6)	(0.0)	(35.7)	30
Wealth index quintile													
Poorest	38.7	17.1	10.9	10.3	0.7	0.8	1.6	0.0	1.5	5.7	2.4	48.6	129
Second	44.8	20.6	11.6	12.2	0.0	2.4	1.6	0.9	1.7	3.3	0.0	46.0	125
Middle	53.9	24.7	20.8	15.9	0.0	3.0	3.0	0.0	2.2	3.2	2.2	26.3	94
Fourth	54.4	29.4	17.0	25.1	2.4	4.5	2.2	0.0	1.1	5.6	1.1	27.4	85
Richest	69.0	38.0	34.4	32.6	5.4	3.6	3.6	0.0	1.8	5.4	1.8	16.5	53
Total	49.3	23.9	16.6	16.9	1.2	2.6	2.2	0.2	1.6	4.6	1.5	36.4	486

[1] **MICS indicator 3.8**

( ) Figures that are based on 25-49 unweighted cases

Figure CH.4. Percentage of children under age 5 with diarrhoea who received ORT, or increased fluids and continued feeding, Northeast Zone, Somalia 2011



( ) Figures in parenthesis are based on less than 50 unweighted cases and should be interpreted with caution.

Care Seeking and Antibiotic Treatment of Pneumonia

Pneumonia is the leading cause of death in children and the use of antibiotics in children under 5 years of age 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.

In Northeast Zone, Somalia MICS, the prevalence of suspected pneumonia[6] was estimated by asking mothers or caretakers whether their child under age five had an illness with a cough accompanied by rapid or difficult breathing, and whose symptoms were due to a problem in the chest or both a problem in the chest and a blocked nose.

6 These data are based on the mother's perception of illness and not validated by a medical examination. Moreover, the prevalence of pneumonia varies seasonally. Thus, this variable should be interpreted with caution as it may be subject to considerable bias.

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, Northeast Zone, 2011

	Had suspected pneumonia in the last two weeks	Number of children age 0-59 months	Children with suspected pneumonia who were taken to:										Any appropriate provider[1]	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 sources					Private sources			Other source				
			Govt. hospital	Govt. health centre	Govt. health post	Village health worker	Other public	Private hospital/ clinic	Private physician	Private pharmacy	Relative or friend	Trad. Practitioner			
Sex															
Male	4.7	2,395	12.3	5.2	7.1	1.9	0.0	12.4	8.7	12.0	0.9	0.0	39.6	53.5	112
Female	5.1	2,319	11.6	7.3	1.6	4.5	2.4	2.4	8.2	13.6	0.0	1.7	30.8	43.8	118
Region															
Bari	6.2	1,952	13.0	5.7	4.1	5.3	1.6	9.1	8.8	13.6	0.0	0.9	37.7	53.1	121
Nugal	5.6	993	12.0	1.7	3.4	1.9	0.0	10.3	12.2	12.4	0.0	0.0	33.0	43.9	56
Mudug	3.0	1,768	9.5	12.7	5.7	0.0	1.8	0.0	3.6	11.5	1.8	1.8	31.5	43.0	53
Area															
Urban	4.4	2,908	17.0	10.4	5.9	0.7	2.2	9.6	13.3	11.1	0.7	0.7	48.1	57.8	129
Rural	5.5	1,806	5.4	1.1	2.2	6.5	0.0	4.3	2.2	15.1	0.0	1.1	18.3	36.6	100
Age															
0-11 months	4.6	857	(9.8)	(4.9)	(0.0)	(0.0)	(0.0)	(4.9)	(12.2)	(11.0)	(0.0)	(0.0)	(29.3)	(43.0)	39
12-23 months	4.9	792	(20.0)	(4.9)	(7.4)	(8.0)	(7.4)	(9.9)	(10.2)	(12.3)	(0.0)	(0.0)	(45.5)	(52.9)	39
24-35 months	4.5	1,027	(6.4)	(8.5)	(4.1)	(2.3)	(0.0)	(4.4)	(6.2)	(19.8)	(2.1)	(2.3)	(27.5)	(47.3)	47
36-47 months	5.5	1,067	13.6	8.2	1.8	5.5	0.0	8.6	6.7	10.6	0.0	0.0	37.5	48.5	59
48-59 months	4.7	972	(10.4)	(4.2)	(8.6)	(0.0)	(0.0)	(8.6)	(8.3)	(10.7)	(0.0)	(2.1)	(36.0)	(50.8)	46
Mother's education															
None	5.1	3,624	11.2	6.3	2.7	3.5	1.0	5.4	6.8	8.8	0.5	1.1	31.5	40.5	185
Primary	4.7	797	(12.7)	(2.5)	(7.9)	(0.0)	(0.0)	(15.5)	(13.0)	(32.3)	(0.0)	(0.0)	(46.5)	(81.3)	38
Secondary+	2.3	293	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	7
Wealth index quintile															
Poorest	5.2	1,004	5.8	3.7	3.9	4.1	0.0	1.8	2.1	7.8	0.0	0.0	15.7	23.3	52
Second	5.5	965	11.0	5.4	1.8	4.0	0.0	7.6	1.8	5.8	0.0	2.0	28.0	34.1	53
Middle	5.4	920	17.7	4.1	3.8	4.3	0.0	6.0	5.7	18.4	0.0	0.0	33.5	54.8	50
Fourth	3.8	965	(10.9)	(7.9)	(5.6)	(0)	(2.6)	(8.2)	(7.9)	(19.1)	(2.6)	(0)	(40.6)	(59.4)	36
Richest	4.4	860	(15.2)	(12.7)	(7.6)	(2.5)	(5.1)	(15.2)	(30.7)	(16.1)	(0.0)	(2.5)	(68.7)	(84.8)	38
Total	4.9	4,714	12.0	6.3	4.3	3.2	1.3	7.3	8.5	12.8	0.4	0.9	35.1	48.5	229

[1] **MICS indicator 3.9**

[2] **MICS indicator 3.10**

( ) Figures that are based on 25-49 unweighted cases

(*) Figures that are based on less than 25 unweighted cases

There are no cases of public or private mobile or outreach clinics or shops, so they are not shown in the table.

Table CH.7 presents the prevalence of suspected pneumonia and, if care was sought outside the home, the site of care. About 5 percent of children age 0-59 months was reported to have had symptoms of pneumonia during the two weeks preceding the survey. Of these children, 35 percent were taken to an appropriate provider.

Under the private sources, the private pharmacy is the main source of care for suspected pneumonia (13 percent) and is as important as government hospital (12 percent) under public sources. Children living in urban areas are nearly three times more likely (48 percent) to get an appropriate care if they get pneumonia compared to children in rural areas (18 percent).

Table CH.7 also presents the use of antibiotics for the treatment of suspected pneumonia in under-5s by socio-demographic characteristics. In Northeast Zone, 49 percent of children under-5 years with suspected pneumonia had received an antibiotic during the two weeks prior to the survey. The percentage was considerably higher in urban (58 percent) than rural areas (37 percent). In Mudug region the percent is 43 compared to 53 percent in Bari region.

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, just 7 percent of mothers and caretakers 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 if the child has fever and become sicker. Twenty two percent of mothers identified fast breathing and 18 percent of mothers identified difficult breathing as symptoms for taking children immediately to a health care provider. More women in urban and those with secondary or higher education compared to rural women or those with no education had knowledge of the two danger signs of pneumonia.

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 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, Northeast Zone, Somalia 2011

	Percentage of mothers/caretakers of children age 0-59 months 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										
Bari	32.9	44.4	50.6	23.0	17.6	14.3	25.2	2.6	6.7	1,135
Nugal	38.0	48.3	47.9	22.9	19.4	15.4	22.6	1.7	7.6	533
Mudug	43.0	50.1	49.2	21.0	16.4	12.5	16.6	1.2	7.7	959
Area										
Urban	36.7	47.8	52.1	22.0	18.1	14.9	21.1	2.1	8.0	1,632
Rural	39.1	46.4	45.3	22.7	16.6	12.0	22.1	1.7	6.0	995
Mother's education										
None	37.1	47.5	49.0	22.5	17.7	14.2	21.9	1.8	7.4	2,031
Primary	37.9	43.5	50.0	21.4	16.2	12.2	21.0	2.3	5.8	432
Secondary+	42.7	54.8	55.4	20.9	18.7	13.1	18.3	3.0	8.9	164
Wealth index quintile										
Poorest	39.2	48.2	46.5	24.6	16.9	13.0	23.0	2.1	6.5	538
Second	36.2	47.9	49.0	22.4	17.0	13.8	22.6	1.1	7.1	536
Middle	34.7	45.3	47.6	20.2	17.1	13.4	20.3	2.0	6.3	505
Fourth	37.6	44.4	51.7	21.0	17.8	14.3	19.8	2.1	7.7	556
Richest	40.4	50.7	53.1	23.0	18.9	14.7	21.8	2.4	8.6	492
Total	37.6	47.3	49.5	22.2	17.5	13.8	21.5	1.9	7.2	2,627

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, and sulphur dioxide (SO2), among others.

Use of solid fuels increases the risks of incurring acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer, and possibly tuberculosis, asthma, or cataracts, 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.

Overall, nearly all (98 percent) households in the Northeast Zone are using solid fuels for cooking. Differentials with respect to background characteristics were minimal. The table CH.9 also clearly shows that the main form of solid fuel in use was charcoal (48 percent) and coal (49 percent).

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, Northeast Zone, Somalia 2011

	Percentage of household members in households using:										
	Electricity	Liquefied Petroleum Gas (LPG)	Kerosene	Char-coal	Wood	Straw, shrubs, grass	No food cooked in the household	Missing	Total	Solid fuels for cooking[1]	Number of household members
Region											
Bari	0.9	1.2	0.2	50.6	46.0	0.5	0.1	0.6	100.0	97.0	12,834
Nugal	1.4	0.1	0.8	32.7	63.4	1.1	0.1	0.1	100.0	97.3	5,862
Mudug	0.2	0.2	0.0	52.8	45.4	0.4	0.1	0.8	100.0	98.6	9,841
Area											
Urban	1.2	0.9	0.2	66.1	30.6	0.3	0.1	0.6	100.0	96.9	18,242
Rural	0.0	0.2	0.4	15.2	82.5	1.1	0.0	0.5	100.0	98.8	10,295
Education of household head											
None	0.6	0.3	0.1	42.2	55.3	0.7	0.1	0.7	100.0	98.2	20,685
Primary	0.9	0.1	0.8	52.8	44.5	0.4	0.0	0.3	100.0	97.8	3,262
Secondary+	1.7	2.7	0.5	69.2	25.3	0.1	0.2	0.3	100.0	94.6	4,442
Missing/DK	0.0	0.0	0.0	62.0	38.0	0.0	0.0	0.0	100.0	100.0	148
Wealth index quintiles											
Poorest	0.0	0.0	0.2	3.6	94.8	0.9	0.3	0.2	100.0	99.2	5,705
Second	0.0	0.0	0.4	12.8	85.8	0.9	0.0	0.2	100.0	99.4	5,712
Middle	0.4	0.0	0.5	43.6	52.6	1.1	0.1	1.7	100.0	97.3	5,705
Fourth	0.6	0.2	0.1	85.9	12.4	0.0	0.0	0.5	100.0	98.4	5,710
Richest	2.9	2.9	0.1	92.6	1.1	0.1	0.0	0.3	100.0	93.8	5,705
Total	0.8	0.6	0.2	47.7	49.3	0.6	0.1	0.6	100.0	97.6	28,537

[1] **MICS indicator 3.11**

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. According to the Northeast Zone MICS, among households using solid fuels for cooking, 42 percent cook in a separate room used as a kitchen. The percentage of households that cook within the dwelling unit is higher in urban areas (60 percent) than in rural areas (33 percent). Cooking in a separate room, used as a kitchen, increases with education of the household head and the wealth status of the household.

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

Percent distribution of household members in households using solid fuels by place of cooking, Northeast Zone, Somalia 2011

	Place of cooking:							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	At another place	Missing	Total	
Region								
Bari	47.0	8.3	4.6	38.3	0.2	1.6	100.0	12,453
Nugal	37.8	9.2	4.0	48.0	0.2	0.8	100.0	5,703
Mudug	38.7	5.6	8.9	45.1	0.0	1.7	100.0	9,703
Area								
Urban	51.8	7.8	5.7	33.1	0.1	1.6	100.0	17,684
Rural	25.7	7.1	6.5	59.2	0.1	1.3	100.0	10,175
Education of household head								
None	36.9	7.7	6.2	47.6	0.1	1.4	100.0	20,318
Primary	48.2	7.2	7.3	36.4	0.0	0.9	100.0	3,189
Secondary+	63.2	7.1	4.1	23.7	0.0	2.0	100.0	4,204
Missing/DK	49.3	5.8	8.3	36.7	0.0	0.0	100.0	148
Wealth index quintiles								
Poorest	7.3	4.6	3.9	82.4	0.3	1.6	100.0	5,662
Second	20.1	9.2	9.2	60.7	0.1	0.8	100.0	5,680
Middle	37.6	11.6	8.2	41.3	0.1	1.1	100.0	5,551
Fourth	65.2	6.8	5.6	20.3	0.1	2.0	100.0	5,617
Richest	83.4	5.4	2.9	6.4	0.0	1.7	100.0	5,349
Total	42.3	7.5	6.0	42.7	0.1	1.4	100.0	27,859

Malaria

Malaria is a leading cause of death of children under age five in Africa and is a common cause of school absenteeism. Preventive measures can dramatically reduce malaria mortality rates among children.

WHO recommends full coverage of long lasting insecticide treated nets LLINs for all people at risk of malaria in areas targeted for malaria prevention. Neither LLINs nor indoor residual spraying (IRS), the other main method of malaria vector control, may be sufficiently effective alone to achieve and maintain interruption of transmission in holo-endemic areas of Africa.

In 2010 WHO recommended universal use of diagnostic testing to confirm malaria infection, followed by appropriate treatment based on the results. According to the new guidelines, treatment solely on the basis of clinical suspicion should only be considered when a parasitological diagnosis is not accessible. Diagnosis is increasingly important, not only to have certainty about malaria cases but also to avoid unnecessary consumption of effective antimalarial drugs, such as artemisinin combination therapies (ACTs), which increases the risk of malaria parasite resistance.

Insecticide-treated mosquito nets, or ITNs, if used properly, are very effective in offering protection against mosquitos and other insects. The use of ITNs is one of the main health interventions applied to reduce malaria transmission in Northeast Zone of Somalia. The questionnaire incorporates questions on the availability and use of bed nets, both at household level and among children under five years of age and pregnant women. In addition, all households in the Northeast Zone MICS were asked whether the interior dwelling walls were sprayed with an insecticide to kill mosquitoes that spread malaria during the 12 months preceding the survey.

Table CH.11: Household availability of insecticide treated nets and protection by a vector control method

Percentage of households with at least one mosquito net, percentage of households with at least one long-lasting treated net, percentage of households with at least one insecticide treated net (ITN) and percentage of households which either have at least one ITN or have received indoor residual spraying (IRS) in the last 12 months, Northeast Zone, Somalia 2011

	Percentage of households with at least one mosquito net	Percentage of households with at least one long-lasting treated net	Percentage of households with at least one ITN[1]	Percentage of households with at least one ITN or received IRS during the last 12 months[2]	Number of households
Region					
Bari	20.7	19.4	19.6	19.9	2,152
Nugal	35.3	33.5	34.1	34.4	947
Mudug	42.8	41.2	41.3	42.0	1,686
Area					
Urban	35.4	34.0	34.3	34.9	2,967
Rural	24.7	23.1	23.3	23.4	1,818
Education of household head[a]					
None	28.4	27.1	27.2	27.6	3,538
Primary	38.5	36.6	37.2	38.1	539
Secondary+	40.2	38.2	38.9	39.4	684
Wealth index quintiles					
Poorest	16.1	14.8	14.8	14.8	1,034
Second	26.4	24.8	25.1	25.1	996
Middle	34.9	33.1	33.3	33.7	934
Fourth	40.2	39.4	39.5	39.9	941
Richest	41.5	39.6	40.3	42.0	881
Total	31.4	29.8	30.1	30.6	4,785

[1] MICS indicator 3.12,
[2] MICS indicator 3.13
[a]Total includes 24 unweighted cases of households with missing information on education of the household head that are not shown separately

In Northeast Zone Somalia, the survey results indicate that 30 percent of households have at least one Insecticide Treated Net (ITN) (Table CH.11). The number of households with at least one ITN is twice as high (41 percent) in Mudug region compared to Bari region (20 percent). More households in urban (34) than rural areas (23 percent) had at least one ITN. Furthermore, household possession of at least one ITN was associated with education status (27 percent for household heads with no education versus 39 percent for household heads with secondary or higher education) and wealth status (15 percent of the poorest households versus 40 percent of the richest households). A common trend that for all the other indicators; households with at least one long lasting mosquito net and the households with at least one ITN or received IRS during the last 12 months, the percentage was highest in Mudug region, in urban areas, in households where the head of household had secondary or higher education and among the richest households.

Table CH.12: Children sleeping under mosquito nets

Percentage of children age 0-59 months who slept under a mosquito net during the previous night, by type of net, Northeast Zone, Somalia 2011

	Percentage of children age 0-59 who stayed in the household the previous night	Number of children age 0-59 months	Percentage of children who:		Number of children age 0-59 months who slept in the household the previous night	Percentage of children who slept under an ITN living in households with at least one ITN	Number of children age 0-59 living in households with at least one ITN
			Slept under any mosquito net[1]	Slept under an insecticide treated net[2]			
Sex							
Male	99.4	2,395	26.3	25.5	2,380	69.9	867
Female	99.5	2,319	26.0	25.2	2,309	68.2	854
Region							
Bari	99.5	1,952	14.9	14.6	1,943	55.4	511
Nugal	99.4	993	28.6	27.8	987	72.0	381
Mudug	99.4	1,768	37.1	35.8	1,758	76.1	828
Area							
Urban	99.5	2,908	29.7	28.9	2,894	70.0	1,195
Rural	99.4	1,806	20.4	19.6	1,795	66.9	526
Age							
0-11 months	99.8	857	29.6	28.8	855	72.8	338
12-23 months	99.6	792	29.5	28.6	790	73.8	307
24-35 months	99.5	1,027	24.6	23.7	1,022	70.4	345
36-47 months	99.5	1,067	25.5	24.7	1,061	65.8	399
48-59 months	99.1	972	22.7	21.9	962	63.4	333
Mother's education							
None	99.4	3,624	25.2	24.4	3,601	70.8	1239
Primary	99.8	797	31.7	30.8	795	65.6	373
Secondary+	100.0	293	22.5	22.5	293	60.6	109
Wealth index quintiles							
Poorest	99.3	1,004	13.4	12.3	997	68.7	178
Second	99.2	965	21.5	21.0	957	65.4	307
Middle	99.7	920	28.5	27.7	917	66.7	381
Fourth	99.3	965	37.2	36.6	958	77.6	452
Richest	100.0	860	31.2	30.2	860	64.5	403
Total	99.5	4,714	26.1	25.3	4,689	69.0	1,721

[1] MICS indicator 3.14,

[2] MICS indicator 3.15; MDG indicator 6.7

Results indicate that 26 percent of children under the age of five slept under any mosquito net the night prior to the survey and 25 percent slept under an Insecticide treated net (Table CH.12). There were no significant gender disparities in ITN use among children under five. The use of ITN among children declines with age. In general children in Mudug region are more likely to sleep under an ITN than their counterparts in Bari or Nugal regions.

Table CH.13 presents the proportion of pregnant women who slept under a mosquito net during the previous night. Twenty one percent slept under an insecticide treated net. Women in Mudug region compared to Bari and Nugal regions and women from urban areas compared to rural areas are more likely to sleep under an insecticide treated net.

Table CH.13: Pregnant women sleeping under mosquito nets

Percentage of pregnant women who slept under a mosquito net during the previous night, by type of net, Northeast Zone, Somalia 2011

	Percentage of pregnant women who stayed in the household the previous night	Number of pregnant women	Percentage of pregnant women who:		Number of pregnant women who slept in the household the previous night	Percentage of pregnant women who slept under an ITN, living in households with at least one ITN	Number of pregnant women living in households with at least one ITN
			Slept under any mosquito net	Slept under an insecticide treated net[1]			
Region							
Bari	95.5	316	9.9	9.2	302	35.8	78
Nugal	99.3	144	20.6	19.9	143	53.5	53
Mudug	99.3	273	36.4	35.7	271	72.4	134
Area							
Urban	98.1	465	24.4	23.5	456	58.4	184
Rural	96.8	268	18.1	17.7	260	56.6	81
Age							
15-19	(94.4)	38	(19.0)	(19.0)	36	(*)	12
20-24	96.4	144	24.1	23.5	139	58.4	56
25-29	98.2	215	24.0	23.6	211	61.4	81
30-34	98.6	144	24.7	23.3	142	59.1	56
35- 39	97.4	116	18.7	17.9	113	(55.5)	36
40-45	100.0	63	11.1	11.1	63	(*)	18
45- 49	(*)	13	(*)	(*)	12	(*)	6
Education							
None	97.5	555	20.9	20.2	541	58.1	188
Primary	98.3	125	27.0	26.2	123	56.3	57
Secondary+	98.2	53	22.5	22.5	52	(*)	19
Wealth index quintiles							
Poorest	98.5	132	14.0	12.5	130	(61.5)	26
Second	96.7	151	19.7	19.0	146	(57.2)	48
Middle	97.9	152	23.1	21.8	149	55.8	58
Fourth	97.4	152	31.7	31.7	148	66.9	70
Richest	97.9	146	20.9	20.9	143	48.4	62
Total	97.6	733	22.1	21.4	716	57.9	265

[1] **MICS indicator 3.19**

(*) Figures that are based on less than 25 unweighted cases

( ) Figures that are based on 25-49 unweighted cases

Questions on the prevalence and treatment of fever were asked for all children under age five. Slightly more than one in ten (11 percent) of under five children were ill with fever in the two weeks prior to the survey (Table CH.14). Regional differences in fever prevalence ranged from 7 to 14 percent across the three regions.

Table CH.14: Anti-malarial treatment of children with anti-malarial drugs

Percentage of children age 0-59 months who had a fever in the last two weeks who received anti-malarial drugs, Northeast Zone, Somalia 2011

			Children with a fever in the last two weeks who were treated with:							
			Anti-malarials:							
	Had a fever in last two weeks	Number of children age 0-59 months	SP/ Fansidar	Chloro-quine	Amodia-quine	Quinine	Combination with artemisinin	Any anti-malarial drug[1]	Percentage who took an anti-malarial drug same or next day[2]	Number of children with fever in last two weeks
Sex										
Male	11.3	2,395	9.5	12.6	2.2	2.2	0.7	22.2	10.0	272
Female	9.6	2,319	5.3	8.8	0.9	3.2	1.8	16.8	7.0	223
Region										
Bari	12.1	1,952	7.9	8.3	0.8	4.2	1.6	17.2	8.6	237
Nugal	13.6	993	5.1	10.7	1.4	0.7	0.7	15.8	9.3	135
Mudug	7.0	1,768	9.8	16.1	3.2	1.6	0.9	29.1	8.0	123
Area										
Urban	10.5	2,908	8.8	13.8	2.2	2.5	1.6	23.0	11.9	305
Rural	10.5	1,806	5.6	6.2	0.6	2.8	0.6	14.7	3.4	190
Age										
0-11 months	7.4	857	4.7	4.7	0.0	0.0	0.0	9.5	3.0	63
12-23 months	10.4	792	14.4	11.9	4.6	3.5	3.5	27.4	16.5	82
24-35 months	12.3	1,027	7.8	14.0	0.0	4.8	0.8	24.3	9.3	127
36-47 months	11.5	1,067	4.9	8.8	2.4	0.8	0.8	13.7	4.7	123
48-59 months	10.3	972	6.9	12.7	1.0	3.1	1.1	21.7	9.8	100
Mother's education										
None	9.9	3,624	7.1	12.1	1.1	2.8	1.4	20.4	8.4	359
Primary	13.3	797	7.5	4.5	3.7	2.9	0.9	16.9	9.1	106
Secondary+	10.3	293	(13.1)	(19.1)	(0.0)	(0.0)	(0.0)	(22.7)	(10.0)	30
Wealth index quintiles										
Poorest	10.1	1,004	3.0	6.9	0.0	1.1	0.0	10.9	5.8	101
Second	11.9	965	8.1	7.1	0.8	2.7	0.9	18.8	5.4	115
Middle	10.6	920	7.2	13.3	1.1	3.2	2.0	20.6	7.0	98
Fourth	8.6	965	6.9	14.0	2.3	0.0	0.0	22.1	11.6	83
Richest	11.4	860	12.7	14.6	3.9	5.8	2.9	27.3	14.6	98
Total	10.5	4,714	7.6	10.9	1.6	2.6	1.2	19.8	8.7	495

[1] MICS indicator 3.18; MDG indicator 6.8

[2] MICS indicator 3.17

( ) Figures that are based on 25-49 unweighted cases

There was no treatment with other medications besides anti-malarials thus no data is shown in the table for other medications.

Mothers were asked to report all of the medicines given to a child to treat the fever, including both medicines given at home and medicines given or prescribed at a health facility. Overall, 20 percent of children with fever in the last two weeks were treated with an "appropriate" anti-malarial drug and 9 percent received anti-malarial drugs either on the same day or day after the onset of symptoms. There were no cases reported of using other medications like antibiotic pill or syrup, antibiotic injection, paracetamol/ panadol/acetaminophen, aspirin and ibuprofen although they were included in the questionnaire. It is likely that these types of medicines are not readily available in Somalia although further investigation may be necessary.

"Appropriate" anti-malarial drugs include chloroquine, SP (sulfadoxine-pyrimethamine), artemisine and combination drugs among other drugs. In Northeast Somalia, the first line of treatment is ACT (Artemisine Combination Therapy) and especially Artemisine + Sulfadoxine-Pyrimethamine (AS+SP).

Only 11 percent of children with fever were given chloroquine, and 8 percent were given SP and 1 percent received Artemisine Combination Therapy.

Table CH.15: Malaria diagnostics usage

Percentage of children age 0-59 months who had a fever in the last two weeks and who had a finger or heel stick for malaria testing, Northeast Zone, Somalia 2011

	Had a finger or heel stick[1]	Number of children age 0-59 months with fever in the last two weeks
Sex		
Male	19.2	272
Female	19.9	223
Region		
Bari	14.1	237
Nugal	19.4	135
Mudug	30.0	123
Area		
Urban	23.9	305
Rural	12.4	190
Age		
0-11 months	10.8	63
12-23 months	25.0	82
24-35 months	21.0	127
36-47 months	18.5	123
48-59 months	19.7	100
Mother's education		
None	19.0	359
Primary	17.3	106
Secondary+	(32.3)	30
Wealth index quintiles		
Poorest	10.0	101
Second	12.3	115
Middle	24.7	98
Fourth	25.6	83
Richest	27.4	98
Total	19.5	495

[1] **MICS indicator 3.16**
( ) Figures that are based on 25-49 unweighted cases

Table CH.15 provides the proportion of children age 0-59 months who had a fever in the last two weeks and who had a finger or heel stick for malaria testing. Overall, 20 percent of children with a fever in the last two weeks had a finger or heel stick. Malaria diagnostics among children was more common in urban areas (24 percent) compared to rural areas (12 percent). The percentage of finger pricks for malaria testing was higher in Mudug region (30 percent) compared to the other two regions (14 percent in Bari and 19 percent in Nugal). The percentage of finger pricks for malaria testing increased with increase in household wealth from 10 percent in the poorest households to 27 percent in the richest.

Pregnant women living in places where malaria is highly prevalent are four times more likely than other adults to get malaria and twice as likely to die of the disease. Once infected, pregnant women risk anemia, premature delivery and stillbirth. Their babies are likely to be of low birth weight, which makes them unlikely to survive their first year of life. For this reason, steps are taken to protect pregnant women by distributing insecticide-treated mosquito nets and treatment during antenatal check-ups with drugs that prevent malaria infection (Intermittent preventive treatment or IPT). In Northeast Zone MICS, women were asked of the medicines they had received in their last pregnancy during the 2 years preceding the survey. Women are considered to have received intermittent preventive therapy if they have received at least 2 doses of SP/Fansidar during the pregnancy.

Intermittent preventive treatment for malaria in pregnant women who gave birth in the two years preceding the survey is presented in Table CH.16. Overall 15 percent of women who received Antenatal care also received medicine to prevent malaria. About 10 percent received SP/Fansidar at least once and another 2 percent at least two or more times.

Table CH.16: Intermittent preventive treatment for malaria

Percentage of women age 15-49 years who had a live birth during the two years preceding the survey and who received intermittent preventive treatment (IPT) for malaria during pregnancy at any antenatal care visit, Northeast Zone, Somalia 2011

	Percentage of women who received antenatal care (ANC)	Number of women who had a live birth in the last two years	Percentage of pregnant women who took:			Number of women who had a live birth in the last two years and who received antenatal care
			Any medicine to prevent malaria at any ANC visit during pregnancy	SP/Fansidar at least once	[7]SP/Fansidar two or more times[1]	
Region						
Bari	26.2	646	16.4	8.6	1.1	169
Nugal	31.8	332	22.1	14.8	3.7	106
Mudug	17.4	553	6.2	5.2	0.0	96
Area						
Urban	30.6	955	15.9	10.3	2.0	292
Rural	13.7	576	13.5	6.8	0.0	79
Education						
None	19.8	1178	16.5	9.7	1.7	233
Primary	34.8	260	14.1	7.6	1.1	90
Secondary+	50.7	93	(12.3)	(12.3)	(2.1)	47
Wealth index quintiles						
Poorest	9.8	302	(23.6)	(13.1)	(6.5)	30
Second	17.6	322	17.7	8.7	1.7	57
Middle	21.7	299	9.3	7.8	1.5	65
Fourth	29.2	312	15.1	7.7	0.0	91
Richest	43.6	295	15.8	11.3	1.5	129
Total	24.2	1531	15.4	9.5	1.6	371

[1] **MICS indicator 3.20**
( ) Figures that are based on 25-49 unweighted cases

7 A review of the quality of data relating to children below 2 years indicates potential data quality limitations hence the need to interpret the results for intermittent preventive treatment (IPT) with caution

VI. 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 (7, C) 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[8].

MICS also collects additional information on the availability of facilities and conditions for handwashing. The following indicators are collected:
- Place for handwashing observed
- Availability of soap

Use of Improved Water Sources

The distribution of the population by main source of drinking water is shown in Table WS.1 and Figure 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, to neighbour, public tap/standpipe), tubewell/borehole, protected well, protected spring. Bottled water is considered as an improved water source only if the household is using an improved water source for handwashing and cooking. Collection of rainwater from rooftops was classified under unimproved sources of drinking because it was considered that the condition of housing and hence rooftops North East Zone is very poor in and does not allow for classification of rainwater from rooftop as improved.

8 http://www.childinfo.org/wes.html

Table WS.1: Use of improved water sources

Percent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Northeast Zone, 2011

	Main source of drinking water																				
	Improved sources								Unimproved sources												
	Piped water																				
	Into dwelling	Into yard/ plot	To neigh-bour	Public tap/ stand-pipe	Tube - well/ bore-hole	Pro-ected well	Pro-tected spring	Bottled water	Unpro - tected well	Unpro - tected spring	Rain water Collec-tion: Roof top	Rain water Colle-ction: Berkad	Rain water Collection : Bally	Tanker truck	Cart with small tank/ drum	Surface water	Bottled water	Other	Missing	Total	Percent-age using improved sources of drinking water[1]	Number of house-hold members
Region																					
Bari	17.9	6.3	1.3	3.5	5.3	6.6	1.2	0.2	4.1	1.1	0.4	35.6	1.1	12.3	1.9	0.6	0.0	0.3	0.4	100	42.3	12,834
Nugal	11.4	3.4	1.0	5.6	13.9	6.6	1.2	1.2	6.2	4.0	0.2	26.2	0.8	11.1	2.7	2.4	1.2	0.3	0.6	100	44.4	5,862
Mudug	27.1	12.8	4.4	7.4	7.5	9.4	0	0.2	13.6	0.3	0.2	11.4	0.4	1.7	3.1	0.0	0.0	0.0	0.5	100	68.8	9,841
Area																					
Urban	29	11.5	2.8	3.4	5.4	7.3	0.7	0.6	6.2	0.8	0.3	21.3	0.5	6.0	2.8	0.4	0.4	0.2	0.5	100	60.7	18,242
Rural	3.4	1.6	1.4	8.6	12	8.0	1.0	0.1	10.7	2.4	0.3	32.5	1.3	12.7	1.9	1.4	0.0	0.2	0.4	100	36.1	10,295
Education of household head																					
None	17.2	6.2	2.7	5.4	8.5	8.5	0.7	0.1	9.2	1.5	0.2	25.7	0.9	8.9	2.5	0.9	0.1	0.2	0.5	100	49.3	20,685
Primary	19.3	9.0	1.4	6.1	7.3	5.8	0.6	0.2	4.0	1.6	0.4	29.0	0.5	9.8	3.4	0.4	0.4	0.2	0.6	100	49.6	3,262
Secondary+	32.1	15.2	1.2	4.3	4.9	4.4	1.4	2.0	4.3	0.9	0.5	20.9	0.2	4.8	2.0	0.1	0.3	0.2	0.2	100	65.5	4,442
Missing/DK	16.1	1.9	3.2	5.8	6.3	12.1	0.0	0.0	0.0	0.0	0.0	22.8	0.0	5.2	0.0	11.0	15.5	0.0	0.0	100	45.6	148
Wealth index quintile																					
Poorest	1.1	0.8	3.5	8.5	13.4	11.8	2.0	0.0	14.3	4.3	0.1	22.1	1.4	10.4	2.7	3.1	0.0	0.3	0.2	100	41.2	5,705
Second	4.1	1.9	2.5	7.6	12.1	8.8	0.6	0.0	10.3	1.8	0.3	32.1	0.8	12.2	3.2	0.5	0.1	0.2	0.7	100	37.6	5,712
Middle	10.9	5.9	3	7.1	9.3	8.4	0.8	0.1	9.8	0.8	0.1	29.4	1.0	8.5	3.9	0.1	0.3	0.1	0.6	100	45.5	5,705
Fourth	30.6	13.2	2.3	2.6	3.3	7.0	0.5	0.4	3.7	0.2	0.2	26.6	0.5	6.3	1.9	0.0	0.2	0.2	0.4	100	59.8	5,710
Richest	51.9	17.8	0.4	0.6	0.9	1.8	0.2	1.7	0.9	0.0	0.7	16.4	0.1	4.5	0.7	0.1	0.7	0.0	0.5	100	75.3	5,705
Total	19.7	7.9	2.3	5.3	7.8	7.6	0.8	0.4	7.8	1.4	0.3	25.3	0.8	8.4	2.5	0.7	0.3	0.2	0.5	100	51.9	28,537

[1] **MICS indicator 4.1; MDG indicator 7.8**

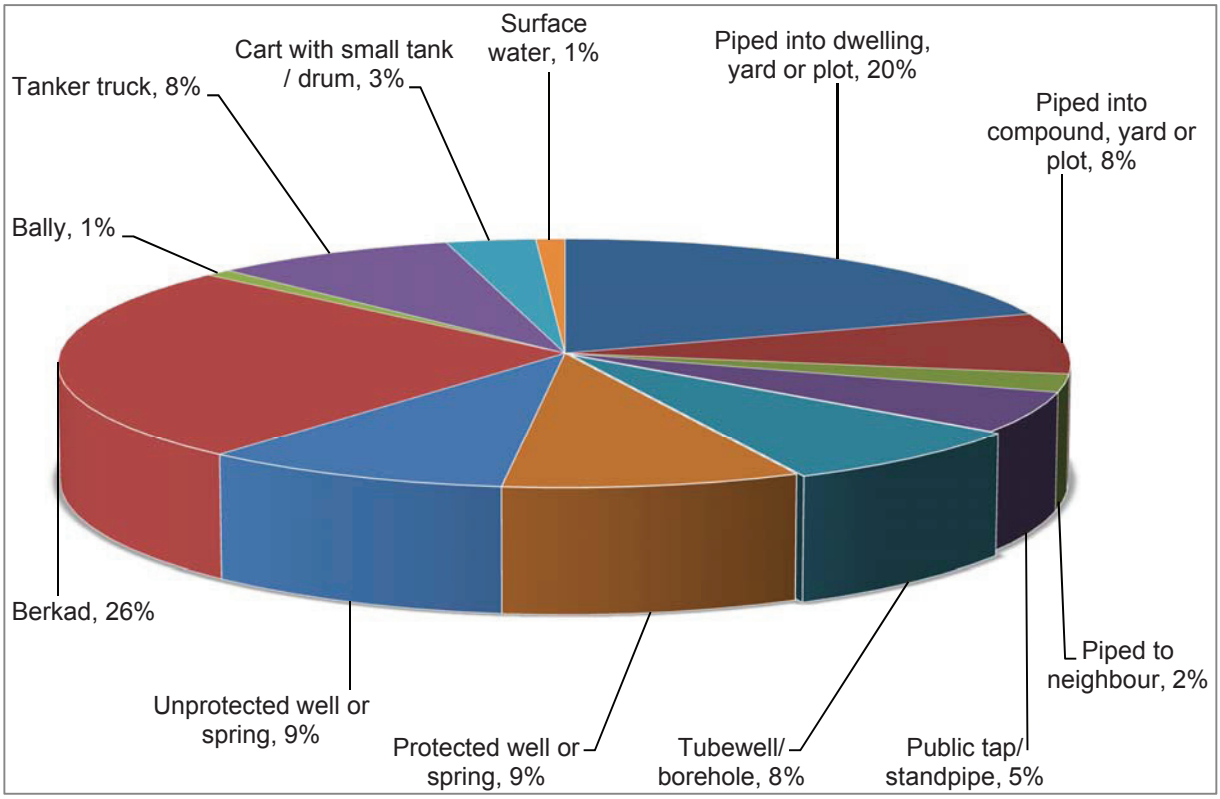
Households using bottled water as the main source of drinking water are classified into improved or unimproved drinking water users according to the water source used for other purposes such as cooking and hand washing.

Surface water includes water from the river, stream, dam, lake, pond and canal

Overall, 52 percent of the population is using an improved source of drinking water – 61 percent in urban areas and 36 percent in rural areas (Table WS.1). The situation in Mudug region is considerably better than in other regions; more than half (69 percent) of the population in this region gets its drinking water from an improved source.

One in every five residents of the Northeast Zone has access to water that is piped into the dwelling place while 8 percent use water that is piped into the yard or plot, from tube-well or from protected wells (Figure WS.1). The source of drinking water for the population varies strongly by region (Table WS.1). In Mudug region, 27 percent of the population uses drinking water that is piped into their dwelling and 13 percent use drinking water that is piped into the yard or plot. In contrast, only 11 percent and 18 percent of the population have access to water piped into their dwelling in Nugal and Bari regions respectively and only 3 percent and 6 percent uses drinking water that is piped into the yard or plot in the two regions respectively. In Nugal and Bari regions, the most important source of drinking water is rainwater (an unimproved source) while in Mudug region more than 14 percent of the population use water from unprotected wells (an unimproved source). Access to improved sources of drinking water increased with household wealth from 41 percent among the poorest to 75 percent for the richest households (Table WS.1).

Figure WS.1: Percent distribution of household members by source of drinking water, Northeast Zone, Somalia 2011



Use of household 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 water, adding bleach or chlorine, using a water filter, and using solar disinfection are 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.

A high proportion of the households do not use appropriate methods of water treatment in the Northeast Zone. Only 6 percent of household members in households using unimproved drinking water sources are using an appropriate method of water treatment. This percentage is lowest in Mudug. Appropriate methods of water treatment, although generally very low, is higher in the urban (8 percent) compared to rural areas (4 percent) and increases with household wealth from 3 percent among the poorest households to 16 percent in the richest households.

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, Northeast Zone, 2011

	Water treatment method used in the household														
	None	Boil	Add bleach/ chlorine	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle	Wash hands before collecting water	Store drinking water in a clean container with cover	Use separate clean cup with a long handle for taking water out of container	Keep animals away from the container	Other	Number of household members	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															
Bari	91.3	4.6	3.2	0.8	0.3	0.3	0.5	0.3	0.8	0.2	0.2	0.4	12,834	6.9	7,404
Nugal	90.0	5.4	4.3	1.2	0.4	0.3	0.8	0.1	1.9	0.0	0.1	0.3	5,862	6.4	3,262
Mudug	96.5	2.6	1.2	0.3	0.0	0.0	0.3	0.2	0.3	0.2	0.3	0.0	9,841	3.6	3,072
Area															
Urban	92.0	4.6	3.8	0.7	0.2	0.2	0.4	0.3	0.9	0.1	0.2	0.3	18,242	7.7	7,162
Rural	94.4	3.1	0.9	0.8	0.3	0.1	0.6	0.0	0.8	0.3	0.3	0.3	10,295	4.2	6,575
Education of household head															
None	94.4	3.3	2.0	0.6	0.2	0.1	0.5	0.2	0.7	0.1	0.2	0.2	20,685	4.8	10,480
Primary	89.8	5.0	4.8	1.2	0.4	0.4	0.7	0.0	1.0	0.6	0.0	0.5	3,262	10.8	1,643
Secondary+	88.2	6.9	4.9	0.9	0.3	0.3	0.4	0.5	1.5	0.2	0.3	0.3	4,442	9.6	1,533
Missing/Don't know	80.4	4.5	5.8	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0	0.0	148	0.0	81
Wealth index quintile															
Poorest	94.7	2.5	1.1	1.0	0.0	0.4	0.6	0.0	0.6	0.1	0.4	0.2	5,705	2.6	3,355
Second	94.2	3.6	0.9	0.6	0.3	0.1	0.6	0.3	0.7	0.1	0.0	0.2	5,712	4.9	3,565
Middle	93.2	3.9	3.0	1.1	0.3	0.3	0.3	0.0	0.6	0.1	0.1	0.2	5,705	6.6	3,111
Fourth	94.1	3.5	2.4	0.5	0.2	0.1	0.6	0.3	0.6	0.0	0.2	0.4	5,710	6.1	2,294
Richest	88.1	6.8	6.4	0.6	0.5	0.2	0.4	0.6	1.9	0.6	0.4	0.3	5,705	15.6	1,412
Total	92.8	4.1	2.8	0.7	0.2	0.2	0.5	0.2	0.9	0.2	0.2	0.3	28,537	6.0	13,737

[1] **MICS indicator 4.2**

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

Table WS.3 shows that 35 percent of the household population use improved drinking water sources on their premises. About 12 percent of the households take 30 minutes or more to and from the improved source of drinking water. One-quarter of household members use unimproved drinking water sources on their premises while 16 percent require 30 minutes or more to and from the source of drinking water. In rural areas more households members spend longer time collecting water compared to those in urban areas. The amount of time spent collecting water is longer for members of the poorest households compared to the richest.

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, Northeast Zone, Somalia 2011

	Time to source of drinking water									
	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	Total	Number of household members
Region										
Bari	29.7	3.3	8.7	0.5	37.0	4.9	14.3	1.5	100.0	12,834
Nugal	22.0	5.8	15.6	0.9	22.8	6.2	24.1	2.6	100.0	5,862
Mudug	48.1	6.8	13.9	0.0	11.6	4.7	14.1	0.7	100.0	9,841
Area										
Urban	49.2	3.3	7.9	0.3	26.1	3.3	8.6	1.2	100.0	18,242
Rural	8.3	8.1	19.0	0.8	24.0	8.4	29.7	1.8	100.0	10,295
Education of household head										
None	30.8	5.5	12.5	0.6	24.7	5.3	19.0	1.7	100.0	20,685
Primary	32.7	3.8	13.1	0.1	30.3	6.8	12.0	1.3	100.0	3,262
Secondary+	53.2	3.3	8.8	0.2	24.3	3.0	6.6	0.7	100.0	4,442
Missing/Don't know	24.5	14.7	6.3	0.0	32.0	7.1	15.3	0.0	100.0	148
Wealth index quintile										
Poorest	8.5	11.1	20.9	0.7	11.5	10.8	34.5	1.9	100.0	5,705
Second	12.6	5.9	18.2	0.9	27.3	7.1	25.8	2.2	100.0	5,712
Middle	26.1	5.2	13.7	0.5	34.5	4.9	14.0	1.1	100.0	5,705
Fourth	51.6	2.4	5.7	0.1	32.1	1.6	5.4	1.1	100.0	5,710
Richest	73.7	0.5	1.1	0.0	21.1	1.0	1.6	1.0	100.0	5,705
Total	34.5	5.0	11.9	0.4	25.3	5.1	16.2	1.5	100.0	28,537

Table WS.4 shows that for the majority of households, an adult female is usually the person collecting the water, when the source of drinking water is not on the premises. Adult men collect water in 22 percent of cases, while for the rest of the households, female or male children under age 15 collect water.

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, Northeast Zone, Somalia 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	Adult man	Female child under age 15	Male child under age 15	Missing/DK	Total	
Region									
Bari	34.3	2,152	57.3	25.4	9.5	4.5	3.2	100.0	737
Nugal	57.5	947	61.8	22.1	7.1	5.5	3.5	100.0	544
Mudug	41.7	1,686	65.1	19.3	8.1	3.9	3.5	100.0	704
Area									
Urban	25.6	2,967	58.7	24.7	8.1	4.7	3.9	100.0	760
Rural	67.4	1,818	62.9	20.9	8.6	4.5	3.1	100.0	1,225
Education of household head									
None	45.5	3,538	62.0	22.2	8.2	4.1	3.6	100.0	1,610
Primary	38.8	539	60.0	21.6	9.8	5.8	2.9	100.0	209
Secondary+	22.9	684	56.0	24.8	9.0	8.3	1.9	100.0	156
Missing/don't know	43.3	24	71.0	29.0	0.0	0.0	0.0	100.0	10
Wealth index quintile									
Poorest	78.6	1,034	63.1	22.2	8.4	3.9	2.3	100.0	812
Second	60.5	996	62.3	21.4	7.6	5.0	3.6	100.0	602
Middle	40.0	934	62.0	21.2	8.9	4.7	3.2	100.0	374
Fourth	16.4	941	52.4	27.5	8.2	6.9	5.0	100.0	154
Richest	5.0	881	(40.0)	(28.8)	(13.4)	(2.2)	(15.6)	100.0	44
Total	41.5	4,785	61.3	22.3	8.4	4.6	3.4	100.0	1,985

( ) Figures that are based on 25-49 unweighted cases.

Use of Improved Sanitation

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. 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. An improved sanitation facility is defined as one that hygienically separates human excreta from human contact. Improved sanitation facilities for excreta disposal include flush or pour flush to a piped sewer system, septic tank, or pit latrine; ventilated improved pit latrine, pit latrine with slab, and use of a composting toilet. The data on the use of improved sanitation facilities in Northeast Zone are provided in this report in Table WS.5.

Twenty six percent of the population of Northeast Zone is living in households using pit latrines with a slab; a form of improved sanitation facility (Table WS.5). Another 19 percent is using Ventilated improved pit latrines, while 18 percent of the household is using flush or pour flush that goes into Septic tanks. The percentage of those using pit latrines with slab is 29 in urban areas and 20 percent in rural areas. The use of septic tanks (an improved sanitation facility) strongly correlated with wealth and is profoundly different between urban and rural areas. In rural areas, open defecation is a common practice among 36 percent of the population. This practice is also very common among members from the poorest households (63 percent).

Table WS.5: Types of sanitation facilities

Percent distribution of household population according to type of toilet facility used by the household, Northeast Zone, 2011

	Type of toilet facility used by household												
	Improved sanitation facility						Unimproved sanitation facility						
	Flush/pour flush to:												
	Piped sewer system	Septic tank	Pit latrine	Unknown place/not sure/DK where	Ventilated improved pit latrine	Pit latrine with slab	Flush/ pour flush to somewhere else	Pit latrine without slab/ open pit	Other	Missing	Open defecation[a]	Total	Number of household members
Region													
Bari	1.3	17.5	15.6	0.2	19.2	26.3	0.7	2.6	0.1	0.1	16.3	100.0	12,834
Nugal	1.1	17.7	13.4	0.1	16.2	27.5	0.4	1.4	0.7	0.4	21.0	100.0	5,862
Mudug	0.6	18.5	17.8	0.2	19.8	24.5	0.5	1.6	0.3	0.9	15.4	100.0	9,841
Area													
Urban	1.5	20.7	15.9	0.3	22.9	29.4	0.8	1.5	0.3	0.4	6.3	100.0	18,242
Rural	0.1	12.8	15.9	0.0	11.5	19.8	0.3	2.9	0.3	0.5	35.9	100.0	10,295
Education of household head													
None	0.6	17.0	15.1	0.1	18.3	25.9	0.4	2.2	0.3	0.5	19.7	100.0	20,685
Primary	0.6	16.3	19.8	0.4	16.7	27.6	0.8	2.5	0.3	0.6	14.4	100.0	3,262
Secondary+	3.5	23.5	16.8	0.8	22.4	25.1	1.1	0.8	0.1	0.0	5.9	100.0	4,442
Missing/Don't know	0.0	3.9	17.4	0.0	26.5	23.0	0.0	3.2	0.0	0.0	26.0	100.0	148
Wealth index quintile													
Poorest	0.3	5.0	8.3	0.0	4.6	14.2	0.1	3.4	0.9	0.2	63.0	100.0	5,705
Second	0.1	15.7	19.4	0.0	12.8	29.7	0.2	3.9	0.3	0.3	17.5	100.0	5,712
Middle	0.1	17.2	19.5	0.1	21.7	33.2	0.3	2.6	0.1	1.1	4.2	100.0	5,705
Fourth	1.3	22.1	17.6	0.1	28.0	29.3	0.9	0.2	0.0	0.2	0.3	100.0	5,710
Richest	3.2	29.2	14.8	0.9	26.7	23.3	1.4	0.1	0.1	0.4	0.0	100.0	5,705
Total	1.0	17.8	15.9	0.2	18.8	25.9	0.6	2.0	0.3	0.4	17.0	100.0	28,537

There are no cases of using buckets as a sanitation facility so they are not shown in the table

[a]Open defecation includes no sanitation facility or defecation in the bush or field

The MDG sanitation indicator excludes users of improved sanitation facilities which are shared between two or more households from having access to sanitation. Therefore, 'use of improved sanitation' is used both in the context of this report and as an MDG indicator to refer to improved sanitation facilities, which are not shared. Data on the use of improved sanitation are presented in Tables WS.6 and WS.8.

As shown in Table WS.6, 65 percent of the household population is using an improved sanitation facility that is not shared. Use of a shared facility by five or less households is more common among households using an improved facility in the urban areas compared to the rural areas. Use of shared sanitation facility is uncommon among the users of unimproved sanitation facilities.

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. In Northeast Zone, safe disposal of child's faeces was practiced for more than two thirds (73 percent) of the children age 0 – 2 years. Safe disposal of child's faeces was least practiced in Nugal region, in households without a sanitation facility, in rural areas and among the poorest households.

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, Northeast Zone, 2011

	Users of improved sanitation facilities					Users of unimproved sanitation facilities					
			Shared by					Shared by			
	Not shared [1]	Public facility	5 households or less	More than 5 households	Missing/DK	Not shared	Public facility	5 households or less	Open defecation (no facility, bush, field)	Total	Number of household members
Region											
Bari	66.6	1.1	10.0	2.2	0.2	2.9	0.1	0.5	16.3	100.0	12,834
Nugal	60.2	2.6	11.1	1.7	0.5	2.4	0.2	0.2	21.0	100.0	5,862
Mudug	65.2	2.6	10.1	2.4	0.9	2.7	0.1	0.5	15.4	100.0	9,841
Area											
Urban	73.9	2.1	11.7	2.3	0.7	2.4	0.2	0.4	6.3	100.0	18,242
Rural	48.6	1.6	7.8	1.9	0.2	3.4	0.1	0.4	35.9	100.0	10,295
Education of household head											
None	62.0	2.2	9.9	2.1	0.6	2.8	0.1	0.4	19.7	100.0	20,685
Primary	63.7	1.2	13.2	2.8	0.4	3.3	0.2	0.8	14.4	100.0	3,262
Secondary+	79.3	1.2	9.2	2.1	0.4	2.0	0.0	0.0	5.9	100.0	4,442
Missing/Don't know	48.3	0.0	22.5	0.0	0.0	0.0	3.2	0.0	26.0	100.0	148
Wealth index quintile											
Poorest	19.3	4.1	5.1	3.9	0.0	3.4	0.3	0.7	63.0	100.0	5,705
Second	57.7	2.7	13.5	3.3	0.6	3.8	0.2	0.7	17.5	100.0	5,712
Middle	75.3	0.8	13.5	1.4	0.8	3.5	0.1	0.4	4.2	100.0	5,705
Fourth	81.7	1.3	13.0	1.4	1.0	1.1	0.0	0.2	0.3	100.0	5,710
Richest	90.0	0.8	6.2	0.7	0.3	1.9	0.0	0.0	0.0	100.0	5,705
Total	64.8	1.9	10.3	2.2	0.5	2.7	0.1	0.4	17.0	100.0	28,537

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

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, Northeast Zone, Somalia 2011

	Place of disposal of child's faeces									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	Buried	Left in the open	Other	Missing	Total		
Type of sanitation facility in dwelling											
Improved	1.9	81.1	3.5	3.5	1.0	2.5	0.1	6.3	100.0	83.0	2,102
Unimproved	2.3	68.9	4.4	9.5	4.7	3.6	1.2	5.5	100.0	71.1	90
Open defecation	1.3	25.6	2.2	15.2	11.0	37.9	1.1	5.6	100.0	26.9	472
Region											
Bari	2.0	72.6	3.3	6.7	1.6	7.8	0.3	5.8	100.0	74.6	1,099
Nugal	0.9	57.7	5.2	6.7	5.9	16.1	1.1	6.4	100.0	58.6	575
Mudug	2.1	76.5	2.3	4.3	2.5	5.8	0.0	6.4	100.0	78.6	989
Area											
Urban	2.0	79.5	4.2	4.4	0.8	2.6	0.2	6.1	100.0	81.5	1,629
Rural	1.5	57.2	1.9	8.0	6.1	18.6	0.5	6.2	100.0	58.6	1035
Mother's education											
None	1.7	69.0	2.9	6.6	3.1	9.8	0.5	6.4	100.0	70.7	2,041
Primary	2.6	73.5	5.3	3.7	2.7	7.1	0.0	5.1	100.0	76.1	462
Secondary+	1.2	86.0	2.4	1.8	0.7	1.3	0.0	6.7	100.0	87.2	160
Wealth index quintile											
Poorest	1.3	41.6	2.9	12.1	8.0	28.6	0.6	4.8	100.0	42.9	545
Second	1.7	65.4	3.2	8.3	5.0	9.7	0.4	6.3	100.0	67.1	557
Middle	1.5	80.6	3.4	3.1	0.4	4.3	0.6	6.1	100.0	82.1	526
Fourth	1.8	84.2	3.5	2.7	0.6	0.5	0.2	6.7	100.0	86.0	554
Richest	2.8	84.3	3.6	2.4	0.0	0.0	0.0	7.0	100.0	87.0	481
Total	1.8	70.8	3.3	5.8	2.9	8.8	0.3	6.1	100.0	72.6	2,664

[1] **MICS indicator 4.4**

In its 2008 report[9], 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. The table also shows the percentage of household members using improved sources of drinking water and sanitary means of excreta disposal. On overall, 37 percent of the household members have improved drinking water sources and improved sanitation facilities. This percentage is highest in Mudug region, urban areas, among those with secondary of higher education and among the richest households.

9 *WHO/UNICEF JMP (2008), MDG assessment report* - http://www.wssinfo.org/download?id_document=1279

Table WS.8: Drinking water and sanitation ladders

Percentage of household population by drinking water and sanitation ladders, Northeast Zone, Somalia 2011

	Percentage of household population using:										
	Improved drinking water[1]					Unimproved sanitation					
	Piped into dwelling, plot or yard	Other improved	Unimproved drinking water	Total	Improved sanitation[2]	Shared improved facilities	Unimproved facilities	Open defecation	Total	Improved drinking water sources and improved sanitation	Number of household members
Region											
Bari	24.4	17.9	57.7	100.0	66.6	13.5	3.6	16.3	100.0	31.4	12,834
Nugal	15.9	28.4	55.6	100.0	60.2	15.9	2.8	21.0	100.0	29.8	5,862
Mudug	40.1	28.7	31.2	100.0	65.2	16.0	3.4	15.4	100.0	47.2	9,841
Area											
Urban	41.0	19.7	39.3	100.0	73.9	16.8	3.0	6.3	100.0	45.7	18,242
Rural	5.1	31.0	63.9	100.0	48.6	11.5	4.0	35.9	100.0	20.2	10,295
Education of household head[a]											
None	23.5	25.8	50.7	100.0	62.0	14.8	3.5	19.7	100.0	33.4	20,685
Primary	28.5	21.2	50.4	100.0	63.7	17.7	4.3	14.4	100.0	34.0	3,262
Secondary+	49.1	16.4	34.5	100.0	79.3	12.8	2.0	5.9	100.0	53.3	4,442
Missing/DK	18.1	27.5	54.4	100	48.3	22.5	3.2	26.0	100.0	25.1	148
Wealth index quintile											
Poorest	2.0	39.2	58.8	100.0	19.3	13.1	4.6	63.0	100.0	8.6	5,705
Second	6.0	31.6	62.4	100.0	57.7	20.1	4.7	17.5	100.0	23.1	5,712
Middle	16.9	28.6	54.5	100.0	75.3	16.4	4.1	4.2	100.0	34.6	5,705
Fourth	44.0	15.8	40.2	100.0	81.7	16.7	1.3	0.3	100.0	48.2	5,710
Richest	71.4	3.8	24.7	100.0	90.0	8.0	1.9	0.0	100.0	68.1	5,705
Total	28.0	23.8	48.1	100.0	64.8	14.9	3.3	17.0	100.0	36.5	28,537

[1] MICS indicator 4.1; MDG indicator 7.8

[2] MICS indicator 4.3; MDG indicator 7.9

Hand washing

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.

In Northeast Zone, a specific place for hand washing was observed in one third of households while 63 percent of households could not indicate a specific place where household members usually wash their hands. Further, 2 percent of the households did not give a permission to see the place used for handwashing (Table WS.9). Of those households where a place for handwashing was observed, more than three quarters (79 percent) had both water and soap present at the specific place. In 8 percent of the households only water was available at the specific place, while in another 8 percent of the households the place only had soap but no water. The remaining 4 percent of households had neither water nor soap available at the designated place for hand washing. Fifty nine percent of the households had soap observed anywhere in the household (Table WS.10). The likelihood of observing soap in the dwelling increased with education and wealth levels. This percentage differed within regions. Mudug region had the lowest availability of soap in households (55 percent) while Bari and Nugal had 61 and 62 percent respectively).

Table WS.9: Water and soap at place for handwashing

Percentage of households where place for handwashing was observed and percent distribution of households by availability of water and soap at place for handwashing, Northeast Zone, Somalia 2011

	Percentage of households where place for handwashing was observed	Percentage of households where place for handwashing was not observed					Number of house holds	Percent distribution of households where place for handwashing was observed, and:						Number of households where place for handwashing was observed
		Not in dwelling/plot/ yard	No permission to see	Other reasons	Missing	Total		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	Missing	Total	
Region														
Bari	32.7	61.4	2.4	2.8	0.7	100.0	2,152	83.9	4.3	8.1	2.8	1.0	100.0	704
Nugal	27.4	69.0	0.5	2.9	0.2	100.0	947	81.3	6.2	8.2	1.9	2.4	100.0	259
Mudug	35.5	60.8	1.5	1.6	0.6	100.0	1,686	70.9	14.3	7.4	5.0	2.3	100.0	598
Area														
Urban	39.2	56.5	1.6	2.3	0.4	100.0	2,967	83.4	5.8	6.7	2.7	1.3	100.0	1,162
Rural	22.0	72.8	1.8	2.5	0.9	100.0	1,818	64.2	16.0	11.1	5.7	3.0	100.0	399
Education of household head														
None	30.5	65.0	2.0	2.0	0.5	100.0	3,538	74.6	10.5	9.0	4.4	1.5	100.0	1,080
Primary	27.6	64.8	1.3	5.4	0.9	100.0	539	87.2	3.3	5.3	2.1	2.1	100.0	149
Secondary+	47.7	49.3	0.7	1.8	0.5	100.0	684	87.4	4.0	5.4	0.9	2.4	100.0	326
Missing/DK	28.6	67.4	.0	4.0	0.0	100.0	24	86.0	.0	.0	14.0	.0	100.0	7
Wealth index quintiles														
Poorest	11.9	83.4	2.4	1.8	0.5	100.0	1,034	50.3	20.5	10.5	15.2	3.4	100.0	123
Second	20.1	73.7	2.1	3.0	1.1	100.0	996	60.3	19.5	13.6	4.0	2.6	100.0	200
Middle	32.3	62.7	1.4	3.2	0.4	100.0	934	76.0	9.7	8.9	4.6	0.7	100.0	301
Fourth	42.5	53.6	1.5	2.1	0.3	100.0	941	80.1	7.8	7.7	2.4	2.0	100.0	400
Richest	60.9	35.7	1.2	1.7	0.4	100.0	881	91.9	1.2	4.7	0.7	1.4	100.0	537
Total	32.6	62.7	1.7	2.4	0.6	100.0	4,785	78.5	8.4	7.9	3.5	1.7	100.0	1,561

[1] **MICS indicator 4.5**

Table WS.10: Availability of soap

Percent distribution of households by availability of soap in the dwelling, Northeast Zone, 2011

	Place for handwashing observed					Place for handwashing not observed						
		Soap not observed at place for handwashing										
	Soap observed	Soap shown	No soap in household	Not able/Does not want to show soap	Missing	Soap shown	No soap in household	Not able/Does not want to show soap	Missing	Total	Percentage of households with soap anywhere in the dwelling[1]	Number of households
Region												
Bari	30.1	0.5	1.8	0.0	0.3	29.9	37.2	0.1	0.1	100.0	60.5	2,152
Nugal	24.5	0.5	1.7	0.0	0.6	36.4	35.9	0.1	0.2	100.0	61.5	947
Mudug	27.8	0.5	6.1	0.2	0.8	26.8	37.5	0.1	0.1	100.0	55.1	1,686
Area												
Urban	35.3	0.7	2.6	0.0	0.5	29.0	31.6	0.1	0.1	100.0	64.9	2,967
Rural	16.5	0.2	4.4	0.1	0.7	31.9	45.9	0.1	0.1	100.0	48.7	1,818
Education of household head												
None	25.5	0.4	4.1	0.1	0.5	27.4	41.9	0.1	0.1	100.0	53.3	3,538
Primary	25.5	0.4	1.1	0.0	0.6	43.8	28.4	0.2	0.0	100.0	69.7	539
Secondary+	44.2	1.0	1.3	0.0	1.1	32.8	19.4	0.0	0.1	100.0	78.0	684
Missing/DK	24.6	4.0	0.0	0.0	0.0	46.3	25.1	0.0	0.0	100.0	74.9	24
Wealth index quintile												
Poorest	7.2	0.3	3.9	0.1	0.4	26.2	61.6	0.1	0.2	100.0	33.7	1,034
Second	14.9	0.4	4.2	0.1	0.5	34.1	45.5	0.3	0.0	100.0	49.3	996
Middle	27.4	0.5	4.1	0.0	0.2	32.7	34.8	0.1	0.1	100.0	60.6	934
Fourth	37.3	1.0	3.2	0.1	0.8	31.9	25.5	0.0	0.1	100.0	70.2	941
Richest	58.9	0.3	0.9	0.0	0.9	25.5	13.4	0.1	0.1	100.0	84.7	881
Total	28.2	0.5	3.3	0.1	0.6	30.1	37.0	0.1	0.1	100.0	58.8	4,785

[1] **MICS indicator 4.6**

VII. Reproductive Health

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.

In Northeast Zone Somalia, current use of contraception is extremely low and was reported by 3 percent of women currently married (Table RH.1). In addition, only 2 percent of currently married women are using Lactational Amenorrhea Method (LAM) as the main traditional method of birth control. Contraceptive prevalence is highest in Nugal region at 5 percent. About 3 percent of women in urban areas used contraceptives compared to 2 percent in rural areas.

Table RH.1: 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, Northeast Zone, Somalia 2011

	Percent of women (currently married or in union) who are using:						
	Not using any method	Pill	LAM	Any modern method	Any tradi-tional method	Any method[1]	Number of women currently married
Region							
Bari	97.7	0.1	2.1	0.1	2.2	2.3	1,450
Nugal	95.5	0.2	4.0	0.3	4.2	4.5	635
Mudug	98.2	0.1	1.6	0.2	1.6	1.8	1,094
Area							
Urban	97.1	0.1	2.5	0.2	2.7	2.9	2,019
Rural	98.0	0.1	1.9	0.1	1.9	2.0	1,160
Age							
15-19	97.9	0.0	2.1	0.0	2.1	2.1	141
20-24	98.2	0.2	1.4	0.4	1.4	1.8	499
25-29	96.7	0.0	3.0	0.1	3.1	3.3	788
30-34	96.4	0.2	3.4	0.2	3.4	3.6	620
35-39	98.3	0.2	1.6	0.2	1.6	1.7	558
40-44	97.6	0.0	2.2	0.0	2.4	2.4	416
45-49	98.8	0.0	0.6	0.0	1.2	1.2	158
Number of living children							
0	100.0	0.0	0.0	0.0	0.0	0.0	210
1	98.7	0.0	1.3	0.0	1.3	1.3	365
2	97.1	0.2	2.5	0.2	2.7	2.9	448
3	97.4	0.0	2.6	0.0	2.6	2.6	470
4+	96.9	0.1	2.7	0.2	2.8	3.1	1,686
Education							
None	97.3	0.0	2.5	0.1	2.6	2.7	2,445
Primary	97.6	0.4	1.8	0.4	2.0	2.4	506
Secondary+	98.7	0.0	1.3	0.0	1.3	1.3	228
Wealth index quintile							
Poorest	98.7	0.0	1.3	0.0	1.3	1.3	613
Second	97.6	0.3	2.1	0.3	2.1	2.4	631
Middle	96.7	0.2	3.0	0.2	3.2	3.3	628
Fourth	96.9	0.0	2.5	0.3	2.8	3.1	669
Richest	97.4	0.0	2.6	0.0	2.6	2.6	638
Total	97.4	0.1	2.3	0.2	2.4	2.6	3,179

[1] **MICS indicator 5.3; MDG indicator 5.3**

There are no cases of female and male sterilization, IUD, injectables, implants, male and female condoms, diaphragm/foam/jelly, periodic abstinence and withdrawal so they are not shown in the table.

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.2 shows the levels of met need for contraception, unmet need, and the demand for contraception satisfied.

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

- are not pregnant and not postpartum amenorrheic[10] and are fecund[11] 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 do not want to have a child OR
- are postpartum amenorrheic and say that they did not want the birth

Total unmet need for contraception is the sum of unmet need for spacing and unmet need for limiting. The unmet need is fairly low (11 percent) among married women in the Northeast Zone of Somalia. Most the unmet need is for birth spacing. It is apparent that in Northeast Somali women tend to have many children resulting to low unmet need for contraception.

Met need for limiting includes women who are using (or whose partner is using) a contraceptive method and who want no more children, are using male or female sterilization or declare themselves as infecund. Met need for spacing includes women who are using (or whose partner is using) a contraceptive method and who want to have another child or are undecided whether to have another child. The total of met need for spacing and limiting adds up to the total met need for contraception. The total met need for contraception was 7 percent and this comprises mainly of need for spacing.

10 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

11 A women is considered infecund 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

There are no regional variations in the distribution of met need for contraception among married women with 9 percent in Nugal, 7 percent in Bari and 6 percent in Mudug region. Similarly, little differences are observed for met need between the different background characteristics such as rural urban residence, education of the woman and wealth status.

Using information on contraception and unmet need, the percentage of demand for contraception satisfied is also estimated from the MICS data. The percentage of demand satisfied is defined as the proportion of women currently married 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. Table RH.2 shows that the total met need is lower than the total unmet need for family planning (7 percent compared to 11 percent). The table also highlights that the total demand for family planning satisfied is 38 percent and the level of satisfaction is similar for rural and urban areas.

Table RH.2: Unmet need for contraception

Percentage of women age 15-49 years currently married or in union with an unmet need for family planning and percentage of demand for contraception satisfied, Northeast Zone, Somalia 2011

	Met need for contraception			Unmet need for contraception			Number of women currently married or in union	Percentage of demand for contraception satisfied	Number of women currently married or in union with need for contraception
	For spacing	For limiting	Total	For spacing	For limiting	Total[1]			
Region									
Bari	6.5	0.1	6.6	9.0	1.1	10.1	1,450	39.5	241
Nugal	8.3	0.6	8.9	11.8	0.3	12.1	635	42.3	133
Mudug	6.2	0.1	6.3	12.2	0.5	12.7	1,094	33.0	207
Area									
Urban	6.8	0.3	7.1	11.0	0.9	11.9	2,019	37.3	384
Rural	6.6	0.0	6.6	10.0	0.4	10.4	1,160	38.9	198
Age									
15-19	10.0	0.7	10.7	10.9	0.0	10.9	141	(49.5)	30
20-24	5.8	0.0	5.8	15.7	0.4	16.1	499	26.6	109
25-29	5.3	0.2	5.5	9.9	0.2	10.2	788	35.3	124
30-34	8.0	0.2	8.1	10.8	0.6	11.5	620	41.4	121
35-39	5.3	0.0	5.3	10.5	1.6	12.1	558	30.5	97
40-44	8.3	0.2	8.5	7.3	0.5	7.7	416	52.4	68
45-49	10.0	0.6	10.6	7.0	2.5	9.5	158	(52.9)	32
Education									
None	6.8	0.2	7.0	10.5	0.7	11.2	2,445	38.4	445
Primary	5.3	0.4	5.7	11.0	0.6	11.6	506	32.8	88
Secondary+	8.9	0.0	8.9	11.1	1.3	12.4	228	(41.7)	49
Wealth index quintiles									
Poorest	5.6	0.0	5.6	9.7	0.3	10.1	613	35.6	96
Second	4.7	0.2	4.9	10.9	0.5	11.4	631	29.8	103
Middle	8.2	0.2	8.4	10.2	0.8	11.0	628	43.3	122
Fourth	7.7	0.6	8.2	12.3	0.6	12.8	669	39.1	141
Richest	7.4	0.0	7.4	10.0	1.4	11.4	638	39.5	120
Total	6.7	0.2	6.9	10.7	0.7	11.4	3,179	37.8	581

[1] **MICS indicator 5.4; MDG indicator 5.6**

( ) Figures that are based on 25-49 unweighted 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 of antenatal care visits, which include:

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

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.3. The results show that nearly three in four of women did not receive antenatal care. In the Northeast Zone, the majority of antenatal care is provided by medical doctors while a minority of women receive care from a traditional birth attendant.

At least 24 percent of women received antenatal care from a skilled provider and getting antenatal care from a skilled provider was twice as likely in urban (31 percent) than in rural areas (14 percent). Education and wealth status of a woman were strongly associated with ANC from a skilled provider, 51 percent of women with secondary or more education received antenatal care from a skilled provider compared to 20 percent of women with no education. A lower percentage (17 percent) of women who gave birth in the two years preceding the survey received antenatal care from a skilled provider in Mudug region compared to the other two regions; 26 percent in Bari and 32 percent in Nugul.

Table RH.3: Antenatal care coverage[12]

Percent distribution of women age 15-49 who gave birth in the two years preceding the survey by type of personnel providing antenatal care during the pregnancy for the last birth, Northeast Zone, Somalia 2011

	Person providing antenatal care									
	Medical doctor	Nurse/ Midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Other	No antenatal care received	Total	Any skilled personnel[1]	Number of women who gave birth in the preceding two years
Region										
Bari	21.1	4.6	0.5	0.3	3.5	0.6	69.4	100.0	26.2	646
Nugal	27.4	3.8	0.6	0.3	2.6	0.0	65.2	100.0	31.8	332
Mudug	12.8	3.7	0.9	0.2	2.7	0.3	79.4	100.0	17.4	553
Area										
Urban	23.8	5.9	0.9	0.3	3.8	0.5	64.8	100.0	30.6	955
Rural	12.4	1.1	0.2	0.2	1.7	0.2	84.2	100.0	13.7	576
Mother's age at birth										
Less than 20	20.5	4.5	1.3	0.0	2.6	0.0	71.1	100.0	26.3	150
20-34	20.2	4.0	0.5	0.3	3.4	0.4	71.2	100.0	24.7	1137
35-49	15.6	4.4	0.8	0.0	1.7	0.4	77.1	100.0	20.9	243
Education										
None	16.3	3.2	0.3	0.2	2.6	0.3	77.1	100.0	19.8	1178
Primary	29.1	4.6	1.1	0.4	4.5	0.7	59.5	100.0	34.8	260
Secondary+	34.0	13.5	3.1	1.0	4.2	0.0	44.1	100.0	50.7	93
Wealth index quintiles										
Poorest	7.8	1.6	0.4	0.7	0.7	0.7	88.2	100.0	9.8	302
Second	14.9	2.8	0.0	0.0	3.4	0.0	79.0	100.0	17.6	322
Middle	17.7	3.6	0.3	0.0	3.3	0.3	74.7	100.0	21.7	299
Fourth	25.1	3.4	0.6	0.0	3.7	0.6	66.5	100.0	29.2	312
Richest	32.5	9.2	2.0	0.7	3.9	0.3	51.5	100.0	43.6	295
Total	19.5	4.1	0.6	0.3	3.0	0.4	72.1	100.0	24.2	1,531

[1] **MICS indicator 5.5a; MDG indicator 5.5**

UNICEF and WHO recommend a minimum of four antenatal care visits during pregnancy. Table RH.4 shows number of antenatal care visits during the last pregnancy within two years preceding the survey, regardless of provider by selected characteristics. One in 10 mothers received two ANC visits, 8 percent had three visits while 3 percent of the mothers had 4 or more ANC visits. The proportion of women who had no antenatal care visits is higher among women with no education and women from the poorest households (Table RH4).

12 A review of the quality of data relating to children below 2 years indicates potential data quality limitations hence the need to interpret the results for antenatal care coverage, skilled attendant at delivery and institutional deliveries with caution.

Table RH.4: Number of antenatal care visits

Percent distribution of women who had a live birth during the two years preceding the survey by number of antenatal care visits by any provider, Northeast Zone, 2011

	Percent distribution of women who had:							Number of women who had a live birth in the preceding two years
	No antenatal care visits	One visit	Two visits	Three visits	4 or more visits[1]	Missing/DK	Total	
Region								
Bari	69.4	6.9	9.7	8.9	4.1	0.9	100.0	646
Nugal	65.2	9.3	11.1	10.2	3.2	0.9	100.0	332
Mudug	79.4	3.3	8.2	6.2	2.5	0.5	100.0	553
Area								
Urban	64.8	6.7	12.2	10.9	4.4	1.0	100.0	955
Rural	84.2	5.2	4.8	3.7	1.7	0.4	100.0	576
Mother's age at birth								
Less than 20	71.1	6.1	8.4	8.5	6.0	0.0	100.0	150
20-34	71.2	6.6	9.9	8.2	3.2	1.0	100.0	1137
35-49	77.1	4.1	8.0	8.1	2.4	0.4	100.0	243
Education								
None	77.1	5.5	8.3	6.0	2.2	0.8	100.0	1178
Primary	59.5	8.5	13.8	12.2	6.1	0.0	100.0	260
Secondary+	44.1	7.3	11.6	25.1	9.8	2.1	100.0	93
Wealth index quintile								
Poorest	88.2	3.8	3.6	3.4	0.7	0.4	100.0	302
Second	79.0	5.1	8.4	4.1	2.5	0.9	100.0	322
Middle	74.7	6.1	7.7	8.9	2.6	0.0	100.0	299
Fourth	66.5	7.2	11.6	9.7	4.1	0.9	100.0	312
Richest	51.5	8.5	16.1	15.4	6.9	1.6	100.0	295
Total	72.1	6.1	9.5	8.2	3.3	0.8	100.0	1,531

[1] **MICS indicator 5.5b; MDG indicator 5.5**

The types of services pregnant women received during antenatal care are shown in table RH.5. Among those women who had a live birth during the two years preceding the survey, 21 percent reported that a blood sample was taken during, 25 percent reported that their blood pressure was checked and 19 percent had urine specimen taken. About 16 percent of these women had all three procedures done; blood pressure measured and urine and blood sample taken. A larger proportion of urban women (20 percent) received all three tests compared to those from rural areas (9 percent). The percentage of women who had all the three tests taken during ANC increased with household wealth from 7 percent in the poorest wealth quintile to 28 in the richest wealth quintile.

Table RH.5: Content of antenatal care[13]

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, Northeast Zone, Somalia 2011

	Percentage of pregnant women who had:				
	Blood pressure measured	Urine sample taken	Blood sample taken	Blood pressure measured, urine and blood sample taken[1]	Number of women who had a live birth in the preceding two years
Region					
Bari	26.6	20.9	23.6	17.1	646
Nugal	30.3	20.9	23.9	16.8	332
Mudug	18.7	15.0	17.3	13.4	553
Area					
Urban	31.2	23.5	26.9	19.6	955
Rural	13.5	10.9	12.2	9.1	576
Mother's age at birth					
Less than 20	26.3	18.4	26.4	18.4	150
20-34	25.1	20.0	21.8	16.1	1,137
35-49	20.9	13.3	16.5	12.1	243
Education					
None	20.1	15.1	17.0	12.7	1,178
Primary	35.1	28.3	32.4	23.6	260
Secondary+	51.6	38.1	46.5	31.7	93
Wealth index quintile					
Poorest	11.2	7.8	7.8	6.8	302
Second	17.9	13.5	16.1	11.9	322
Middle	22.0	16.0	19.0	13.4	299
Fourth	28.8	21.7	26.0	18.8	312
Richest	43.6	35.4	38.6	27.8	295
Total	24.5	18.8	21.4	15.7	1,531

[1] MICS indicator 5.6

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(who are also skilled birth attendants).

13 A review of the quality of data relating to children below 2 years indicates potential data quality limitations hence the need to interpret the results for skilled attendant at delivery with caution.

About 38 percent of last births to women in the last two years before the survey were delivered by skilled personnel (Table RH.6). Among regions, the percentages range from 42 percent in Bari to 35 percent in Mudug. Education and household wealth were correlated with assistance of a skilled birth attendant.

More than one in twenty of the births (5 percent) in the two years preceding the MICS survey were delivered with assistance by a midwife. Doctors assisted with the delivery of 13 percent of births and nurses/auxiliary midwife assisted with 20 percent.

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.7 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.

Table RH.6: Assistance during delivery[14]

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, Northeast Zone, Somalia 2011

	Person assisting at delivery											
	Medical doctor	Nurse/ Mid-wife	Auxiliary midwife	Traditional birth attendant	Community health worker	Relative/ Friend	Other	No attendant	Total	Delivery assisted by any skilled attendant[1]	Percent delivered by C-section[2]	Number of women who had a live birth in preceding two years
Region												
Bari	15.6	20.4	6.0	51.4	0.8	2.3	2.6	0.8	100.0	42.1	2.7	646
Nugal	13.8	21.8	1.6	54.1	1.2	2.7	3.9	0.9	100.0	37.2	1.7	332
Mudug	9.3	18.9	6.7	61.7	0.9	1.0	1.2	0.2	100.0	34.9	1.6	553
Area												
Urban	18.0	24.4	4.4	46.8	0.9	2.0	2.8	0.7	100.0	46.8	3.0	955
Rural	4.6	13.2	6.9	70.5	0.9	1.9	1.7	0.4	100.0	24.7	0.6	576
Mother's age at birth												
Less than 20	13.7	23.9	5.0	52.1	0.7	1.4	2.0	1.3	100.0	42.6	3.2	150
20-34	12.6	20.2	5.5	56.0	0.9	2.0	2.2	0.6	100.0	38.3	2.2	1137
35-49	14.4	17.7	4.5	56.4	1.2	2.0	3.7	0.0	100.0	36.6	0.8	243
Place of delivery												
Public sector health facility	60.8	31.5	2.8	3.5	0.7	0.0	0.0	0.7	100.0	95.1	17.4	140
Private sector health facility	45.5	38.0	1.8	9.1	2.0	1.8	0.0	1.8	100.0	85.3	14.5	54
Home	6.8	18.8	5.9	64.7	0.9	2.3	0.1	0.5	100.0	31.6	0.0	1,291
Missing/DK	2.1	2.1	0.0	18.0	0.0	0.0	77.8	0.0	100.0	4.2	0.0	45.9
Education												
None	10.8	17.7	6.1	59.8	0.8	1.9	2.3	0.6	100.0	34.7	1.5	1,178
Primary	17.3	27.1	1.5	46.4	1.5	2.3	3.0	0.8	100.0	46.0	4.1	260
Secondary+	28.5	31.7	5.3	29.3	1.0	2.1	2.1	0.0	100.0	65.5	4.3	93
Wealth index quintiles												
Poorest	5.3	7.2	4.5	76.6	1.0	2.1	3.1	0.3	100.0	17.0	0.4	302
Second	5.6	16.1	6.2	67.5	0.9	1.9	1.3	0.6	100.0	27.9	0.3	322
Middle	9.6	20.2	6.7	56.1	0.4	3.0	3.3	0.7	100.0	36.5	2.3	299
Fourth	16.6	28.1	3.5	45.5	1.6	1.5	2.8	0.3	100.0	48.3	2.2	312
Richest	28.5	29.5	5.6	31.8	0.7	1.3	1.6	1.0	100.0	63.5	5.6	295
Total	13.0	20.2	5.3	55.7	0.9	2.0	2.4	0.6	100.0	38.4	2.1	1,531

[1] MICS indicator 5.7; MDG indicator 5.2
[2] MICS indicator 5.9

14 A review of the quality of data relating to children below 2 years indicates potential data quality limitations hence the need to interpret the results for institutional deliveries with caution.

Table RH.7: Place of delivery[15]

Percent distribution of women age 15-49 who had a live birth in two years preceding the survey by place of delivery, Northeast Zone, Somalia 2011

	Place of delivery						
	Public sector health facility	Private sector health facility	Home	Other/missing	Total	Delivered in health facility[1]	Number of women who had a live birth in preceding two years
Region							
Bari	12.0	5.2	79.8	3.0	100.0	17.2	646
Nugal	8.3	1.5	86.3	3.9	100.0	9.7	332
Mudug	6.3	2.8	88.3	2.5	100.0	9.1	553
Area							
Urban	12.4	4.8	79.6	3.2	100.0	17.2	955
Rural	3.7	1.5	92.2	2.6	100.0	5.2	576
Mother's age at birth							
Less than 20	9.8	4.6	83.6	2.0	100.0	14.4	150
20-34	9.2	3.3	84.9	2.6	100.0	12.4	1137
35-49	8.8	4.0	81.8	5.4	100.0	12.8	243
Number of antenatal care visits							
None	4.6	1.9	90.0	3.5	100.0	6.5	1,104
1-3 visits	20.4	7.0	71.0	1.6	100.0	27.3	364
4+ visits	27.0	15.7	55.4	1.9	100.0	42.7	51
Missing/DK	(*)	(*)	(*)	(*)	100.0	(*)	12
Education							
None	7.6	2.9	86.6	2.9	100.0	10.5	1,178
Primary	10.9	4.1	81.2	3.8	100.0	15.0	260
Secondary+	24.3	9.6	64.0	2.1	100.0	33.9	93
Wealth index quintiles							
Poorest	5.0	0.7	90.9	3.4	100.0	5.7	302
Second	3.1	1.3	92.8	2.9	100.0	4.3	322
Middle	8.3	2.7	85.1	3.9	100.0	11.0	299
Fourth	11.3	4.4	81.2	3.1	100.0	15.7	312
Richest	18.6	8.8	70.9	1.6	100.0	27.5	295
Total	9.2	3.5	84.3	3.0	100.0	12.7	1,531

[1] **MICS indicator 5.8**

(*) Figures that are based on less than 25 unweighted cases

About 13 percent of births in Northeast Zone are delivered in a health facility; 9 percent of deliveries occur in public sector facilities and 4 percent occur in private sector facilities. More than four in five births (84 percent) occur at home. There are no major differences by woman's age in the choice of a place of delivery. The proportion of health facility deliveries was higher for women living in urban areas (17 percent) than those in the rural areas (5 percent). Bari region has the highest percentage of institutional deliveries (17 percent compared to 10 percent in Nugal and 9 percent in Mudug regions). Women with higher levels of educational attainment are more likely to deliver in a health facility than women with less education or no education. The proportion of births occurring in a health facility increases steadily with increasing wealth quintile, from 6 percent of births in the lowest wealth quintile to 28 percent among those in the highest quintile. This pattern is similar with regard to the number of antenatal care visits rising from 7 percent of those women with no ANC visits to 43 percent of those who had four or more visits, delivering in health facility.

15 A review of the quality of data relating to children below 2 years indicates potential data quality limitations hence the need to interpret the results for institutional deliveries with caution.

VIII. Child Development

Early Childhood Education and Learning

Readiness of children for primary school can be improved through attendance to early childhood education programmes or through pre-school attendance. Early childhood education programmes include programmes for children that have organised learning components as opposed to baby-sitting and day-care which do not typically have organised educational and learning.

Attendance to early childhood education programs in Northeast Zone is generally very low. Only about 2 percent of children aged 36-59 months are attending an organised early childhood education programme (Table CD.1). The attendance remains low for both rural (less than 1 percent) and urban (3 percent). Attendance is also low across the three regions and varied from 1 percent in Mudug region to 4 percent in Nugal. This low prevalence was found across gender and wealth quintiles).

Table CD.1: Early childhood education

Percentage of children age 36-59 months who are attending an organized early childhood education programme, Northeast Zone, Somalia 2011

	Percentage of children age 36-59 months currently attending early childhood education[1]	Number of children age 36-59 months
Sex		
Male	2.1	1,033
Female	1.3	1,005
Region		
Bari	1.7	844
Nugal	3.9	417
Mudug	0.5	777
Area		
Urban	2.5	1,273
Rural	0.4	765
Age of child		
36-47 months	1.3	1,067
48-59 months	2.2	972
Mother's education		
None	1.5	1,570
Primary	2.0	335
Secondary+	2.9	134
Wealth index quintile		
Poorest	0.4	455
Second	1.2	405
Middle	1.0	391
Fourth	2.6	410
Richest	3.6	377
Total	1.7	2,038

[1] **MICS indicator 6.7**

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 over half (58 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 3.4. The table also indicates that the father's involvement in such activities was extremely limited. Father's involvement with one or more activities was only 1 percent. About 30 percent of children were living in a household without their fathers.

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, Northeast Zone, Somalia 2011

	Percentage of children age 36-59 months		Mean number of activities			
	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	Percentage of children not living with their natural father	Number of children age 36-59 months
Sex						
Male	58.4	35.4	3.4	0.8	29.8	1,033
Female	56.6	33.9	3.3	0.8	30.6	1,005
Region						
Bari	62.9	37.2	3.6	0.9	33.7	844
Nugal	61.0	34.3	3.6	0.8	28.5	417
Mudug	49.8	32.0	3.0	0.8	27.3	777
Area						
Urban	57.9	35.4	3.4	0.9	29.0	1,273
Rural	57.0	33.3	3.3	0.8	32.1	765
Age						
36-47 months	57.2	34.0	3.4	0.8	30.9	1,067
48-59 months	57.9	35.4	3.4	0.8	29.4	972
Mother's education						
None	54.7	32.0	3.2	0.8	29.8	1,570
Primary	66.7	44.9	3.9	1.1	29.4	335
Secondary	67.0	40.6	3.9	1.0	37.2	134
Father's education[5]						
None	54.8	38.0	3.3	0.9	na	957
Primary	74.7	49.1	4.1	1.3	na	182
Secondary+	66.3	52.4	3.8	1.3	na	272
Father not in household	53.1	16.7	3.2	na	na	615
Missing/DK	41.2	59.8	3.1	1.5	0.0	12
Wealth index quintiles						
Poorest	54.4	26.8	3.1	0.7	31.4	455
Second	50.4	31.3	3.1	0.8	32.8	405
Middle	53.2	32.4	3.2	0.7	29.0	391
Fourth	59.6	37.4	3.6	0.9	27.8	410
Richest	71.1	47.1	4.1	1.1	29.6	377
Total	57.5	34.6	3.4	0.8	30.2	2,038

[1] **MICS indicator 6.1**

[2] **MICS Indicator 6.2**

na: not applicable

There are no differentials by gender, residence and age of the child in terms of engagement of adults or fathers in activities with children. Considerable differentials by region and socio-economic status are also observed: Adult engagement in activities with children was lowest in Mudug region (50 percent). The proportion was 71 percent for children living in the richest households, as opposed to 54 percent of those living in the poorest households.

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. 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.

In Northeast Zone, Somalia, only 1 percent of children age 0-59 months lives in households where at least 3 children's books are present for the child (Table CD.3). In our sample of 4,714 children under five years of age, none were found to live in a household having 10 or more children's books.

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, Northeast Zone, 2011

	Household has for the child:	Child plays with:				
	3 or more children's books[1]	Homemade toys	Toys from a shop/manufactured toys	Household objects/objects found outside	Two or more types of playthings[2]	Number of children under age 5
Sex						
Male	0.7	7.4	7.2	31.7	8.4	2,395
Female	0.5	8.1	6.3	33.2	8.3	2,319
Region						
Bari	0.8	8.9	8.5	33.8	9.7	1,952
Nugal	1.2	6.4	6.8	26.6	6.7	993
Mudug	0.1	7.2	4.8	34.2	7.9	1,768
Area						
Urban	1.0	9.0	9.0	31.0	10.5	2,908
Rural	0.1	5.7	3.2	34.9	4.9	1,806
Age						
0-23 months	0.1	4.1	4.3	16.5	4.4	1,649
24-59 months	0.9	9.7	8.1	41.1	10.5	3,065
Mother's education						
None	0.3	7.2	5.2	32.1	7.2	3,624
Primary	1.3	10.3	11.0	35.7	12.6	797
Secondary+	2.3	7.2	14.2	27.8	10.9	293
Wealth index quintiles						
Poorest	0.1	6.3	1.8	33.0	4.5	1,004
Second	0.0	5.3	2.9	35.4	5.2	965
Middle	0.5	7.2	4.1	32.1	7.1	920
Fourth	0.2	9.6	8.9	29.7	10.9	965
Richest	2.5	10.5	17.2	32.1	14.9	860
Total	0.6	7.7	6.8	32.5	8.4	4,714

[1] **MICS indicator 6.3**

[2] **MICS indicator 6.4**

There are no cases of 10 or more children's books in the households, so they are not shown in the table.

Table CD.3 also shows that 8 percent of children aged 0-59 months had 2 or more types of playthings to play with in their homes. The types of 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 7 percent of children play with toys that come from a store; however, the percentages for other types of toys e.g. household objects/objects found outside the house is 33 percent and 8 percent are homemade toys. The proportion of children who have 2 or more types of playthings is similar for both male and female children (8 percent). Urban children were more likely to have 2 or more types of playthings to play with compared to their rural counterparts (11 percent versus 5 percent). In

addition, small differences are observed in terms of mother's education – 11 percent of children whose mothers are educated to secondary or more level have 2 or more types of playthings, while the proportion is 7 percent for children whose mothers have no education. Differentials are also observed between the children from poorest households (5 percent) and those from the richest households (15 percent) in ownership of 1 play things but regional differences were minimal.

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 shows that 26 percent of children aged 0-59 months were left in the care of other children, while 14 percent were left alone during the week preceding the interview. Combining the two care indicators, it is calculated that 29 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. No differences were observed by the sex of the child or between urban and rural areas. Children aged 24-59 months were left with inadequate care more (36 percent) than those who were aged 0-23 months (18 percent). Children from the poorest households were more likely to be left without adequate care (35 percent) compared to children from the richest households (24 percent).

Table CD.4: Inadequate Care

Percentage of children under age 5 left alone or left in the care of another child younger than 10 years of age for more than one hour at least once during the past week, Northeast Zone, Somalia 2011

	Percentage 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]	Number of children under age 5
Sex				
Male	14.0	27.0	29.6	2,395
Female	13.7	25.2	29.1	2,319
Region				
Bari	15.1	25.1	28.6	1,952
Nugal	16.6	28.4	32.9	993
Mudug	10.8	26.1	28.3	1,768
Area				
Urban	13.9	26.0	29.6	2,908
Rural	13.6	26.3	29.0	1,806
Age				
0-23 months	7.1	16.7	18.0	1,649
24-59 months	17.4	31.2	35.5	3,065
Mother's education				
None	14.0	25.8	28.8	3,624
Primary	13.4	29.3	33.2	797
Secondary+	12.5	22.4	26.0	293
Wealth index quintiles				
Poorest	17.2	31.4	34.5	1,004
Second	13.0	24.2	27.3	965
Middle	13.7	25.5	29.6	920
Fourth	14.5	26.7	30.7	965
Richest	10.2	22.2	24.1	860
Total	13.8	26.1	29.4	4,714

[1] **MICS indicator 6.5**

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 Northeast Zone, Somalia.

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 are 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.
- Social-emotional: Children are considered to be developmentally on track if two of the following are 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 this domain.

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

The results are presented in Table CD.5. In Northeast Zone, Somalia, 35 percent of children aged 36-59 months are developmentally on track and there is no gender difference. As expected, ECDI is much higher in older age group (41 percent among 48-59 months old compared to 30 percent among 36-47 months old), since children mature more skills with age. Higher ECDI is seen in children attending an early childhood education programme (75 percent) compared to 34 percent for those who are not attending.

Children living in poorest households have lower ECDI (28 percent) compared to children living in richest households (42 percent). The analysis of four domains of child development shows that 76 percent of children are on track in physical domain, but much less on track in learning domain (69 percent), social-emotional (46 percent) and literacy-numeracy (16 percent) 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, Northeast Zone, Somalia 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	16.8	77.5	45.3	70.7	36.2	1,033
Female	15.5	74.9	45.9	66.9	33.6	1,005
Region						
Bari	19.3	72.5	42.6	68.2	33.6	844
Nugal	16.8	74.2	45.7	71.0	36.5	417
Mudug	12.6	81.3	48.8	68.3	35.4	777
Area						
Urban	18.6	76.7	45.5	69.0	36.9	1,273
Rural	12.2	75.4	45.7	68.5	31.5	765
Age						
36-47 months	12.9	71.3	45.1	63.2	29.7	1,067
48-59 months	19.8	81.6	46.2	75.0	40.6	972
Attendance to early childhood education						
Attending	(71.8)	(97.3)	(58.4)	(88.3)	(74.6)	35
Not attending	15.2	75.8	45.4	68.5	34.2	2,003
Mother's education						
None	14.8	76.2	46.5	67.6	33.9	1,570
Primary	18.7	76.0	41.5	72.7	36.5	335
Secondary+	26.1	76.8	45.3	72.9	42.3	134
Wealth index quintiles						
Poorest	11.3	72.0	45.0	64.3	28.4	455
Second	14.3	77.8	40.6	69.1	29.9	405
Middle	15.9	77.8	47.8	68.7	36.7	391
Fourth	17.4	76.2	49.1	68.0	38.8	410
Richest	23.2	77.8	45.6	75.0	42.0	377
Total	16.2	76.2	45.6	68.8	34.9	2,038

[1] **MICS indicator 6.6**

( ) Figures that are based on 25-49 unweighted cases

IX. 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 is assessed on the ability of the respondent to read a short simple statement or based on school attendance. The percent literate is presented in Table ED.1 which indicates that slightly above one quarter (37 percent) of women in Northeast Zone are literate and that literacy status varies by region, area of residence and household wealth index. Of women who stated that primary school was their highest level of education, 76 percent were able to read the statement shown to them.

Table ED.1: Literacy among young women

Percentage of women age 15-24 years who are literate, Northeast Zone, Somalia 2011

	Percentage literate[1]	Percentage not known	Number of women age 15-24 years
Region			
Bari	43.6	1.6	1,044
Nugal	36.4	1.8	450
Mudug	27.4	1.1	717
Area			
Urban	43.5	1.8	1,457
Rural	24.1	0.8	755
Education			
None	3.8	0.8	1,296
Primary	75.5	3.7	608
Secondary+	100.0	0.0	308
Age			
15-19	42.7	2.0	1,191
20-24	30.1	0.9	1,021
Wealth index quintile			
Poorest	14.2	1.2	347
Second	26.0	0.0	439
Middle	39.3	1.9	432
Fourth	37.8	2.3	455
Richest	57.6	1.8	539
Total	36.9	1.5	2,212

[1] **MICS indicator 7.1; MDG indicator 2.3**

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 who attended pre-school the previous year. Overall, 23 percent of children who are currently attending the first grade of primary school were attending pre-school the previous year. The percentages do not vary much between urban areas (24 percent) and rural areas (20 percent). Thirty percent of first graders in Nugal region have attended pre-school compared to 20 percent in Bari and 24 percent in Mudug. In households from the middle wealth quintile, about one third (35 percent) of children attending the first grade have attended pre-school in the previous year compared to 18 percent for children from the poorest and richest households.

Table ED.2: School readiness

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

	Percentage of children attending first grade who attended preschool in previous year[1]	Number of children attending first grade of primary school
Sex[a]		
Male	25.3	262
Female	19.9	230
Region		
Bari	19.6	273
Nugal	29.6	112
Mudug	23.6	108
Area		
Urban	24.1	325
Rural	20.0	168
Mother's education		
None	22.6	344
Primary	23.2	89
Secondary+	(29.6)	39
Mother not in house	(*)	6
Missing/DK	(*)	15
Wealth index quintile		
Poorest	18.2	61
Second	16.9	103
Middle	35.1	106
Fourth	24.2	100
Richest	17.9	123
Total	22.7	493

[1] **MICS indicator 7.2**

[a]Total include 1 unweighted case of a child with missing information on sex that is not shown separately

(*) Figures are based on less than 25 unweighted 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 Northeast Zone, Somalia, children enter primary school at age 6 and enter secondary school at age 14. There are 8 grades in primary school and 4 grades in secondary school. In primary school, grades are referred to as standard 1 to standard 8. For secondary school, grades are referred to as Form 1 to Form 4. The school year typically runs from September of one year to May of the following year.

Of children who are of primary school entry age (age 6) in Northeast Zone, 17 percent are attending the first grade of primary school (Table ED.3). There are no gender and urban-rural differentials. The percent of children of primary school entry age attending first grade ranges from 22 percent in Bari region to 9 percent in Mudug region. A positive correlation with mother's education and socioeconomic status is observed; for children age 6 whose mothers have at least secondary school education, 34 percent were attending the first grade. In the richest households, the proportion is around 31 percent, while it is only 6 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), Northeast Zone, Somalia 2011

	Percentage of children of primary school entry age entering grade 1[1]	Number of children of primary school entry age
Sex		
Male	15.0	744
Female	17.9	745
Region		
Bari	22.0	682
Nugal	16.4	311
Mudug	8.9	497
Area		
Urban	17.8	976
Rural	13.9	514
Mother's education		
None	13.4	1165
Primary	25.3	231
Secondary+	33.5	93
Wealth index quintile		
Poorest	6.1	305
Second	14.3	323
Middle	15.5	299
Fourth	17.0	277
Richest	30.5	286
Total	16.5	1,490

[1] **MICS indicator 7.3**

Table ED.4 provides the percentage of children of primary school age 6 to 14 years who are attending primary or secondary school[16]. Less than half (43 percent) of children of primary school age are attending school. This percentage is slightly higher in males, (46 percent) compared to females (40 percent). In urban areas half of the children attend school while in rural areas attendance is only 31 percent. Mother's education and household wealth are positively correlated to school attendance of the children.

16 Ratios presented in this table are "adjusted" since they include not only secondary school attendance, but also attendance to higher levels in the numerator.

Table ED.4: Primary school attendance

Percentage of children of primary school age attending primary or secondary school (adjusted net attendance ratio), Northeast Zone, Somalia 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						
Bari	54.3	1,871	49.1	1,760	51.7	3,631
Nugal	50.9	854	41.1	791	46.2	1,645
Mudug	32.5	1,356	28.2	1,345	30.4	2,701
Area						
Urban	54.5	2,620	46.0	2,512	50.3	5,132
Rural	31.8	1,461	29.8	1,384	30.8	2,846
Age at beginning of school year						
6	19.6	744	21.5	745	20.6	1,490
7	38.0	627	30.5	583	34.4	1,210
8	45.6	487	37.1	486	41.4	972
9	53.7	619	47.8	506	51.0	1125
10	58.7	367	52.5	297	56.0	664
11	58.3	485	52.4	476	55.4	960
12	62.4	368	53.7	478	57.5	847
13	58.5	384	44.9	325	52.2	710
Mother's education[a]						
None	40.6	3,194	35.0	3,074	37.9	6,268
Primary	66.1	632	56.6	555	61.6	1,187
Secondary+	68.9	256	66.7	264	67.8	520
Mother not in the house	0.0	0	(*)	3	(*)	3
Wealth index quintile						
Poorest	19.6	854	17.5	764	18.6	1,617
Second	40.6	862	30.0	766	35.6	1,628
Middle	45.8	833	40.6	775	43.3	1,608
Fourth	55.2	765	46.2	794	50.6	1,559
Richest	74.3	767	65.6	797	69.8	1,565
Total	46.4	4,081	40.3	3,896	43.4	7,977

[1] MICS indicator 7.4; MDG indicator 2.1

(*)Figures that are based on less than 25 unweighted cases

The secondary school net attendance ratio is presented in Table ED.5[17]. Only 15 percent of the children of secondary school age are attending secondary school. Timely attendance to secondary school is higher in urban areas (21 percent) as compared to only 3 percent in rural areas. Differentials exist between males and females. Attendance of secondary school among boys of secondary school age is slight higher than girls (28 percent against 18 percent). About one third (32 percent) of the children of secondary school age are attending primary school when they should be attending secondary school while the remaining 53 percent are not attending school at all.

17 Ratios presented in this table are “adjusted” since they include not only secondary school attendance, but also attendance to higher levels in the numerator.

Table ED.5: 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, Northeast Zone, Somalia 2011

	Male			Female			Total		
	Net attendance ratio (adjusted)[1]	Percent attending primary school	Number of children	Net attendance ratio (adjusted)[1]	Percent attending primary school	Number of children	Net attendance ratio (adjusted)[1]	Percent attending primary school	Number of children
Region									
Bari	22.8	36.1	652	13.5	27.3	628	18.2	31.8	1,280
Nugal	18.6	39.7	273	8.5	33.6	268	13.6	36.7	541
Mudug	11.3	31.5	405	9.2	25.7	354	10.3	28.8	759
Area									
Urban	25.1	39.5	899	15.8	28.7	846	20.6	34.3	1,745
Rural	4.5	26.9	430	1.6	27.3	405	3.1	27.1	835
Age at beginning of school year									
14	12.4	50.7	381	5.7	42.0	306	9.4	46.8	687
15	15.3	41.2	334	9.9	36.2	261	13.0	39.0	595
16	28.3	23.9	240	15.4	23.1	331	20.8	23.4	571
17	21.1	22.1	375	13.1	15.2	352	17.2	18.8	727
Mother's education									
None	12.5	40.2	597	8.9	35.3	523	10.8	37.9	1,119
Primary	29.0	44.6	103	11.5	44.9	92	20.7	44.8	194
Secondary+	33.5	41.3	63	30.6	41.3	56	32.1	41.3	119
Mother not in the house	21.1	39.5	192	8.9	22.4	227	14.5	30.2	419
Cannot be determined	21.0	22.3	376	13.1	15.2	353	17.2	18.9	729
Wealth index quintile									
Poorest	3.4	16.8	249	1.6	13.2	192	2.6	15.3	441
Second	4.9	35.2	240	3.5	27.4	258	4.2	31.2	498
Middle	14.0	43.0	244	6.4	36.1	226	10.3	39.7	470
Fourth	24.5	40.3	283	14.7	28.0	260	19.8	34.4	543
Richest	38.6	40.1	315	24.1	32.7	314	31.3	36.4	628
Total	18.4	35.4	1,330	11.2	28.2	1,250	14.9	31.9	2,580

[1] **MICS indicator 7.5**

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 grade one, 85 percent of them eventually reach the last grade. Notice that this number includes children that repeat grades and that eventually move up to reach last grade. The possibility of eventually reaching the last grade of school is highest in Mudug region (95 percent), among children of mother with secondary education or higher (95 percent) and those in the richest wealth quintile households (93 percent).

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), Northeast Zone, Somalia 2011

	Percent attending grade 1 last school year who are in grade 2 this school year	Percent attending grade 2 last school year who are attending grade 3 this school year	Percent attending grade 3 last school year who are attending grade 4 this school year	Percent attending grade 4 last school year who are attending grade 5 this school year	Percent attending grade 5 last school year who are attending grade 6 this school year	Percent attending grade 6 last school year who are attending grade 7 this school year	Percent attending grade 7 last school year who are attending grade 8 this school year	Percent who reach grade 8 of those who enter grade 1[1]
Sex								
Male	98.6	97.8	98.4	97.2	99.5	97.8	97.6	87.6
Female	97.4	98.0	97.3	97.6	98.1	94.4	97.7	82.1
Region								
Bari	97.7	97.7	99.0	98.0	98.6	95.8	97.5	85.3
Nugal	96.9	96.4	94.9	94.3	98.6	95.1	95.3	74.8
Mudug	100.0	99.5	98.1	99.0	100.0	98.6	100.0	95.3
Area								
Urban	98.8	98.4	98.6	98.1	99.3	98.0	99.4	91.1
Rural	96.4	96.6	96.0	95.0	97.1	89.7	89.5	66.1
Mother's education								
None	98.3	96.9	97.8	97.1	100.0	98.4	98.7	87.8
Primary	97.4	100.0	99.3	98.9	98.1	97.1	100.0	91.1
Secondary+	100.0	100.0	97.8	100.0	97.4	100.0	100.0	95.2
Mother not in household	75.0	100.0	100.0	83.9	100.0	91.8	95.7	55.3
Wealth index quintile								
Poorest	98.6	94.9	96.9	93.2	90.0	81.0	91.8	56.5
Second	96.6	96.6	94.8	97.4	100.0	91.3	91.4	71.9
Middle	96.1	98.0	97.4	96.8	100.0	98.5	97.0	84.8
Fourth	98.6	100.0	100.0	97.3	98.9	96.4	99.1	90.7
Richest	100.0	98.0	98.8	98.7	99.3	98.2	100.0	93.2
Total	98.0	97.9	97.9	97.4	98.9	96.3	97.7	85.1

[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.7. The primary completion rate is the ratio of the total number of students, regardless of age, entering the last grade of primary school for the first time, to the number of children of the primary graduation age at the beginning of the current (or most recent) school year. At the moment of the survey, the primary school completion rate is 50 percent and is strongly correlated to the mother's education and household wealth. The percentage of primary school completion rate is higher among the males (59 percent) compared to females (40 percent).

Slightly less than half (48 percent) of the children that completed successfully the last grade of primary school were found at the moment of the survey to be attending the first grade of secondary school.

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

Primary school completion rates and transition rate to secondary school, Northeast Zone, Somalia 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	58.9	384	46.1	114
Female	40.2	325	50.1	69
Region				
Bari	55.3	300	45.7	91
Nugal	51.9	165	(50.4)	42
Mudug	43.2	244	(48.8)	49
Area				
Urban	66.9	451	50.0	159
Rural	21.3	259	(*)	24
Mother's education[a]				
None	28.8	564	45.3	68
Primary	59.3	92	(*)	18
Secondary+	67.5	51	(*)	17
Mother not in the house	(*)	3	(*)	18
Wealth index quintile				
Poorest	16.3	139	(*)	3
Second	24.9	142	(*)	21
Middle	49.6	139	(62.8)	34
Fourth	74.6	139	(43.7)	38
Richest	84.0	150	47.7	86
Total	50.3	710	47.6	182

[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

[a]Total contains 59 unweighted cases of children missing information on mother's education that are not shown separately

The ratio of girls to boys attending primary and secondary education is provided in Table ED.8. These ratios are better known as the Gender Parity Index (GPI). Notice that the ratios included here 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 0.9 indicating slight differences in the attendance of girls and boys to primary school. However, the indicator drops to 0.6 for secondary education. The disadvantage of girls is particularly pronounced among children living in rural areas.

Table ED.8: Education gender parity

Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, Northeast Zone, Somalia 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						
Bari	49.1	54.3	0.90	13.5	22.8	0.59
Nugal	41.1	50.9	0.81	8.5	18.6	0.46
Mudug	28.2	32.5	0.87	9.2	11.3	0.81
Area						
Urban	46.0	54.5	0.84	15.8	25.1	0.63
Rural	29.8	31.8	0.94	1.6	4.5	0.35
Education of mother/caretaker[3]						
None	35.0	40.7	0.86	8.9	12.5	0.71
Primary	56.6	66.1	0.86	11.5	29.0	0.40
Secondary+	66.7	68.9	0.97	30.6	33.5	0.91
Mother not in the household	na	na	na	8.9	21.1	0.42
Cannot be determined	na	na	na	13.1	21.0	0.62
Wealth index quintile						
Poorest	17.5	19.6	0.89	1.6	3.4	0.46
Second	30.0	40.6	0.74	3.5	4.9	0.71
Middle	40.6	45.8	0.89	6.4	14.0	0.45
Fourth	46.2	55.2	0.84	14.7	24.5	0.60
Richest	65.6	74.4	0.88	24.1	38.6	0.62
Total	40.3	46.4	0.87	11.2	18.4	0.61

[1] MICS indicator 7.9; MDG indicator 3.1

[2] MICS indicator 7.10; MDG indicator 3.1

Non Formal Education

Non Formal Education (NFE) can complement formal education or help people who are out of the formal education system acquire useful skills in life. In the context of the Northeast Zone where formal education is still developing, NFE may act as critical source of these skills. The MICS4 focused on children aged 5 -17 years of age and collected data on different types of NFE;

- Koranic School
- Integrated Koranic School
- Alternative Basic Education (ABE) classes
- Vocational training classes

And for each of the NFE category, data were collected for children 5 – 17 years who

- Ever attended NFE.
- Are currently attending different types of NFE.
- Have completed the different types of NFE.

Children who ever attended any form of NFE are shown in Table ED.9A. Seventy three percent of children aged 5 -17 years have ever attended non formal education. Most of these children have ever attended the Koranic School (72 percent) and one in every ten children has ever attended integrated koranic school. Only 5 percent of children have ever attended Alternative Basic Education (ABE), while less than 1 percent have ever attended education for youth programme or vocational training classes.

Table ED.9A: Ever Attendance of Non-Formal Education

Percentage of children 5-17 years who ever attended non-formal education, Northeast Zone, Somalia 2011

	Percentage of children who ever attended:						
	Non-formal education	Koranic school	An integrated koranic school	ABE classes	An education for youth programme	Vocational training classes	Number of children 5-17 years of age
Sex							
Male	74.3	72.9	10.0	5.1	0.8	0.5	6,170
Female	72.0	70.3	8.9	4.9	1.0	0.7	5,853
Region							
Bari	73.1	71.8	11.3	6.5	1.2	0.6	5,430
Nugal	71.0	69.6	7.8	5.5	0.8	0.7	2,463
Mudug	74.6	72.6	8.1	2.8	0.6	0.4	4,131
Area							
Urban	76.1	74.5	11.0	6.3	1.2	0.8	7,720
Rural	68.0	66.4	6.8	2.7	0.4	0.2	4,304
Age groups							
5-12	71.2	69.7	9.7	4.3	0.6	0.4	8,611
13-17	78.2	76.4	9.0	6.7	1.7	1.0	3,412
Mother's education							
None	72.0	70.4	9.0	4.5	0.8	0.5	9,155
Primary	77.4	76.2	12.0	6.0	1.2	0.3	1,704
Secondary +	80.8	78.5	10.5	6.9	1.0	0.3	740
Mother not in household	69.9	68.1	9.5	8.2	2.1	3.7	422
Wealth index quintiles							
Poorest	59.8	56.8	5.7	3.5	0.5	0.1	2,433
Second	73.8	72.6	7.4	3.8	0.7	0.3	2,450
Middle	75.4	74.0	10.7	6.0	0.7	1.1	2,395
Fourth	77.3	76.0	10.2	5.4	0.8	0.3	2,382
Richest	80.0	78.9	13.8	6.4	1.9	1.1	2,363
Total	73.2	71.6	9.5	5.0	0.9	0.6	12,024

Percentage of children who completed NFE is shown in Table ED.9B where only three programmes registered very small completion rates. Only 3 percent of children completed ABE classes and less than 1 percent completed the education for youth programme or the vocational training programme.

Table ED.9B: Current Attendance for Non-Formal Education

Percentage of children 5-17 years having completed a non-formal education programme, Northeast Zone, Somalia 2011

	Percentage of children having completed the ABE programme	Percentage of children having completed an education for youth programme	Percentage of children having completed a vocational training programme	Number of children 5-17 years of age
Sex[a]				
Male	3.4	0.3	0.2	6,170
Female	3.3	0.6	0.2	5,853
Region				
Bari	4.6	0.5	0.3	5,430
Nugal	3.7	0.5	0.4	2,463
Mudug	1.6	0.4	0.0	4,131
Area				
Urban	4.4	0.6	0.3	7,720
Rural	1.4	0.2	0.0	4,304
Age groups				
5-12	2.9	0.3	0.1	8,611
13-17	4.5	0.8	0.5	3,412
Mother's education				
None	3.0	0.4	0.2	9,155
Primary	4.1	0.3	0.1	1,704
Secondary +	5.0	0.3	0.1	740
Mother not in household	5.4	1.4	1.8	422
Wealth index quintiles				
Poorest	2.4	0.2	0.0	2,433
Second	2.2	0.5	0.2	2,450
Middle	4.1	0.4	0.4	2,395
Fourth	3.3	0.3	0.0	2,382
Richest	4.8	0.7	0.5	2,363
Total	3.4	0.4	0.2	12,024

[a]Total include 1 unweighted case of a child with missing information on sex that is not shown separately

X. Child Protection

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 he/she performed the following activities:

- 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. Table CP.1 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.

For children 5 – 11 years and 12 – 14 years respectively less than 2 percent and 3 percent engaged in economic activity outside the household. Nearly half (49 percent) of the children aged 12 – 14 years engaged in household chores less than 28 hours a week and about 1 in 5 children aged 5 – 11 years worked for family business (22 percent). Overall about 26 percent of children in Northeast Zone are engaged in child labour. Involvement in child labour is more among the girls (29 percent) than boys (23 percent). In addition, fewer children in the urban areas are engaged in child labour than their children labour compared to their rural counterparts (22 percent versus 33 percent). Involvement in child labour decreases with mother’s education and the wealth status of household; 27 percent of children whose mothers have no education are engaged in child labour compared to 17 percent of children whose mothers have secondary or more education.

Table CP.1: 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, Northeast Zone, Somalia 2011

	Percentage of children age 5-11 involved in:								Percentage of children age 12-14 involved in:										
	Economic activity								Economic activity										
	Working outside household								Working outside household										
	Paid work	Unpaid work	Working for family business	Economic activity for at least one hour	Household chores less than 28 hours	Household chores for 28 hours or more	Child labour	Number of children age 5-11	Paid work	Unpaid work	Working for family business	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	Number of children age 12-14	Total child labour[1]	Number of children age 5-14 years
Sex																			
Male	0.6	1.0	21.9	22.4	33.7	3.1	24.0	3,978	0.8	1.7	35.6	18.7	17.6	41.2	7.0	21.4	1,237	23.4	5,215
Female	0.7	0.7	23.1	23.5	46.2	7.0	27.3	3,672	1.8	2.0	37.0	16.9	20.9	56.3	19.8	33.4	1,414	29.0	5,086
Region																			
Bari	0.7	1.2	22.5	23.1	40.0	4.2	25.3	3,401	1.3	2.1	34.1	19.5	15.5	51.7	10.6	22.3	1,189	24.5	4,590
Nugal	0.3	1.1	23.1	23.6	42.5	3.9	25.9	1,500	0.3	2.2	44.4	22.9	22.5	54.7	10.3	28.3	585	26.6	2,085
Mudug	0.7	0.3	22.0	22.2	37.9	6.5	25.8	2,750	2.0	1.3	34.0	12.0	22.6	42.4	20.4	35.0	877	28.0	3,627
Area																			
Urban	0.6	1.0	18.4	19.0	38.6	4.7	21.9	4,826	1.6	2.0	28.4	14.9	14.6	47.8	13.0	23.7	1,732	22.4	6,558
Rural	0.6	0.6	29.3	29.6	41.6	5.4	31.9	2,825	0.8	1.6	51.4	23.2	28.5	52.0	15.3	35.5	919	32.8	3,745
School attendance																			
Yes	0.5	1.4	27.9	28.5	48.0	5.7	31.5	2,388	0.8	2.1	33.0	17.1	16.7	52.0	11.8	24.3	1,482	28.7	3,871
No	0.7	0.6	20.0	20.3	35.9	4.6	22.9	5,263	2.0	1.6	40.6	18.6	22.7	45.8	16.4	32.3	1,169	24.6	6,432
Mother's education																			
None	0.6	0.8	23.2	23.6	39.2	5.0	26.3	6,056	1.4	2.0	38.4	17.7	21.5	48.8	14.4	29.8	2,084	27.2	8,140
Primary	0.6	1.2	21.6	22.2	43.0	5.5	25.0	1,137	1.0	1.7	30.5	17.6	14.1	51.5	13.7	24.1	393	24.8	1,529
Secondary+	0.6	0.6	15.1	15.6	38.9	2.7	17.9	459	1.6	0.6	25.3	19.3	6.6	49.4	7.1	13.2	175	16.6	633
Wealth index quintile																			
Poorest	0.6	0.7	28.6	28.9	43.6	5.0	31.2	1,622	0.9	1.4	52.2	25.5	27.4	53.4	15.0	34.4	520	31.9	2,143
Second	0.8	0.9	28.2	28.6	39.9	4.5	30.6	1,574	2.6	2.1	48.7	27.0	22.4	49.6	12.8	29.3	535	30.3	2,109
Middle	0.7	1.4	24.0	24.8	38.4	5.6	27.2	1,568	1.5	3.1	38.6	15.2	24.4	46.7	14.1	31.5	506	28.3	2,073
Fourth	0.5	0.7	17.6	18.0	38.7	5.4	21.6	1,479	1.1	1.9	24.9	11.9	13.8	47.1	16.0	26.2	544	22.8	2,023
Richest	0.4	0.6	12.3	12.6	37.6	4.3	15.9	1,408	0.5	0.9	18.6	9.6	9.7	49.5	11.3	18.3	546	16.6	1,955
Total	0.6	0.9	22.4	22.9	39.7	5.0	25.6	7651	1.3	1.9	36.4	17.8	19.4	49.3	13.8	27.8	2,651	26.2	10,302

[1] MICS indicator 8.2

Table CP.2 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 38 percent of the children 5-14 years of age attending school, 29 percent are also involved in child labour activities. On the other hand, out of the 26 percent of the children who are involved in child labour, 41 Percent are also attending school.

Forty nine percent of child labourers in Bari region are attending school. This proportion is 31 percent in Mudug region and 45% in Nugal. Conversely, more students are involved in child labour in Mudug region (34 percent) compared to Bari region (26 percent). Nearly half (49 percent) of urban child labourers are attending school compared to 32 percent of rural child labourers. In addition, school attendance by child labourers increases with the age of the child, mother's education and wealth status; an inverse similar trend with the school going children who are involved in child labour..

Table CP.2: 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, Northeast Zone, Somalia 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[a]							
Male	23.4	39.9	5,215	44.2	1,220	25.9	2,081
Female	29.0	35.2	5,086	38.8	1,474	32.0	1,788
Region							
Bari	24.5	45.5	4,590	49.1	1,126	26.4	2,090
Nugal	26.6	41.2	2,085	44.9	554	28.9	859
Mudug	28.0	25.4	3,627	30.5	1,015	33.6	921
Area							
Urban	22.4	44.0	6,558	48.7	1,467	24.8	2,887
Rural	32.8	26.3	3,745	32.2	1,228	40.3	983
Age							
5-11	25.6	31.2	7,651	38.4	1,957	31.5	2,388
12-14	27.8	55.9	2,651	48.7	738	24.3	1,482
Mother's education							
None	27.2	32.8	8,140	37.2	2,210	30.8	2,666
Primary	24.8	53.0	1,529	59.2	379	27.7	810
Secondary+	16.6	62.3	633	61.4	105	16.4	395
Wealth index quintile							
Poorest	31.9	15.8	2,143	18.1	685	36.5	339
Second	30.3	31.0	2,109	37.5	639	36.7	654
Middle	28.3	37.2	2,073	49.5	586	37.6	771
Fourth	22.8	44.1	2,023	51.6	462	26.7	892
Richest	16.6	62.1	1,955	67.7	324	18.0	1,215
Total	26.2	37.6	10,302	41.2	2,695	28.7	3,871

[1] **MICS indicator 8.3**

[2] **MICS indicator 8.4**

[a]Total include 1 unweighted case of a child with missing information on sex that is not shown separately

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 Northeast Zone, Somalia MICS survey, respondents to the household questionnaire were asked a series of questions on the ways adults in the household tend to use to discipline children during the past month preceding the survey. 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 physical punishment.

In Northeast Zone 75 percent of children age 2-14 years were subjected to at least one form of psychological or physical punishment by their parents or other adult household members during the past month preceding the survey. More importantly, 26 percent of children were subjected to severe physical punishment.

There are no gender differences with regard to which children are subject to violent discipline. Older children (10 -14 years) compared to younger children (2 – 4 years) were subjected to violent discipline (80 percent versus 64 percent. It is very notable that, apart from age of the child, differentials with respect to many of the background variables were relatively small.

Table CP.3: Child discipline

Percentage of children age 2-14 years according to method of disciplining the child, Northeast Zone, Somalia 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 module
			Physical punishment					
	Only non-violent discipline	Psychological aggression	Any	Severe	Any violent discipline method[1]			
Sex								
Male	14.8	65.5	66.4	26.4	75.2	6,853	33.6	1,999
Female	16.4	66.6	66	26.4	75.2	6,625	34.0	2,059
Region								
Bari	12.3	70.5	70	28.3	79.9	5,896	36.6	1,819
Nugal	11.5	72.5	72	28.9	81.2	2,737	34.3	820
Mudug	22	57.1	58.3	22.7	66.1	4,845	30.0	1,419
Area								
Urban	15.3	65.1	65.8	25.4	75.3	8,512	33.2	2,521
Rural	16.1	67.7	67	28.2	75	4,966	34.9	1,537
Age								
2-4 years	21.8	53.6	55.3	20.6	63.5	3,096	31.0	1,110
5-9 years	13.9	68.5	69.6	25.7	77.8	5,885	33.4	1,680
10-14 years	13.5	71.6	69.3	31.4	79.8	4,498	37.0	1,269
Education of household head								
None	16.7	65	65.3	26.9	73.8	9,724	na	na
Primary	9.9	71	71.2	27.8	80.4	1,601	na	na
Secondary+	14.4	67.7	66.8	23.7	77.8	2,093	na	na
Missing/DK	24.6	58	58.6	4.8	66.6	60	na	na
Respondent's Education								
None	na	na	na	na	na	na	34.2	3175
Primary	na	na	na	na	na	na	32.5	602
Secondary +	na	na	na	na	na	na	32.4	273
Missing/DK	na	na	na	na	na	na	(0.0)	2
Wealth index quintile								
Poorest	11.2	69	68.6	26	77	2,839	31.0	870
Second	13.8	69.2	68.5	31.2	76.6	2,740	37.7	838
Middle	16.3	68.1	69.1	29.1	76.2	2,695	35.2	799
Fourth	20.6	59.6	59.8	21.9	70.7	2,679	32.7	803
Richest	16.5	64.1	64.9	23.7	75.3	2,526	32.6	749
Total	15.6	66.1	66.2	26.4	75.2	13,478	33.9	4,058

[1] **MICS indicator 8.5**

( ) Figures are based on 15 – 49 unweighted cases

Early Marriage and Polygyny

Marriage before the age of 18 is a reality for many young girls. According to UNICEF's worldwide estimates, over 60 million women age 20-24 were married 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 and practices 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.

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. The demand 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.4. About one in ten young women age 15-19 years are currently married (12 percent). The percentage of women in a polygynous union is also provided in Table CP.4. One in five women age 15 – 49 years in Northeast zone, are in a polygynous union. The percent of women in polygynous union increases with age from 14 percent among women 15 -19 years to 29 percent among women age 45 – 49 years. There are minimal differences in polygyny across the different background characteristics.

Table CP.4: Early marriage and polygyny

Percentage of women age 15-49 years who first married before their 15th birthday, percentages of women age 20-49 years who first married before their 15th and 18th birthdays, percentage of women age 15-19 years currently married, and the percentage of women currently married who are in a polygynous marriage, Northeast Zone, Somalia 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[3]	Number of women age 15-19 years	Percentage of women age 15-49 years in polygynous marriage[4]	Number of women age 15-49 years currently married
Region									
Bari	11.5	2,586	14.0	36.1	1,998	12.2	588	18.5	1,450
Nugal	12.1	1,077	14.7	41.9	841	9.3	235	22.6	635
Mudug	13.1	1,830	15.3	38.6	1,462	12.8	368	19.9	1,094
Area									
Urban	12.0	3,563	14.7	38.1	2769	10.6	794	19.7	2,019
Rural	12.4	1,929	14.4	38.0	1532	14.3	397	19.9	1,160
Age									
15-19	3.2	1,191	na	na	na	11.8	1191	13.6	141
20-24	13.5	1,021	13.5	35.2	1,021	na	na	11.1	499
25-29	16.6	1,020	16.6	44.9	1,020	na	na	17.9	788
30-34	19.0	767	19.0	42.1	767	na	na	24.1	620
35-39	12.6	705	12.6	37.9	705	na	na	20.9	558
40-44	11.2	551	11.2	30.3	551	na	na	24.5	416
45-49	10.5	238	10.5	27.5	238	na	na	29.4	158
Education									
None	13.4	3,865	15.2	38.5	3,252	14.9	613	19.6	2,445
Primary	9.9	1,090	14.3	41.0	685	9.9	406	22.2	506
Secondary+	7.3	537	9.9	29.2	365	5.6	172	16.1	228
Wealth index quintile									
Poorest	14.7	992	16.6	44.6	809	15.0	183	22.3	613
Second	13.3	1,077	15.9	37.1	832	14.1	245	17.8	631
Middle	11.9	1,088	14.4	37.0	863	13.9	225	16.9	628
Fourth	12.5	1,132	15.4	40.2	889	9.7	243	21.9	669
Richest	8.9	1,203	11.1	32.2	908	8.2	295	20.0	638
Total	12.1	5,492	14.6	38.1	4,301	11.8	1,191	19.8	3,179

[1] MICS indicator 8.6

[2] MICS indicator 8.7

[3] MICS indicator 8.8

[4] MICS indicator 8.9

na: not applicable

Table CP.5 present 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. Both marriage before ages 15 and 18 follows a specific trend starting with a low at age 15 -19 and increases steadily peaking at age 25 – 34 years and then start to decline again. Overall, 12 percent and 38 percent of women were married before age 15 and 18 respectively. Very interesting is that there are no differences between rural and urban areas.

Table CP.5: Trends in early marriage

Percentage of women who were first married before age 15 and 18, by Area and age groups, Northeast Zone, Somalia 2011

	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
Age												
15-19	2.7	794	na	na	4.3	397	na	na	3.2	1,191	na	Na
20-24	12.8	663	33.5	663	14.6	358	38.2	358	13.5	1,021	35.2	1,021
25-29	15.7	676	42.7	676	18.4	343	49.2	343	16.6	1,020	44.9	1,020
30-34	20.9	476	44.0	476	15.8	291	39.0	291	19.0	767	42.1	767
35-39	11.9	478	40.6	478	14.2	227	32.1	227	12.6	705	37.9	705
40-44	13.0	319	31.8	319	8.8	232	28.1	232	11.2	551	30.3	551
45-49	11.1	157	25.3	157	9.2	81	31.6	81	10.5	238	27.5	238
Total	12.0	3,563	38.1	2,769	12.4	1,929	38.0	1,532	12.1	5,492	38.1	4,301

na: not applicable

Another component is the spousal age difference with an indicator being the percentage of married women with a difference of 10 or more years younger than their current spouse. Table CP.6 presents the results of the age difference between husbands and wives. The results show that there are some important spousal age differences in Northeast Zone. Nearly one in three women age 20-24 is currently married to a man who is older by ten years or more (30 percent), and just over one in three women age 15-19 are currently married to men who are older by ten years or more (35 percent). The differentials by background characteristics are difficult to judge due to the relatively small sample sizes.

Table CP.6: Spousal age difference

Percent distribution of women currently married age 15-19 and 20-24 years according to the age difference with their husband or partner, Northeast Zone, Somalia 2011

	Percentage of currently married women age 15 - 19 years whose husband or partner is:					Number of women age 15-19 years currently married	Percentage of currently married women age 20-24 years whose husband or partner is:						Number of women age 20-24 years currently married
	0-4 years older	5-9 years older	10+ years older[1]	Husband/Partner's age un-known	Total		Younger	0-4 years older	5-9 years older	10+ years older[2]	Husband/Partner's age un-known	Total	
Region													
Bari	25.6	35.0	39.4	0.0	100.0	72	2.8	27.6	35.5	30.6	3.5	100.0	208
Nugal	(*)	(*)	(*)	(*)	100.0	22	1.8	31.9	31.4	31.2	3.6	100.0	109
Mudug	(39.1)	(29.3)	(29.6)	(2.0)	100.0	47	2.7	34.5	34.8	27.9	0.0	100.0	182
Area													
Urban	21.8	37.9	35.6	4.6	100.0	84	3.4	31.8	33.9	29.1	1.8	100.0	316
Rural	39.6	26.4	34.0	0.0	100.0	57	1.2	29.8	35.1	31.0	2.9	100.0	183
Age													
15-19	29.0	33.3	35.0	2.7	100.0	141	na	na	na	na	na	na	na
20-24	na	na	na	na	na	na	2.6	31.1	34.4	29.8	2.2	100.0	499
Education													
None	29.4	30.6	40.0	0.0	100.0	91	2.5	27.7	35.4	32.1	2.3	100.0	359
Primary	(30.3)	(40.2)	(22.3)	(7.2)	100.0	40	4.2	41.0	29.2	24.6	1.0	100.0	92
Secondary+	(*)	(*)	(*)	(*)	100.0	10	(0.0)	(37.0)	(36.4)	(22.3)	(4.2)	100.0	48
Wealth index quintile													
Poorest	(26.2)	(33.2)	(40.6)	(0.0)	100.0	27	2.3	29.1	35.7	29.4	3.5	100.0	89
Second	(42.5)	(35.7)	(21.7)	(0.0)	100.0	34	1.9	30.8	45.3	20.9	1.1	100.0	99
Middle	(26.4)	(25.4)	(41.9)	(6.2)	100.0	31	3.3	25.6	32.5	36.5	2.1	100.0	91
Fourth	(*)	(*)	(*)	(*)	100.0	23	0.8	33.1	27.1	37.2	1.7	100.0	119
Richest	(24.0)	(36.0)	(32.0)	(8.0)	100.0	24	4.8	35.7	32.6	24.0	3.0	100.0	101
Total	29.0	33.3	35.0	2.7	100.0	141	2.6	31.1	34.4	29.8	2.2	100.0	499

[1] **MICS indicator 8.10a**
[2] **MICS indicator 8.10b**
na: not applicable
( ) Figures that are based on 25-49 un-weighted cases
(*) Figures that are based on less than 25 un-weighted cases

Female Genital Mutilation/Cutting

Female genital mutilation/cutting (FGM/C) is the partial or total removal of the female external genitalia or other injury to the female genital organs. FGM/C is always traumatic with immediate complications including excruciating pain, shock, urine retention, ulceration of the genitals and injury to adjacent tissue. Other complications include septicaemia, infertility, obstructed labour, and even death. The procedure is generally carried out on girls between the ages of 5 and 14. It is often performed by traditional practitioners, including midwives and barbers, without anaesthesia, using scissors, razor blades or broken glass.

FGM/C is a fundamental violation of human rights. It subjects girls and women to health risks and has life-threatening consequences. Among those rights violated are the rights to the highest attainable standard of health and to bodily integrity. Furthermore, it could be argued that girls (under 18) cannot be said to give informed consent to such a potentially damaging practice as FGM/C. Table CP.7 presents the prevalence of FGM/C among women and the type and extent of the procedure. The table shows that 98 percent of women aged 15-49 had some form of female genital mutilation. The practice does not appear to differ in any way between the different background characteristics. A great majority of women (87 percent) were sewn closed followed by a smaller percentage (6 percent) who had flesh removed.

Table CP.7: Female genital mutilation/cutting (FGM/C) among women

Percent distribution of women age 15-49 years by FGM/C status, Northeast Zone, Somalia 2011

	Percent distribution of women age 15-49 years:							
		Who had FGM/C						
	No FGM/C	Had flesh removed	Were nicked	Were sewn closed	Form of FGM/C not determined	Total	Percentage who had any form of FGM/C[1]	Number of women age 15-49 years
Region								
Bari	2.3	7.7	1.9	83.4	4.7	100.0	97.7	2,586
Nugal	2.6	4.8	1.4	87.6	3.6	100.0	97.4	1,077
Mudug	1.2	3.5	0.7	90.7	3.9	100.0	98.8	1,830
Area								
Urban	2.0	6.8	1.7	84.7	4.7	100.0	98.0	3,563
Rural	1.9	3.6	0.8	90.4	3.3	100.0	98.1	1,929
Age								
15-19	2.7	9.6	2.3	79.7	5.7	100.0	97.3	1,191
20-24	1.5	6.0	1.8	85.4	5.3	100.0	98.5	1,021
25-29	2.1	4.3	1.1	89.0	3.6	100.0	97.9	1,020
30-34	1.3	4.4	1.4	89.3	3.6	100.0	98.7	767
35-39	1.7	3.8	0.3	90.2	4.1	100.0	98.3	705
40-44	2.4	4.4	0.9	90.4	2.0	100.0	97.6	551
45-49	2.2	4.1	1.3	89.5	3.0	100.0	97.8	238
Education								
None	1.9	4.8	1.2	88.2	3.9	100.0	98.1	3,865
Primary	2.5	7.7	1.7	82.6	5.5	100.0	97.5	1,090
Secondary+	1.8	8.1	2.2	83.7	4.2	100.0	98.2	537
Wealth index quintile								
Poorest	1.8	4.0	0.6	89.6	4.0	100.0	98.2	992
Second	1.8	4.8	0.7	87.3	5.4	100.0	98.2	1077
Middle	2.3	4.3	2.3	86.7	4.4	100.0	97.7	1088
Fourth	1.9	6.9	1.2	86.2	3.8	100.0	98.1	1132
Richest	2.1	8.0	2.1	84.1	3.7	100.0	97.9	1203
Total	2.0	5.7	1.4	86.7	4.2	100.0	98.0	5,492

[1] **MICS indicator 8.12**

Like the rest of Somalia, the Northeast Zone has one of the highest prevalence rates of FGM/C in the world, with nearly all girls cut by the age of 12. Majority of these girls and women are subjected to 'pharonic' FGM/C, the most severe form of the practice, usually involving infibulations. Despite internationally recognized laws against FGM/C, lack of validation for the practice in Islam relgion and global advocacy to eradicate the practice, it remains deeply embedded in Somaliland culture. In the rural areas, FGM/C is practiced during the rainy season while in the urban centres there is no specific defined time frame.

Table CP.8 presents the prevalence and extent of FGM/C performed on the respondents' daughters aged 0-14. Overall, 31 per cent of girls had undergone FGM/C. Surprising to note is that daughters whose mothers have no education are less likely to be exposed to the practice of FGM/C (30percent) compared to daughters whose mothers have secondary education or more (42 percent). FGM/C among daughters was more common in urban areas (33 percent) compared to rural areas (26 percent). It also increased with age and was highest in the 10 – 14 years age group (82 percent), suggesting that most girls underwent FGM between the ages of 10 and 14 years. Moreover, FGM/C among daughters increased with increasing wealth quintile from 25 percent among the poorest to 37 percent among the richest quintile.

Table CP.8: Female genital mutilation/cutting (FGM/C) among daughters

Percent distribution of daughters age 0-14 by FGM/C status, North East Zone, Somalia 2011

	Percent distribution of daughters age 0-14 years:							
		Who had FGM/C						
	No FGM/C	Had flesh removed	Were nicked	Were sewn closed	Form of FGM/C not determined	Total	Percentage who had any form of FGM/C[1]	Number of daughters age 0-14 years
Region								
Bari	67.2	5.3	1.3	23.1	3.1	100.0	32.8	2,520
Nugal	67.8	4.7	0.7	25.0	1.8	100.0	32.2	1,116
Mudug	72.9	4.0	0.4	20.5	2.1	100.0	27.1	2,176
Area								
Urban	67.0	5.9	1.1	22.9	3.1	100.0	33.0	3,705
Rural	73.8	2.5	0.4	21.9	1.4	100.0	26.2	2,108
Age								
0-4	99.1	0.0	0.1	0.5	0.3	100.0	0.9	2,036
5-9	76.3	4.0	0.8	17.1	1.8	100.0	23.7	2,305
10-14	17.7	12.2	2.1	61.5	6.5	100.0	82.3	1,471
Mothers Education								
None	70.1	4.3	0.6	22.4	2.5	100.0	29.9	4,555
Primary	70.4	4.4	1.6	21.8	1.8	100.0	29.6	896
Secondary	58.3	10.0	1.9	25.0	4.8	100.0	41.7	362
Mother's FGM/C experience								
No FGM/C	(60.6)	(0.0)	(0.0)	(27.1)	(12.3)	100.0	(39.4)	49
Had FGM/C	69.5	4.7	0.9	22.5	2.4	100.0	30.5	5,764
Wealth index quintile								
Poorest	74.9	2.5	0.7	19.7	2.2	100.0	25.1	1,184
Second	71.3	4.2	0.2	22.2	2.2	100.0	28.7	1,160
Middle	70.4	3.3	1.1	23.4	1.8	100.0	29.6	1,128
Fourth	67.4	6.4	0.5	23.4	2.3	100.0	32.6	1,210
Richest	63.1	7.0	2.0	23.9	4.0	100.0	36.9	1,130
Total	69.4	4.7	0.9	22.5	2.5	100.0	30.6	5,813

[1] **MICS indicator 8.13**
( ) Figures that are based on 25-49 un-weighted cases

Table CP.9 presents the woman's attitudes towards FGM/C. Regarding opinion as to whether the practice should be continued or discontinued, 58 percent of women thought it should be continued while 37 percent believed it should be discontinued. Women in Mudug region are more likely to approve of the continuation of the practice of FGM/C than women in other regions. Approval of the continuation of the practice is highest among women with primary education (60 percent) than those with secondary education and above (50 percent). Women from the richest households are less likely to approve of the continuation of the practice than women from the poorest households. Women who have not undergone FGM/C are less likely to approve continuation (37 percent) compared to those who had undergone FGM/C (58 percent). Age is an important determinant in disapproval of FGM/C; 43 percent of women aged 15 -19 years say FGM/C should be discontinued compared to 35 percent of women age 45 – 49 years.

Table CP.9: Approval of female genital mutilation/cutting (FGM/C)

Percentage of women age 15-49 years who have heard of FGM/C, and percent distribution of women according to attitudes towards whether the practice of FGM/C should be continued, Northeast Zone, Somalia 2011

	Percentage of women who have heard of FGM/C	Number of women age 15-49 years	Percent distribution of women who believe the practice of FGM/C should be:					Number of women age 15-49 years who have heard of FGM/C
			Continued[1]	Discontinued	Depends	Don't know	Total	
Region								
Bari	99.4	2,586	57.1	37.6	1.2	4.1	100.0	2,571
Nugal	99.1	1,077	53.3	36.6	2.5	7.6	100.0	1,066
Mudug	99.6	1,830	61.1	36.5	0.5	1.9	100.0	1,823
Area								
Urban	99.3	3,563	54.0	40.2	1.4	4.3	100.0	3,540
Rural	99.6	1,929	64.1	31.5	0.9	3.5	100.0	1,920
Age								
15-19	99.2	1,191	53.2	43.1	0.0	3.7	100.0	1,181
20-24	99.4	1,021	55.6	38.4	1.7	4.2	100.0	1,015
25-29	99.8	1,020	59.2	34.5	1.3	5.0	100.0	1,017
30-34	99.6	767	57.6	37.2	1.1	4.1	100.0	764
35-39	99.4	705	57.4	38.6	1.3	2.7	100.0	701
40-44	99.1	551	57.7	37.7	1.1	3.5	100.0	546
45-49	99.1	238	59.6	34.5	0.5	5.4	100.0	236
Education								
None	99.4	3,865	57.9	36.7	1.2	4.2	100.0	3,842
Primary	99.4	1,090	60.1	35.5	1.0	3.3	100.0	1,083
Secondary+	99.6	537	50.1	44.4	1.5	4.0	100.0	535
FGM/C experience								
No FGM/C	70.9	109	36.9	35.5	0.0	27.5	100.0	77
Had FGM/C	100.0	5,383	58.0	37.0	1.2	3.7	100.0	5,383
Wealth index quintile								
Poorest	99.6	992	64.6	31.2	1.5	2.7	100.0	988
Second	99.4	1,077	63.7	31.8	1.0	3.5	100.0	1,071
Middle	99.2	1,088	57.0	38.5	0.3	4.2	100.0	1,079
Fourth	99.7	1,132	55.7	38.3	1.3	4.8	100.0	1,128
Richest	99.3	1,203	47.4	45.8	1.8	5.0	100.0	1,194
Total	99.4	5,492	57.8	37.0	1.2	4.0	100.0	5,460

[1] **MICS indicator 8.11**

Attitudes toward Domestic Violence

The Northeast Zone MICS4 assessed the attitudes of women and men age 15-49 years towards wife beating for a variety of scenarios by asking the respondents whether husbands are justified to hit or beat their wives 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. The main assumption here is that women that agree with the statements indicating that husbands are justified to beat their wives under the situations described in reality tend to be abused by their own husbands. The responses to these questions can be found in Table CP.10. Overall, 35 percent of women in Northeast Zone, Somalia feel that a husband is justified to hit or beat his wife for at least one of a variety of reasons. Women who approve a husband's violence, in most cases agree and justify violence in instances when the woman refuses to have sex with him (25 percent), neglects the children (20 percent) or if she demonstrates her autonomy, e.g. argues with him (19 percent) or goes out without telling her husband (17 percent). Around 11 percent of women believe that a husband is justified to hit or beat his wife or if she burns the food.

Acceptance is more present among those living Bari region (37 percent) than in Mudug region (33 percent). Acceptance is also higher among the currently married women. There appear to be no major differences in approval of domestic violence by wealth status and area of residence.

Table CP.10: 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, Northeast Zone, Somalia 2011

	Percentage of women age 15-49 years who believe a husband is justified in beating his wife/partner:						
	If she 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	For any of these reasons[1]	Number of women age 15-49 years
Region							
Bari	16.0	21.5	19.4	27.7	10.1	36.9	2,586
Nugal	16.0	20.7	19.1	23.9	10.1	34.1	1,077
Mudug	18.4	18.8	18.3	21.9	11.7	32.7	1,830
Area							
Urban	17.6	21.0	18.7	25.3	10.1	35.6	3,563
Rural	15.2	19.4	19.5	24.4	11.6	33.8	1,929
Age							
15-19	15.0	18.1	17.6	22.0	9.6	31.0	1,191
20-24	16.0	20.6	17.6	24.9	10.4	34.3	1,021
25-29	18.2	22.3	21.5	26.8	11.8	37.2	1,020
30-34	17.7	20.1	19.9	25.1	10.5	37.2	767
35-39	18.4	22.4	18.9	26.1	10.8	36.3	705
40-44	17.3	21.3	20.1	26.4	10.7	36.7	551
45-49	13.5	16.8	15.4	25.8	11.0	32.5	238
Marital status[a]							
Currently married	18.5	22.3	20.5	27.5	11.7	38.4	3,179
Formerly married	16.3	19.5	19.4	25.4	10.3	34.7	682
Never married	13.6	17.1	15.7	19.9	8.6	28.1	1,626
Education							
None	17.2	20.4	19.5	25.2	11.1	35.0	3,865
Primary	15.4	19.4	17.6	23.7	9.5	34.0	1,090
Secondary+	16.3	23.2	18.1	26.6	9.3	36.5	537
Wealth index quintile							
Poorest	17.3	20.4	20.5	27.8	12.5	36.5	992
Second	16.1	21.0	20.2	26.4	12.7	35.1	1,077
Middle	17.9	22.2	19.7	25.0	11.0	35.2	1,088
Fourth	17.8	17.7	17.2	22.3	10.4	32.9	1,132
Richest	15.0	21.1	17.5	24.0	7.1	35.2	1,203
Total	16.8	20.4	19.0	25.0	10.6	34.9	5,492

[1] **MICS indicator 8.14**

[a]Total includes 4 unweighted cases of women with missing information on marital status that are not shown separately

Orphans

Children who are orphaned 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 comparing them to their peers gives us a measure of how well communities and governments are responding to their needs.

The frequencies of children living with neither parent, mother only, and father only are presented in Table HA.7. Sixty three percent of children aged 0-17 years in Northeast Zone live with both their parents. One in eight children (12 percent) is living with neither parent. This percentage increases with the child's age.

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 years 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.

Table CP.11: Children's living arrangements and orphan hood

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, Northeast Zone, Somalia 2011

		Living with neither parent				Living with mother only		Living with father only						
	Living with both parents	Only father alive	Only mother alive	Both alive	Both dead	Father alive	Father dead	Mother alive	Mother dead	Impossible to determine	Total	Not living with a biological parent[1]	One or both parents dead [2]	Number of children age 0-17 years
Sex*														
Male	64.6	1.1	1.8	6.9	1.1	13.3	7.7	1.1	0.6	1.8	100.0	10.9	12.4	8,623
Female	61.7	1.4	2.2	8.4	1.3	14.1	7.7	0.9	0.4	1.9	100.0	13.4	13.1	8,228
Region														
Bari	59.9	1.5	2.4	8.0	1.1	15.9	7.4	1.3	0.7	1.7	100.0	13.1	13.2	7,420
Nugal	66.5	1.5	1.3	9.0	0.9	11.2	6.4	1.2	0.1	1.9	100.0	12.7	10.2	3,496
Mudug	65.3	0.8	2.0	6.3	1.5	12.4	8.8	0.4	0.4	2.1	100.0	10.5	13.5	5,936
Area														
Urban	62.6	1.3	2.1	7.7	1.1	13.7	8.0	0.9	0.4	2.1	100.0	12.2	13.1	10,699
Rural	64.2	1.3	1.9	7.5	1.3	13.7	7.1	1.1	0.6	1.5	100.0	11.9	12.1	6,153
Age														
0-4	72.0	0.7	1.2	6.0	0.6	13.1	4.6	0.6	0.3	0.9	100.0	8.6	7.5	4,829
5-9	64.3	1.0	1.9	7.6	1.1	13.4	7.7	1.2	0.5	1.3	100.0	11.6	12.2	5,863
10-14	57.4	1.7	2.9	8.8	1.4	14.4	10.0	1.2	0.5	1.7	100.0	14.8	16.6	4,439
15-17	49.6	2.5	2.6	9.4	2.4	14.3	10.6	0.8	0.9	7.0	100.0	16.9	19.0	1,721
Wealth index quintiles														
Poorest	62.2	1.3	1.9	7.4	1.6	14.6	7.8	0.8	0.7	1.7	100.0	12.2	13.4	3,452
Second	64.8	1.1	1.7	8.1	1.4	12.1	7.1	1.2	0.5	1.9	100.0	12.3	11.9	3,428
Middle	63.9	1.4	2.2	7.2	0.8	13.8	7.7	1.0	0.3	1.6	100.0	11.6	12.4	3,339
Fourth	64.9	1.0	2.0	6.2	0.9	13.3	8.7	0.8	0.3	2.0	100.0	10.1	12.8	3,384
Richest	60.1	1.6	2.4	9.3	1.2	14.5	7.2	1.1	0.6	2.1	100.0	14.4	13.2	3,250
Total	63.2	1.3	2.0	7.6	1.2	13.7	7.7	1.0	0.5	1.9	100.0	12.1	12.7	16,853

[1] **MICS indicator 9.17**

[2] **MICS indicator 9.18**

In Northeast Zone, one percent of children aged 10-14 have lost both parents (Table HA.8). Thirty one percent of the orphans are currently attending school. Among the children age 10-14 who have not lost a parent and who live with at least one parent, 57 percent are attending school. The orphans to non-orphans school attendance ratio is 0.55.

Table CP.12: School attendance of orphans and non-orphans

School attendance of children age 10-14 years by orphanhood, Northeast Zone, Somalia 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[1]	Total number of orphan children age 10-14 years	Percentage of children who are non-orphans and are attending school[2]	Total number of non-orphan children age 10-14 years	Orphans to non-orphans school attendance ratio
Sex								
Male	1.4	74.7	2,222	(37.5)	32	60.3	1,661	(0.62)
Female	1.4	71.3	2,217	(24.9)	31	53.3	1,580	(0.47)
Area								
Urban	1.3	72.2	2,874	(38.5)	37	66.4	2,076	(0.58)
Rural	1.7	74.4	1,565	(20.8)	26	39.9	1,165	(0.52)
Total	1.4	73.0	4,439	31.2	63	56.9	3,241	0.55

[1] **MICS indicator 9.19; MDG indicator 6.4**

[2] **MICS indicator 9.20; MDG indicator 6.4**

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

XI. HIV/AIDS, Sexual Behaviour, and Orphan

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 towards 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. HIV modules were 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. In Northeast Zone, MICS all women who have heard of AIDS were asked whether they knew of the three main ways of preventing 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. In Northeast Zone, majority of the interviewed women (83 percent) have heard of AIDS. However, the percentage of women who know of both main ways of preventing HIV transmission is only 27 percent. Sixty two percent of women know of having one faithful uninfected sex partner and 31 percent know of using a condom every time as main ways of preventing HIV transmission.

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, percentage who know that a healthy looking person can have the AIDS virus, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Northeast Zone, Somalia 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	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
		Having only one faithful uninfected sex partner	Using a condom every time			Mosquito bites	Supernatural means	Sharing food with someone with AIDS			
Region											
Bari	84.8	63.6	33.3	28.4	58.5	54.5	54.1	59.1	31.4	9.0	2,586
Nugal	80.9	58.8	26.5	22.9	56.4	47.5	56.1	55.5	27.4	7.0	1,077
Mudug	80.2	61.8	29.4	26.5	48.9	56.1	48.7	53.9	29.3	10.0	1,830
Area											
Urban	85.4	63.9	33.0	28.7	58.6	57.6	56.6	61.9	33.6	10.4	3,563
Rural	77.2	58.6	26.3	23.1	48.1	46.5	45.6	46.9	23.2	6.1	1,929
Age											
15-24	83.4	62.6	30.1	26.1	55.7	54.1	53.8	58.2	30.8	9.7	2,212
25-29	81.5	61.9	31.1	27.6	54.8	54.0	51.5	56.5	28.8	7.8	1,020
30-39	82.2	61.3	30.9	26.9	53.8	53.2	52.6	55.0	29.3	8.5	1,472
40-49	81.9	62.1	30.9	26.8	54.8	53.0	51.5	55.6	30.0	8.9	789
Marital status[a]											
Ever married	82.3	61.6	30.8	26.7	54.4	53.5	52.6	56.4	29.5	8.4	3,862
Never married	83.0	63.2	30.3	26.7	56.0	54.2	53.1	57.2	30.9	10.1	1,626
Women's education											
None	79.1	58.3	28.5	24.7	50.2	49.9	48.6	52.4	25.9	7.1	3,865
Primary	88.5	68.6	33.4	29.2	63.2	58.8	58.8	63.2	35.8	11.9	1,090
Secondary+	94.7	76.1	40.1	35.8	71.9	70.5	70.1	74.0	46.8	16.1	537
Wealth index quintiles											
Poorest	73.5	50.9	24.2	21.1	44.0	41.9	44.1	43.8	20.0	4.3	992
Second	82.0	61.2	28.1	24.2	51.7	47.9	48.5	50.6	24.9	6.6	1,077
Middle	82.3	63.8	29.1	25.4	53.2	54.7	52.5	57.0	30.1	9.0	1,088
Fourth	82.9	64.1	33.2	29.1	56.8	54.1	52.3	60.3	30.8	9.7	1,132
Richest	90.2	68.5	37.2	32.5	66.5	67.2	64.2	68.9	41.6	14.0	1,203
Total	82.5	62.1	30.6	26.7	54.9	53.7	52.7	56.7	29.9	8.9	5,492

[1]MICS indicator 9.1

[a]Total includes 4 unweighted cases with missing information on marital status who are not shown separately

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, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission , Northeast Zone, Somalia 2011

		Percentage who know transmission can be prevented by:				Percentage who know that HIV cannot be transmitted by:					
	Percentage who have heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Percentage of women who know both ways	Percentage who know that a healthy looking person can have the AIDS virus	Mosquito bites	Supernatural means	Sharing food with someone with AIDS	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
Region											
Bari	85.1	63.7	32.0	27.2	58.8	53.7	55.3	59.4	31.5	9.5	1,044
Nugal	81.3	60.6	23.0	20.2	56.4	46.7	55.3	57.3	29.1	7.2	450
Mudug	82.3	62.2	31.9	28.1	50.8	59.2	50.7	57.0	30.8	11.5	717
Area											
Urban	86.6	65.2	32.8	28.6	59.2	58.1	58.9	63.9	34.5	11.1	1,457
Rural	77.2	57.6	25.1	21.2	49.2	46.3	44.1	47.2	23.5	7.1	755
Age											
15-19	81.1	61.8	31.4	27.6	55.0	51.1	51.5	56.8	29.8	10.2	1,191
20-24	86.1	63.6	28.7	24.3	56.6	57.6	56.5	59.8	31.9	9.1	1,021
Marital status[a]											
Ever married	84.3	61.8	29.5	24.4	55.6	55.4	55.7	60.1	31.2	8.6	760
Never married	82.9	63.1	30.5	26.9	55.8	53.4	52.8	57.2	30.6	10.3	1,449
Women's education											
None	78.5	56.1	27.5	23.3	49.6	49.3	48.9	52.5	26.0	7.6	1,296
Primary	88.0	69.5	31.6	28.2	60.6	56.6	55.9	61.9	33.3	11.9	608
Secondary+	94.9	76.4	38.4	33.7	71.9	69.1	70.4	74.8	46.1	14.2	308
Wealth index quintiles											
Poorest	73.5	50.6	19.9	16.6	45.0	41.6	44.1	43.9	20.8	3.3	347
Second	81.2	61.3	26.0	23.6	50.5	49.7	47.4	52.2	25.0	7.5	439
Middle	82.1	62.9	28.3	24.5	52.3	53.0	53.9	58.9	29.7	10.0	432
Fourth	85.7	64.4	33.6	28.4	59.6	54.4	54.8	62.8	32.5	9.9	455
Richest	90.7	69.7	38.6	33.4	66.4	66.2	64.4	67.9	41.3	15.3	539
Total	83.4	62.6	30.1	26.1	55.7	54.1	53.8	58.2	30.8	9.7	2,212

[1] **MICS indicator 9.2; MDG indicator 6.3**

[a] Total includes 3 unweighted cases of women with missing information on marital status who are not shown separately

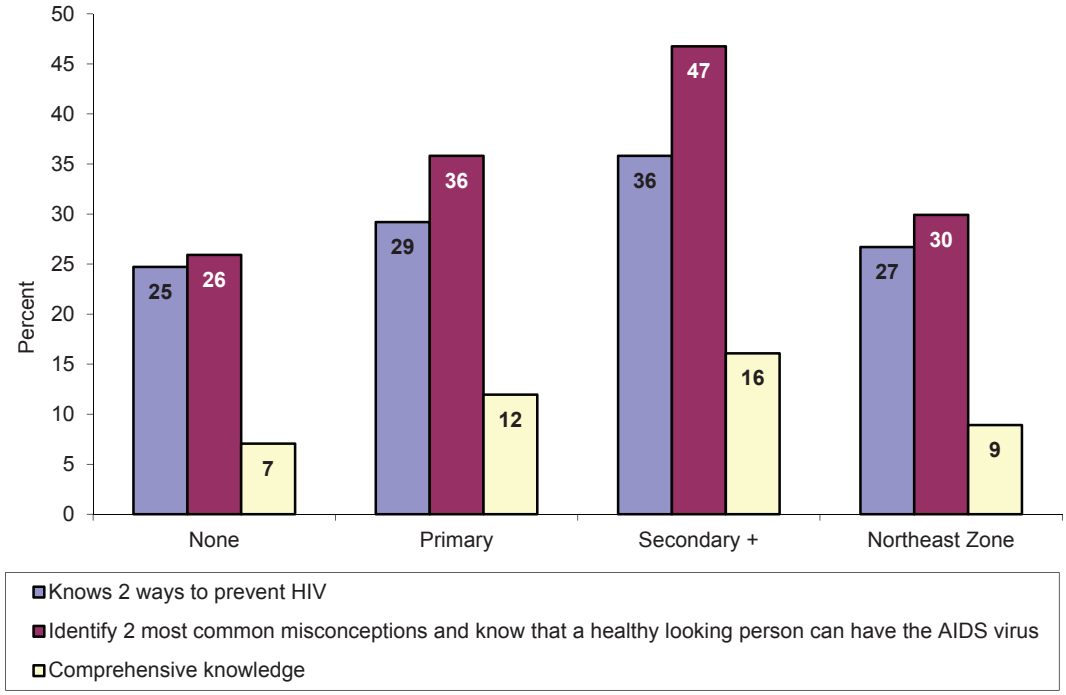
The results for women age 15-24 are separately presented in Table HA.2. Among this age group, 83 percent have ever heard of AIDS and 63 percent of them know that having one faithful uninfected partner is a way of preventing HIV transmission.

Tables HA.1 and HA.2 also present the percent of women who could correctly identify misconceptions concerning HIV. The indicator was based on the two most common and relevant misconceptions in Northeast Zone, that HIV can be transmitted by supernatural means and mosquito bites. The table also provides information on whether women knew that HIV could not be transmitted by sharing food with someone with AIDS. Of the interviewed women age 15 to 49 years, 30 percent reject the two most common misconceptions and know that a healthy-looking person can be infected (Table HA.1). About half of the women know that HIV is not transmitted through supernatural means. Fifty seven percent of women know that sharing food with someone with AIDS does not transmit HIV while this percentage is 58 among younger women.

Women who have comprehensive knowledge about HIV prevention include women who know of the two main 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 also present the percentage of women with comprehensive knowledge. Comprehensive knowledge of HIV prevention methods and transmission is fairly low although there are differences by area. Overall, 9 percent of women ages 15 to 49 years were found to have comprehensive knowledge, which was slightly higher in urban areas (10 percent) than rural areas (6 percent). As expected the percent of women with comprehensive knowledge increases with the woman's education level (Figure HA.1).

The same pattern is observed in regard to the increase of comprehensive knowledge and household wealth (Table HA.1). Only one in every ten young women in Northeast Zone has comprehensive knowledge of HIV transmission (Table HA.2). The percentage is similar across regions and between urban and rural areas.

Figure HA.1 Percentage of women who have comprehensive knowledge of HIV/AIDS transmission by education levels, Northeast Zone, Somalia 2011



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, during 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, 74 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 45 percent, while 9 percent of women did not know of any specific way. Sixty four percent of the women know that HIV can be transmitted through breastfeeding while 55 percent know that transmission can occur during pregnancy and 65 percent know that it may occur during delivery.

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, Northeast Zone, Somalia 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							
Bari	76.6	57.2	67.2	67.2	48.0	8.1	2,586
Nugal	73.3	54.6	61.5	61.1	42.3	7.6	1,077
Mudug	70.3	50.5	65.2	61.5	41.4	9.9	1,830
Area							
Urban	78.2	58.3	68.7	67.1	47.2	7.2	3,563
Rural	66.0	47.4	59.4	58.6	40.0	11.2	1,929
Age group							
15-24	74.0	54.1	65.6	63.8	44.0	9.4	2,212
15-19	71.6	50.6	64.1	62.1	41.7	9.4	1,191
20-24	76.7	58.2	67.4	65.8	46.6	9.5	1,021
25-29	74.0	58.7	65.5	65.7	48.9	7.5	1,020
30-39	73.3	53.7	64.6	63.7	44.3	8.9	1,472
40-49	74.6	51.4	66.1	63.7	41.8	7.3	789
Marital status[a]							
Ever married	74.2	55.4	65.4	64.6	45.5	8.1	3,862
Never married	73.1	52.1	65.5	62.8	42.8	9.9	1,626
Education							
None	69.9	52.6	61.9	60.4	42.9	9.2	3,865
Primary	81.2	59.0	71.6	71.8	49.3	7.3	1,090
Secondary+	87.8	58.9	78.0	75.2	47.9	6.9	537
Wealth index quintiles							
Poorest	63.2	47.4	55.4	57.1	41.1	10.3	992
Second	70.3	51.2	62.9	61.9	43.8	11.7	1,077
Middle	73.2	53.2	65.5	61.5	41.1	9.0	1,088
Fourth	76.0	57.0	67.8	65.2	46.7	6.9	1,132
Richest	84.5	61.9	73.6	73.2	49.6	5.6	1,203
Total	73.9	54.5	65.4	64.1	44.7	8.6	5,492

[1] **MICS indicator 9.3**

[a]Total includes 4 unweighted cases of women with missing information on marital status who are not shown separately

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 is 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 Northeast Zone, 93 percent of women who have heard of AIDS agree with at least one accepting attitude towards people living with HIV/AIDS. The most common accepting attitude is not keeping secret that a family member got infected with the AIDS virus (68 percent). The two least accepted attitudes are; the believe that a female teacher with the AIDS virus and is not sick should be allowed to continue teaching (31 percent) and that one would buy fresh vegetables from a shop keeper or vendor who has the AIDS virus (32 percent). More educated women and those from richest households have more accepting attitudes than the ones with lower education and a poorer wealth status.

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, Northeast Zone, Somalia 2011

	Percentage of women who:						
	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]	Number of women who have heard of AIDS
Region							
Bari	63.0	33.4	31.7	68.1	95.6	7.5	2,192
Nugal	59.4	30.0	30.5	69.6	93.9	8.2	871
Mudug	55.5	31.5	29.1	66.7	89.8	10.4	1,468
Area							
Urban	61.9	33.6	32.0	69.7	93.7	9.8	3,043
Rural	55.8	29.2	27.9	64.3	92.7	6.1	1,488
Age							
15-24	58.2	33.1	32.3	69.0	93.9	9.8	1,845
15-19	59.2	35.3	34.5	70.4	94.3	11.7	965
20-24	57.1	30.5	29.9	67.5	93.5	7.7	879
25-29	59.3	31.5	28.3	66.7	93.1	6.3	831
30-39	61.3	32.0	29.7	66.5	92.6	8.1	1,210
40-49	62.8	30.8	30.7	69.0	93.8	9.0	646
Marital status[a]							
Ever married	60.7	31.7	29.8	67.0	93.3	7.8	3,178
Never married	58.0	33.2	32.6	70.2	93.5	10.3	1,350
Education							
None	57.7	30.1	28.1	66.9	92.6	6.9	3,057
Primary	62.0	34.4	33.8	72.7	95.4	10.8	965
Secondary+	68.8	40.6	40.0	65.1	94.0	14.7	509
Wealth index quintiles							
Poorest	54.3	28.9	25.7	67.3	93.5	6.5	729
Second	56.4	29.2	27.8	68.1	92.6	6.7	883
Middle	59.5	30.9	29.4	65.5	91.9	7.4	895
Fourth	62.3	34.0	33.0	69.2	93.9	8.6	938
Richest	64.8	36.3	35.1	69.1	94.8	12.5	1,085
Total	59.9	32.2	30.6	67.9	93.4	8.6	4,531

[1] **MICS indicator 9.4**

[a]Total includes 4 unweighted cases of women with missing information on marital status who is not shown separately

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. Inorder to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of own 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 are presented in Table HA.5. Twenty seven percent of women knew where to be tested, while 5 percent have actually been tested. Of these, 2 percent have been tested within the last 12 months and been told the results. There is minimal regional disparity in knowledge on a place to get tested which varies by education and household wealth.

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, Northeast Zone, Somalia 2011

	Percentage of women who:				
	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 twelve months and have been told result[2]	Number of women
Region					
Bari	27.7	5.5	2.5	2.3	2,586
Nugal	24.1	5.6	2.9	2.6	1,077
Mudug	27.4	2.6	1.4	1.3	1,830
Area					
Urban	32.1	5.8	2.8	2.6	3,563
Rural	17.2	2.2	1.1	1.0	1,929
Age					
15-24	27.5	4.2	2.0	1.8	2,212
15-19	27.6	3.6	1.9	1.8	1,191
20-24	27.4	4.9	2.2	1.8	1,021
25-29	25.8	5.5	2.6	2.4	1,020
30-39	26.4	4.5	2.5	2.3	1,472
40-49	27.3	4.3	1.6	1.6	789
Marital status[a]					
Ever married	26.0	5.1	2.5	2.3	3,862
Never married	29.0	3.2	1.5	1.3	1,626
Education					
None	22.5	3.2	1.4	1.2	3,865
Primary	31.9	6.1	2.8	2.7	1,090
Secondary+	47.7	10.9	6.9	6.4	537
Wealth index quintiles					
Poorest	11.2	2.1	0.7	0.7	992
Second	20.9	3.3	1.5	1.4	1,077
Middle	28.4	3.8	1.9	1.8	1,088
Fourth	30.8	4.0	1.8	1.4	1,132
Richest	40.0	8.9	4.7	4.4	1,203
Total	26.9	4.5	2.2	2.0	5,492

[1] MICS indicator 9.5

[2] MICS indicator 9.6

[a]Total includes 4 unweighted cases of women missing information on marital status who is not shown separately

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.6. Only 3 percent of women who had given birth within the two years preceding the survey received HIV counselling during ANC in Northeast Zone. Those who were offered an HIV test were only 2 percent.

Table HA.6: HIV counseling 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 counseling, percentage who were offered and accepted an HIV test and received the results, Northeast Zone, Somalia 2011

	Percentage of women who:					
	Received antenatal care from a health care professional for last pregnancy	Received HIV counseling 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 counseling, were offered an HIV test, accepted and received the results	Number of women who gave birth in the 2 years preceding the survey
Region						
Bari	26.2	3.6	3.2	3.0	2.4	646
Nugal	31.8	3.8	1.7	1.5	1.5	332
Mudug	17.4	2.7	1.8	1.4	1.4	553
Area						
Urban	30.6	4.9	3.4	3.0	2.7	955
Rural	13.7	0.7	0.6	0.6	0.4	576
Age						
15-24	27.3	3.2	2.2	2.0	1.8	431
15-19	25.6	7.3	3.6	3.6	3.6	81
20-24	27.7	2.2	1.9	1.7	1.4	349
25-29	23.5	3.4	2.6	2.4	1.8	486
30-39	23.9	3.1	1.9	1.5	1.5	505
40-49	17.0	4.4	3.5	3.5	3.5	109
Marital status						
Ever married	24.2	3.3	2.4	2.1	1.8	1,531
Education						
None	19.8	2.1	1.4	1.2	1.1	1,178
Primary	34.8	5.7	3.0	3.0	2.6	260
Secondary+	50.7	12.5	12.5	11.5	9.4	93
Wealth index quintiles						
Poorest	9.8	1.3	1.0	1.0	0.6	302
Second	17.6	0.9	0.6	0.6	0.6	322
Middle	21.7	2.7	1.0	1.0	1.0	299
Fourth	29.2	3.7	2.5	1.9	1.9	312
Richest	43.6	8.2	6.9	6.2	5.2	295
Total	24.2	3.3	2.4	2.1	1.8	1,531

[1] MICS indicator 9.8

[2] MICS indicator 9.9

XII. Access to Mass Media and Use of Information/ Communication Technology

The 2011 Northeast Zone, Somalia MICS collected information on exposure to mass media and the use of computers and the internet.

Information is collected on:

- exposure to newspapers/magazines, radio and television among women and men age 15-49,
- use of computers among 15-24 year-olds, and
- use of the internet among 15-24 year-olds.

Access to Mass Media

The proportion of women who read a newspaper, listen to the radio and watch television at least once a week is shown in table MT.1.

At least once a week, 13 percent of women in Northeast Zone read a newspaper, 30 percent listen to the radio and 13 percent watch television. Overall, 12 percent do not have regular exposure to any of the three media, while 5 percent are exposed to all the three types of media at least on a weekly basis. Women under age 25 are more likely than older women to report exposure to all three types of mass media. Strong differentials by area, education and socio-economic status are observed for exposure to all types of media.

Women with higher education were likely to have been exposed to all the types of media than women with primary education or no education. Similarly, 16 percent of women in the highest wealth index quintile have been exposed to all the three media forms, while the corresponding proportion of women in the lowest wealth index quintile is less than 1 percent. Larger proportions of women are exposed to all the media types in urban areas (7 percent) than in rural areas (1 percent). Exposure of women to all the three mass media was lowest in the Mudug region (2 percent).

Table MT.1: Exposure to mass media

Percentage of women age 15-49 years who are exposed to specific mass media on a weekly basis, Northeast Zone, Somalia 2011

	Percentage of women age 15-49 who:					
	Read a newspaper at least once a week	Listen to the radio at least once a week	Watch television at least once a week	All three media at least once a week[1]	No media at least once a week	Number of women age 15-49 years
Age						
15-19	22.3	34.5	18.3	7.2	16.6	1,191
20-24	14.6	32.3	17.1	5.9	11.8	1,021
25-29	11.7	27.6	12.8	5.0	9.6	1,020
30-34	6.5	24.0	7.7	2.1	10.6	767
35-39	9.7	28.6	10.0	3.9	8.8	705
40-44	7.3	31.0	8.8	2.3	9.4	551
45-49	7.0	30.6	8.7	2.0	11.4	238
Region						
Bari	16.4	35.6	16.6	6.3	11.6	2,586
Nugal	12.5	29.5	13.6	5.1	14.3	1,077
Mudug	8.3	22.6	8.1	2.2	10.1	1,830
Area						
Urban	17.4	37.1	19.0	6.9	10.4	3,563
Rural	4.5	17.1	2.3	0.6	13.9	1,929
Education						
None	1.5	21.1	7.2	0.3	3.8	3,865
Primary	28.7	44.8	18.9	8.6	38.6	1,090
Secondary+	62.9	64.8	44.9	28.3	12.8	537
Wealth index quintile						
Poorest	1.9	10.1	1.4	0.2	9.6	992
Second	4.6	16.3	2.5	0.5	16.3	1,077
Middle	10.1	24.8	5.6	2.0	14.1	1,088
Fourth	14.8	34.5	11.5	3.4	11.1	1,132
Richest	30.2	59.4	40.9	15.8	7.3	1,203
Total	12.9	30.1	13.2	4.7	11.6	5,492

[1] **MICS indicator MT.1**

Use of Information/Communication Technology

The questions on computer and internet use were asked only to 15-24 year old women.

As displayed in Table MT.2, 12 percent of 15-24 year old women ever used a computer, 8 percent used a computer during the last year and 6 percent used at least once a week during the last month. Overall, 12 percent of women age 15-24 ever used the internet, while 10 percent used the internet during the last year. The proportion of young women who used the internet more frequently, at least once a week during the last month is smaller, at 8 percent.

Both the computer and internet use during the last 12 months is more widespread among the 15-19 year old women. Use of a computer and the internet is also strongly associated with area of residence, education and wealth.

Only 8 percent of women with primary education report using a computer during the last year, while 37 percent of women with secondary or higher education used a computer. Similarly higher utilisation of the internet during the previous year before the survey is observed among young women in urban areas (15 percent) compared to those in rural areas (1 percent). The use of the internet during the last year is highest in Bari region (12 percent), while the proportion is 26 percent for young women in the richest households, as opposed to those living in the poorest households (1 percent).

Table MT.2: Use of computers and internet

Percentage of young women age 15-24 who have ever used a computer, percentage who have used a computer during the last 12 months, and frequency of use during the last one month, Northeast Zone, Somalia 2011

	Percentage of women age 15-24 who have:			Percentage of women age 15-24 who have:			
	Ever used a computer	Used a computer during the last 12 months[1]	Used a computer at least once a week during the last one month	Ever used the internet	Used the internet during the last 12 months[2]	Used the internet at least once a week during the last one month	Number of women age 15-24 years
Age							
15-19	14.0	9.5	8.1	13.5	11.6	9.4	1,191
20-24	9.9	5.5	4.2	10.3	8.0	5.8	1,021
Region							
Bari	14.5	9.4	8.3	15.0	12.0	9.6	1,044
Nugal	9.7	5.6	3.4	8.6	7.1	5.2	450
Mudug	10.2	6.5	5.1	9.8	8.7	6.5	717
Area							
Urban	17.4	11.4	9.4	17.5	14.5	11.3	1,457
Rural	2.0	0.4	0.3	1.4	1.0	0.8	755
Education							
None	1.5	0.8	0.7	1.9	1.7	1.3	1,296
Primary	13.2	7.6	6.4	12.3	9.9	7.5	608
Secondary+	54.7	36.5	29.8	54.1	44.7	35.0	308
Wealth index quintile							
Poorest	1.2	0.6	0.6	0.6	0.6	0.6	347
Second	2.3	0.9	0.9	2.5	1.1	0.9	439
Middle	6.4	3.1	2.9	6.5	5.4	5.0	432
Fourth	11.8	6.8	5.1	12.0	10.5	8.1	455
Richest	32.1	22.1	18.1	31.6	26.2	19.7	539
Total	12.1	7.7	6.3	12.0	9.9	7.7	2,212

[1] **MICS indicator MT.2**

[2] **MICS indicator MT.3**

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 Northeast Zone Multiple Indicator Cluster Survey was to produce statistically reliable estimates of most indicators for the whole Northeast Zone, for urban and rural areas, and for the three regions (Bari, Nugal and Mudug) of the Zone. There were two main sampling strata: urban and rural areas.

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 Northeast Zone MICS was calculated as 5,179 households. For the calculation of the sample size, the key indicator used was the polio immunization coverage for children aged 12 – 23 months. The following formula was used to estimate the required sample size for this indicator:

$$n = \frac{[\,4\,(r)\,(1\text{-}r)\,(f)\,(1.1)\,]}{[\,(0.13r)^2\,(p)\,(n_h)\,]}$$

Where

- *n* is the required sample size, expressed as number of households
- *4* is a factor to achieve the 95 per cent level of confidence
- *r* is the predicted or anticipated prevalence (coverage rate) of the indicator. The polio immunization coverage for children aged 12 – 23 months is 34.8% (MICS 2006)
- *1.1* is the factor necessary to raise the sample size by 10 per cent for non-response
- *f* is the shortened symbol for *deff* (design effect). 1.75 was taken as a default, similar to that used in MICS 2006.
- *0.12r* is the margin of error to be tolerated at the 95 per cent level of confidence, defined as 12 per cent of r (relative sampling error of r)
- *p* is the proportion of the total population upon which the indicator, r, is based. Percentage of children aged 12 -23 months in total population was taken as 3.2% (MICS 2006)
- n_h is the average household size. The average household size was taken as 5.7 (MICS 2006)

The resulting number of households from the calculations was 5,179 households in total.

Separately in urban and rural areas, the total number of households was distributed to regions proportionally to the population size of that region. The table below shows the allocation of PSUs to the regions.

Table SD.1: Allocation of Primary Sampling Units to regions

Zone	Population (2005 UNDP Estimates)			Number of PSUs		
	Total	Urban	Rural	Urban	Rural	Total
Bari	283,801	173,100	110,701	78	51	129
Nugal	119,887	73,300	46,587	33	22	55
Mudug	227,957	147,700	80,257	67	37	104
Total	631,645	394,100	237,545	178	110	288

Sampling Frame and Selection of Clusters

The sampling frame was the list of settlements obtained from the 2005/2006 UNDP settlement census and which was updated in preparation for the Somalia population estimation survey. For each settlement, this list contained an estimated number of households and the classification by urban and rural.

Stratification consisted of separating urban and rural settlements within each region. Settlements were then used as primary sampling units and were selected with probability proportional to size, the size being the estimated number of households. Very large settlements were selected with certainty as self-representing units (that is with probability equal to 1).

In rural areas and small towns, settlements with more than 200 households were divided into segments of which one was randomly selected. All households in the selected segment were listed to create a frame for the selection of 18 households at the second stage using systematic sampling.

For very large settlements, the list of villages and sections that comprised each settlement served as frame for the second stage selection (secondary sampling units). Each selected village and section was segmented if it contained more 200 households. One of the newly created segments was then randomly selected and all of the households it contained were listed. In the final stage, 18 households were selected from the household listing. In villages and sections containing 200 households or less, a complete household listing was carried out and 18 households were directly selected from the list of households.

Calculation of Sample Weights

The sample for the Northeast Zone was implemented according to its design. However, information onsegmentation was not systematically captured at the field level for most of the clusters. As a result, information was incomplete for most clusters. Based on this finding, it was decided not to calculate the weights at cluster level. The sampling weights were calculated at strata level.

The major component of the weight is the reciprocal of the sampling fraction employed in selecting the number of sample households in a particular sampling stratum (h) :

$$W_{hi} = \frac{1}{f_h}$$

The term f_h, the sampling fraction for the h-th stratum, is defined as :

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

where
nh is the number of households selected from stratum *h*

Nh is the total number of households 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 stratum . Response rates in the Northeast Zone 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 = Number of interviewed households in stratum h/ Number of occupied households listed in stratum h

After the completion of fieldwork, response rates were calculated for each sampling stratum. These were used to adjust the sample weights calculated for each cluster. Response rates in the Homa Bay County Multiple Indicator Cluster Survey are shown in Table HH.1 in this report.

Similarly, the adjustment for non-response at the individual level (women and under-5 children) for each stratum is equal to the inverse value of:

RR_h = Completed women's (or under-5's) questionnaires in stratum h / Eligible women (or under-5s) in stratum h

The non-response adjustment factors for women's and under-5's questionnaires were 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 sample weights for the households were calculated by multiplying the above factors for each stratum. 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 performed by multiplying the sample weights by a constant factor equal to the unweighted 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 0.96 and 1.08.

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. List of Personnel Involved in the Survey

MICS4 Technical Committees

MICS4 Technical Committee members - Nairobi	
Name	**Organization**
Bo Pedersen	UNICEF ESARO
Debra Bowers	UNICEF PME
Volker Huls	UNICEF PME
Sicily Matu	UNICEF PME
Nancy Balfour	UNICEF WASH
Zaid Jurji	UNICEF WASH
Lars Jensen	UNICEF S/L
Peter Hailey	UNICEF Nutrition
Osamu Kunii	UNICEF ACSD
Sheema Sen Gupta	UNICEF CP
Isabella Castrogiovanni	UNICEF CP
Chiara Pierotti	UNICEF GF
Mette Nordstrand	UNICEF Education
Woki Munyui	UNICEF Education
Teija Vallandingham	UNICEF Education
Grainne Moloney	FSNAU/FAO
Sriram Pande	UNDP
Richard Ngetich	UNDP
Uffe Poulsen	UNICEF JPLGDSD
Abraham Mulugeta	WHO
Raul Kamadjeu	WHO
Simon Renk	WFP
Niaz Mohammed	UNFPA
Stephen Macharia	UNFPA
MICS4 Technical Committee members - Hargeisa	
Hassan Abdillahi Jama	MoNPD
Ahmed Diriye	MoNPD
Mohamed Jama Farah	MoE
Khadar Mohamed	MoHL
Abdillahi Abdi Yusuf	MoHL
Saeed Dualeh Mohamed	MoW&MR
Abdirhaman Farah Omer	MoW&MR
Awale M Awale	MoFA&SD
Mohamed Ismail	MoInterior
Ahmed Hassan Yusuf	MoInformation
Asha Hussein Adam	UNICEF
Amran Ibrahim	FSNAU/FAO
Nura Gureh	FSNAU/FAO
Salada Roble	UNFPA
Ahmed Mihile	UNDP
Musa Warsame	WFP
Nasir Abdi Hirsi	WHO

Survey Teams and ToTs Trainers	
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Bo Pedersen	UNICEF
Sicily Matu	UNICEF
Peter Kingori	UNICEF
Oztas Ayhan	UNICEF
Austin Mueke	UNICEF
Aleksandar Zoric	UNICEF
Asha Hussein Adam	UNICEF
Mohammed Dhaqane	UNICEF
Hassan Jama	MoNPD
Ahmed Hassan Yusuf	ANPPCAN
Idris Nur Mohamed	ANPPCAN
Abdulkadir Ali Ghelle	SDRA
Mohamed Ali Ismail	SAREDO
Yahye Ali Obsiye	MoNPD
Louise Masese	FSNAU/FAO
Key resource persons for specific modules during the training	
Agnes Makanyi	UNICEF – WASH
Woki Munyui	UNICEF – Education
Imran Ravji	UNICEF – Health
Awil Gureh	UNICEF – Health
Maryan Yussuf Fahiye	UNICEF - Health
Safia Jibril	UNICEF – CP
Abdirashid Hashi Abdi	UNICEF – GF
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	Hawo Abdi Duale
Enumerator	Deqa Jamac Cise
Sketch mapper	Abdisalan Muse Ali

Appendix C. Estimates of Sampling Errors

The sample of respondents selected in the North West Zone 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 an 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 unweighted counts of denominators for each indicator.

Sampling errors are calculated for indicators of primary interest, for the national level, for urban and rural areas, and for the regions. One of the indicators is based on households, 8 selected indicators are based on household members, 20 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. Tables SE.2 to SE.7 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, Northeast Zone, 2011

MICS4 Indicator		Base Population
HOUSEHOLDS		
3.12	Household availability of insecticide-treated nets (ITNs)	All households
HOUSEHOLD MEMBERS		
4.1	Use of improved drinking water sources	All household members
4.3	Use of improved sanitation	All household members
7.5	Secondary school net attendance ratio (adjusted)	Children of secondary school age
8.2	Child labour	Children age 5-14 years
9.18	Prevalence of children with one or both parents dead	Children age 0-17 years
9.19	School attendance of orphans	Children age 10-14 years who have lost both parents
9.20	School attendance of non-orphans	Children age 10-14 years, whose parents are alive, and who are living with at least one parent
8.5	Violent discipline	Children age 2-14 years
WOMEN		
-	Pregnant women	Women age 15-49 years
3.19	Pregnant women sleeping under insecticide-treated nets (ITNs)	Pregnant women
3.20	Intermittent preventive treatment for malaria	Women age 15-49 years with a live birth in the 2 years preceding the survey
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
8.12	Prevalence of female genital mutilation/cutting (FGM/C) among women	Women age 15-49 years
9.2	Comprehensive knowledge about HIV	Women age 15-24 years

	prevention among young people	
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 who have heard of HIV
9.6	Women who have been tested for HIV and know the results	Women age 15-49 years
8.13	Prevalence of female genital mutilation/cutting (FGM/C) among girls	Girls age 0-14 years
UNDER-5s		
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 12-23 months
-	Received polio immunization	Children age 12-23 months
-	Received DPT immunization	Children age 12-23 months
-	Received measles immunization	Children age 12-23 months
-	Diarrhoea in the previous 2 weeks	Children under age 5
-	Illness with a cough in the previous 2 weeks	Children under age 5
-	Fever in last two 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
3.15	Children under age 5 sleeping under insecticide-treated nets (ITNs)	Children under age 5
3.18	Anti-malarial treatment of children under age 5	Children under age 5 reported to have had fever 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

Table SE.2: Sampling errors: Northeast Zone

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Northeast Zone, 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*
HOUSEHOLDS										
Household availability of insecticide-treated nets (ITNs)	3.12	0.301	0.010	0.032	2.171	1.473	4,785	4,785	0.282	0.321
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.519	0.016	0.031	4.907	2.215	28,537	4,785	0.487	0.551
Use of improved sanitation	4.3	0.797	0.013	0.016	4.886	2.210	28,537	4,785	0.771	0.823
Secondary school net attendance ratio (adjusted)	7.5	0.149	0.009	0.063	1.811	1.346	2,580	2,598	0.130	0.168
Child labour	8.2	0.262	0.009	0.035	4.544	2.132	10,302	10,323	0.243	0.280
Prevalence of children with one or both parents dead	9.18	0.127	0.006	0.045	5.017	2.240	16,853	16,883	0.116	0.139
School attendance of orphans	9.19	0.312	0.019	0.060	0.100	0.316	63	63	0.275	0.349
School attendance of non-orphans	9.20	0.569	0.016	0.028	3.291	1.814	3,241	3,249	0.538	0.601
Violent discipline	8.5	0.752	0.007	0.009	1.079	1.039	13,478	4,059	0.738	0.766
WOMEN										
Pregnant women	-	0.134	0.005	0.041	1.409	1.187	5,492	5,492	0.123	0.144
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.214	0.016	0.073	1.025	1.013	716	715	0.183	0.245
Intermittent preventive treatment for malaria	3.20	0.016	0.007	0.472	1.326	1.152	371	376	0.001	0.030
Early childbearing	5.2	0.203	0.014	0.069	1.249	1.118	1,021	1,021	0.175	0.231
Contraceptive prevalence	5.3	0.026	0.004	0.139	1.640	1.281	3,179	3,175	0.019	0.033
Unmet need	5.4	0.114	0.005	0.048	0.939	0.969	3,179	3,175	0.103	0.125
Antenatal care coverage - at least once by skilled personnel	5.5a	0.242	0.011	0.046	1.051	1.025	1,531	1,527	0.220	0.265
Antenatal care coverage – at least four times by any provider	5.5b	0.033	0.005	0.148	1.139	1.067	1,531	1,527	0.023	0.043
Skilled attendant at delivery	5.7	0.385	0.015	0.039	1.425	1.194	1,531	1,527	0.355	0.414
Institutional deliveries	5.8	0.127	0.009	0.073	1.178	1.085	1,531	1,527	0.108	0.145
Caesarean section	5.9	0.021	0.003	0.158	0.813	0.902	1,531	1,527	0.014	0.028
Literacy rate among young women	7.1	0.369	0.013	0.036	1.696	1.302	2,212	2,214	0.342	0.395
Marriage before age 18	8.7	0.381	0.008	0.022	1.246	1.116	4,301	4,299	0.364	0.398
Polygyny	8.9	0.198	0.008	0.042	1.414	1.189	3,179	3,175	0.181	0.215
Prevalence of female genital	8.12	0.980	0.002	0.002	1.227	1.108	5,492	5,492	0.976	0.984

Table SE.2: Sampling errors: Northeast Zone

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Northeast Zone, 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*
mutilation/cutting (FGM/C) among women										
Comprehensive knowledge about HIV prevention among young people	9.2	0.097	0.009	0.088	1.826	1.351	2,212	2,214	0.080	0.114
Knowledge of mother- to-child transmission of HIV	9.3	0.447	0.011	0.024	2.578	1.606	5,492	5,492	0.425	0.468
Accepting attitudes towards people living with HIV	9.4	0.086	0.006	0.069	2.014	1.419	4,531	4,541	0.074	0.098
Women who have been tested for HIV and know the results	9.6	0.021	0.002	0.109	1.403	1.185	5,492	5,492	0.016	0.025
Prevalence of female genital mutilation/cutting (FGM/C) among girls	8.13	0.306	0.80	0.026	1.760	1.330	5,813	5,806	0.290	1.000
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.048	0.009	0.189	0.864	0.930	481	480	0.030	0.066
Age-appropriate breastfeeding	2.14	0.182	0.010	0.054	1.061	1.030	1,649	1,650	0.162	0.201
Tuberculosis immunization coverage	-	0.230	0.016	0.068	1.086	1.042	787	787	0.199	0.261
Received polio immunization	-	0.097	0.011	0.118	1.172	1.082	784	784	0.074	0.119
Received DPT immunization	-	0.094	0.010	0.109	0.962	0.981	783	783	0.074	0.115
Received measles immunization	-	0.254	0.019	0.074	1.443	1.201	781	781	0.217	0.292
Diarrhoea in the previous 2 weeks	-	0.103	0.006	0.057	1.752	1.324	4,714	4,714	0.091	0.115
Illness with a cough in the previous 2 weeks	-	0.049	0.003	0.070	1.168	1.081	4,714	4,714	0.042	0.055
Fever in last two weeks	-	0.105	0.006	0.055	1.685	1.298	4,714	4,714	0.093	0.117
Oral rehydration therapy with continued feeding	3.8	0.239	0.019	0.079	0.945	0.972	486	484	0.201	0.277
Antibiotic treatment of suspected pneumonia	3.10	0.485	0.033	0.069	1.009	1.004	229	228	0.419	0.552
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.253	0.011	0.044	3.023	1.739	4,689	4,689	0.231	0.275
Anti-malarial treatment of children under age 5	3.18	0.087	0.011	0.132	0.819	0.905	495	495	0.064	0.110
Support for learning	6.1	0.575	0.015	0.026	1.928	1.389	2,038	2,040	0.545	0.606
Attendance to early childhood education	6.7	0.017	0.003	0.186	1.222	1.105	2,038	2,040	0.011	0.023

Table SE.3: Sampling errors: Urban areas

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Northeast Zone, 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*
HOUSEHOLDS										
Household availability of insecticide-treated nets (ITNs)	3.12	0.343	0.013	0.037	2.252	1.501	2,967	3,104	0.317	0.368
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.607	0.016	0.026	3.298	1.816	18,242	3,104	0.576	0.639
Use of improved sanitation	4.3	0.907	0.008	0.009	2.203	1.484	18,242	3,104	0.892	0.923
Secondary school net attendance ratio (adjusted)	7.5	0.206	0.013	0.062	1.826	1.351	1,745	1,826	0.180	0.231
Child labour	8.2	0.224	0.011	0.050	4.863	2.205	6,558	6,861	0.202	0.246
Prevalence of children with one or both parents dead	9.18	0.131	0.007	0.053	4.740	2.177	10,699	11,194	0.117	0.144
School attendance of orphans	9.19	*	*	*	*	*	37	39	*	*
School attendance of non-orphans	9.20	0.664	0.015	0.022	2.172	1.474	2,076	2,172	0.635	0.694
Violent discipline	8.5	0.753	0.009	0.012	1.098	1.048	8,512	2,638	0.736	0.771
WOMEN										
Pregnant women	-	0.130	0.006	0.047	1.223	1.106	3,563	3,688	0.118	0.143
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.235	0.019	0.080	0.937	0.968	456	472	0.197	0.273
Intermittent preventive treatment for malaria	3.20	0.020	0.009	0.472	1.362	1.167	292	302	0.001	0.039
Early childbearing	5.2	0.201	0.018	0.089	1.382	1.175	663	686	0.165	0.237
Contraceptive prevalence	5.3	0.029	0.005	0.175	1.884	1.372	2,019	2,090	0.019	0.039
Unmet need	5.4	0.119	0.007	0.055	0.869	0.932	2,019	2,090	0.106	0.132
Antenatal care coverage - at least once by skilled personnel	5.5a	0.306	0.016	0.052	1.179	1.086	955	988	0.274	0.338
Antenatal care coverage – at least four times by any provider	5.5b	0.043	0.007	0.155	1.048	1.023	955	988	0.029	0.056
Skilled attendant at delivery	5.7	0.468	0.019	0.041	1.440	1.200	955	988	0.429	0.506
Institutional deliveries	5.8	0.172	0.013	0.077	1.232	1.110	955	988	0.145	0.199
Caesarean section	5.9	0.030	0.005	0.166	0.856	0.925	955	988	0.020	0.041
Literacy rate among young women	7.1	0.435	0.015	0.035	1.451	1.205	1,457	1,508	0.404	0.466
Marriage before age 18	8.7	0.381	0.010	0.027	1.322	1.150	2,769	2,866	0.361	0.402
Polygyny	8.9	0.197	0.010	0.050	1.295	1.138	2,019	2,090	0.177	0.217
Prevalence of female genital mutilation/cutting (FGM/C) among women	8.12	0.980	0.003	0.003	1.302	1.141	3,563	3,688	0.975	0.985
Comprehensive knowledge about HIV prevention among young people	9.2	0.111	0.011	0.096	1.718	1.311	1,457	1,508	0.090	0.132
Knowledge of mother- to-child transmission of HIV	9.3	0.472	0.014	0.029	2.827	1.681	3,563	3,688	0.444	0.499
Accepting attitudes towards people living with HIV	9.4	0.098	0.008	0.080	2.210	1.486	3,043	3,149	0.082	0.114

Table SE.3: Sampling errors: Urban areas

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Northeast Zone, 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	
Women who have been tested for HIV and know the results	9.6	0.027	0.003	0.118	1.422	1.193	3,563	3,688	0.020	0.033
Prevalence of female genital mutilation/cutting (FGM/C) among girls	8.13	0.330	1.0600	0.032	1.938	1.392	3,705	3,834	0.309	1.000
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.046	0.011	0.243	0.863	0.929	291	304	0.024	0.068
Age-appropriate breastfeeding	2.14	0.174	0.012	0.067	1.008	1.004	1,025	1,070	0.151	0.197
Tuberculosis immunization coverage	-	0.251	0.021	0.083	1.172	1.083	490	511	0.209	0.292
Received polio immunization	-	0.102	0.015	0.143	1.176	1.084	488	509	0.073	0.131
Received DPT immunization	-	0.114	0.014	0.119	0.930	0.965	487	508	0.087	0.141
Received measles immunization	-	0.279	0.027	0.096	1.781	1.334	485	506	0.225	0.332
Diarrhoea in the previous 2 weeks	-	0.097	0.007	0.074	1.760	1.326	2,908	3,036	0.082	0.111
Illness with a cough in the previous 2 weeks	-	0.045	0.004	0.090	1.136	1.066	2,908	3,036	0.037	0.052
Fever in last two weeks	-	0.105	0.008	0.074	1.965	1.402	2,908	3,036	0.089	0.120
Oral rehydration therapy with continued feeding	3.8	0.249	0.024	0.097	0.914	0.956	281	293	0.201	0.298
Antibiotic treatment of suspected pneumonia	3.10	0.578	0.042	0.072	0.960	0.980	129	135	0.494	0.661
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.289	0.013	0.046	2.597	1.612	2,894	3,021	0.262	0.316
Anti-malarial treatment of children under age 5	3.18	0.120	0.016	0.137	0.803	0.896	305	318	0.087	0.152
Support for learning	6.1	0.579	0.017	0.030	1.640	1.281	1,273	1,329	0.544	0.613
Attendance to early childhood education	6.7	0.025	0.005	0.197	1.317	1.147	1,273	1,329	0.015	0.035

Table SE.4: Sampling errors: Rural areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Northeast Zone, 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*
HOUSEHOLDS										
Household availability of insecticide-treated nets (ITNs)	3.12	0.233	0.015	0.065	2.145	1.464	1,818	1,681	0.203	0.263
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.361	0.034	0.095	8.547	2.924	10,295	1,681	0.293	0.430
Use of improved sanitation	4.3	0.601	0.033	0.055	7.632	2.763	10,295	1,681	0.535	0.667
Secondary school net attendance ratio (adjusted)	7.5	0.031	0.007	0.229	1.295	1.138	835	772	0.017	0.045
Child labour	8.2	0.328	0.017	0.051	4.392	2.096	3,745	3,462	0.294	0.361
Prevalence of children with one or both parents dead	9.18	0.121	0.010	0.083	5.462	2.337	6,153	5,689	0.101	0.142
School attendance of orphans	9.19	*	*	*	*	*	26	24	*	*
School attendance of non-orphans	9.20	0.399	0.033	0.083	4.967	2.229	1,165	1,077	0.333	0.466
Violent discipline	8.5	0.750	0.012	0.016	1.041	1.020	4,966	1,421	0.726	0.773
WOMEN										
Pregnant women	-	0.139	0.011	0.076	1.688	1.299	1,929	1,804	0.118	0.160
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.177	0.027	0.151	1.190	1.091	260	243	0.123	0.231
Intermittent preventive treatment for malaria	3.20	0.000	0.000	0.000	NA	NA	79	74	0.000	0.000
Early childbearing	5.2	0.206	0.022	0.108	1.018	1.009	358	335	0.161	0.251
Contraceptive prevalence	5.3	0.021	0.005	0.222	1.155	1.075	1,160	1,085	0.012	0.031
Unmet need	5.4	0.104	0.010	0.092	1.070	1.035	1,160	1,085	0.085	0.123
Antenatal care coverage - at least once by skilled personnel	5.5a	0.137	0.013	0.094	0.753	0.868	576	539	0.112	0.163
Antenatal care coverage – at least four times by any provider	5.5b	0.017	0.007	0.420	1.608	1.268	576	539	0.003	0.031
Skilled attendant at delivery	5.7	0.247	0.024	0.097	1.675	1.294	576	539	0.199	0.295
Institutional deliveries	5.8	0.052	0.011	0.210	1.300	1.140	576	539	0.030	0.074
Caesarean section	5.9	0.006	0.003	0.567	0.969	0.984	576	539	0.000	0.012
Literacy rate among young women	7.1	0.241	0.025	0.104	2.395	1.548	755	706	0.191	0.291
Marriage before age 18	8.7	0.380	0.014	0.036	1.113	1.055	1,532	1,433	0.353	0.407
Polygyny	8.9	0.199	0.015	0.077	1.590	1.261	1,160	1,085	0.169	0.230
Prevalence of female genital mutilation/cutting (FGM/C) among	8.12	0.981	0.003	0.003	1.089	1.044	1,929	1,804	0.974	0.987

Table SE.4: Sampling errors: Rural areas

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Northeast Zone, 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*
women										
Comprehensive knowledge about HIV prevention among young people	9.2	0.071	0.014	0.198	2.108	1.452	755	706	0.043	0.099
Knowledge of mother- to-child transmission of HIV	9.3	0.400	0.017	0.043	2.200	1.483	1,929	1,804	0.366	0.434
Accepting attitudes towards people living with HIV	9.4	0.061	0.008	0.126	1.446	1.203	1,488	1,392	0.046	0.077
Women who have been tested for HIV and know the results	9.6	0.010	0.003	0.282	1.444	1.202	1,929	1,804	0.004	0.016
Prevalence of female genital mutilation/cutting (FGM/C) among girls	8.13	0.262	1.189	0.045	1.443	1.201	2,108	1,972	0.238	1.000
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.051	0.015	0.301	0.855	0.924	189	176	0.020	0.082
Age-appropriate breastfeeding	2.14	0.195	0.018	0.090	1.130	1.063	624	580	0.160	0.230
Tuberculosis immunization coverage	-	0.196	0.023	0.116	0.897	0.947	297	276	0.150	0.241
Received polio immunization	-	0.087	0.018	0.210	1.156	1.075	296	275	0.051	0.124
Received DPT immunization	-	0.062	0.015	0.239	1.033	1.016	296	275	0.032	0.091
Received measles immunization	-	0.215	0.023	0.106	0.846	0.920	296	275	0.169	0.260
Diarrhoea in the previous 2 weeks	-	0.114	0.010	0.089	1.705	1.306	1,806	1,678	0.094	0.134
Illness with a cough in the previous 2 weeks	-	0.055	0.006	0.110	1.184	1.088	1,806	1,678	0.043	0.068
Fever in last two weeks	-	0.106	0.008	0.080	1.272	1.128	1,806	1,678	0.089	0.122
Oral rehydration therapy with continued feeding	3.8	0.225	0.030	0.133	0.977	0.988	206	191	0.165	0.285
Antibiotic treatment of suspected pneumonia	3.10	0.366	0.052	0.143	1.078	1.038	100	93	0.261	0.470
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.196	0.019	0.099	3.958	1.990	1,795	1,668	0.157	0.235
Anti-malarial treatment of children under age 5	3.18	0.034	0.013	0.391	0.942	0.970	190	177	0.007	0.060
Support for learning	6.1	0.570	0.028	0.050	2.322	1.524	765	711	0.513	0.626
Attendance to early childhood education	6.7	0.004	0.002	0.572	0.983	0.992	765	711	0.000	0.009

Table SE.5: Sampling errors: Bari region

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Northeast Zone, Somalia 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***
HOUSEHOLDS										
Household availability of insecticide-treated nets (ITNs)	3.12	0.196	0.012	0.064	2.127	1.458	2,152	2,149	0.171	0.221
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.423	0.025	0.058	5.331	2.309	12,834	2,149	0.374	0.472
Use of improved sanitation	4.3	0.801	0.019	0.024	5.078	2.253	12,834	2,149	0.762	0.840
Secondary school net attendance ratio (adjusted)	7.5	0.182	0.015	0.083	1.975	1.405	1,280	1,289	0.152	0.212
Child labour	8.2	0.245	0.014	0.057	4.904	2.215	4,590	4,589	0.217	0.273
Prevalence of children with one or both parents dead	9.18	0.132	0.009	0.065	4.726	2.174	7,420	7,422	0.115	0.149
School attendance of orphans	9.19	*	*	*	*	*	27	27	*	*
School attendance of non-orphans	9.20	0.664	0.020	0.030	2.656	1.630	1,475	1,480	0.624	0.704
Violent discipline	8.5	0.799	0.011	0.013	1.269	1.126	5,896	1,817	0.777	0.820
WOMEN										
Pregnant women	-	0.122	0.007	0.059	1.272	1.128	2,586	2,586	0.108	0.137
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.092	0.020	0.215	1.407	1.186	302	301	0.053	0.132
Intermittent preventive treatment for malaria	3.20	0.011	0.008	0.697	0.949	0.974	169	170	0.000	0.027
Early childbearing	5.2	0.151	0.016	0.108	0.946	0.972	457	456	0.119	0.184
Contraceptive prevalence	5.3	0.024	0.004	0.188	1.235	1.111	1,450	1,448	0.015	0.032
Unmet need	5.4	0.101	0.007	0.068	0.750	0.866	1,450	1,448	0.087	0.114
Antenatal care coverage - at least once by skilled personnel	5.5a	0.262	0.017	0.064	0.928	0.963	646	642	0.228	0.295
Antenatal care coverage – at least four times by any provider	5.5b	0.041	0.009	0.211	1.232	1.110	646	642	0.024	0.059
Skilled attendant at delivery	5.7	0.421	0.025	0.059	1.630	1.277	646	642	0.371	0.471
Institutional deliveries	5.8	0.172	0.016	0.091	1.108	1.053	646	642	0.141	0.204
Caesarean section	5.9	0.027	0.005	0.188	0.636	0.798	646	642	0.017	0.038
Literacy rate among young women	7.1	0.436	0.022	0.049	1.967	1.403	1,044	1,045	0.393	0.479
Marriage before age 18	8.7	0.361	0.013	0.035	1.367	1.169	1,998	1,997	0.336	0.387
Polygyny	8.9	0.185	0.010	0.055	0.982	0.991	1,450	1,448	0.164	0.205
Prevalence of female genital mutilation/cutting (FGM/C) among women	8.12	0.978	0.003	0.003	0.952	0.975	2,586	2,586	0.972	0.983

Table SE.5: Sampling errors: Bari region

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Northeast Zone, Somalia 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***
Comprehensive knowledge about HIV prevention among young people	9.2	0.095	0.011	0.117	1.496	1.223	1,044	1,045	0.073	0.118
Knowledge of mother- to-child transmission of HIV	9.3	0.480	0.014	0.030	2.141	1.463	2,586	2,586	0.451	0.509
Accepting attitudes towards people living with HIV	9.4	0.075	0.007	0.095	1.627	1.275	2,192	2,195	0.061	0.090
Women who have been tested for HIV and know the results	9.6	0.025	0.004	0.158	1.632	1.278	2,586	2,586	0.017	0.033
Prevalence of female genital mutilation/cutting (FGM/C) among girls	8.13	0.328	1.267	0.039	1.830	1.353	2,520	2,514	0.302	1.000
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.062	0.017	0.281	0.992	0.996	194	192	0.027	0.097
Age-appropriate breastfeeding	2.14	0.168	0.013	0.077	0.820	0.905	692	690	0.142	0.194
Tuberculosis immunization coverage	-	0.239	0.022	0.091	0.840	0.917	321	321	0.195	0.283
Received polio immunization	-	0.106	0.017	0.162	0.986	0.993	318	318	0.071	0.140
Received DPT immunization	-	0.100	0.014	0.138	0.663	0.814	317	317	0.072	0.127
Received measles immunization	-	0.277	0.026	0.095	1.099	1.048	317	317	0.224	0.330
Diarrhoea in the previous 2 weeks	-	0.116	0.010	0.086	1.889	1.375	1,952	1,949	0.096	0.136
Illness with a cough in the previous 2 weeks	-	0.062	0.006	0.094	1.128	1.062	1,952	1,949	0.050	0.073
Fever in last two weeks	-	0.121	0.009	0.077	1.594	1.263	1,952	1,949	0.103	0.140
Oral rehydration therapy with continued feeding	3.8	0.187	0.023	0.124	0.784	0.885	226	224	0.140	0.233
Antibiotic treatment of suspected pneumonia	3.10	0.531	0.044	0.084	0.935	0.967	121	119	0.442	0.620
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.146	0.015	0.103	3.502	1.871	1,943	1,940	0.116	0.176
Anti-malarial treatment of children under age 5	3.18	0.087	0.014	0.166	0.612	0.782	237	235	0.058	0.115
Support for learning	6.1	0.629	0.023	0.036	1.860	1.364	844	844	0.584	0.675
Attendance to early childhood education	6.7	0.017	0.005	0.267	1.055	1.027	844	844	0.008	0.027

Table SE.6: Sampling errors:

Nugal Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Northeast Zone, Somalia 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***
HOUSEHOLDS										
Household availability of insecticide-treated nets (ITNs)	3.12	0.341	0.016	0.048	1.125	1.061	947	942	0.308	0.374
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.444	0.033	0.074	4.122	2.030	5,862	942	0.378	0.509
Use of improved sanitation	4.3	0.761	0.022	0.029	2.521	1.588	5,862	942	0.717	0.805
Secondary school net attendance ratio (adjusted)	7.5	0.136	0.014	0.104	0.914	0.956	541	541	0.108	0.165
Child labour	8.2	0.266	0.016	0.059	2.610	1.615	2,085	2,084	0.234	0.297
Prevalence of children with one or both parents dead	9.18	0.102	0.011	0.110	4.844	2.201	3,496	3,490	0.080	0.125
School attendance of orphans	9.19	*	*	*	*	*	8	8	*	*
School attendance of non-orphans	9.20	0.587	0.031	0.052	2.744	1.656	709	705	0.525	0.648
Violent discipline	8.5	0.812	0.013	0.016	0.871	0.933	2,737	816	0.787	0.838
WOMEN										
Pregnant women	-	0.134	0.013	0.097	1.557	1.248	1,077	1,070	0.108	0.160
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.200	0.025	0.126	0.557	0.746	143	142	0.149	0.250
Intermittent preventive treatment for malaria	3.20	0.037	0.023	0.625	1.584	1.259	106	108	0.000	0.082
Early childbearing	5.2	0.224	0.031	0.138	1.171	1.082	215	214	0.162	0.285
Contraceptive prevalence	5.3	0.045	0.010	0.224	1.497	1.224	635	631	0.025	0.065
Unmet need	5.4	0.121	0.010	0.080	0.553	0.744	635	631	0.101	0.140
Antenatal care coverage - at least once by skilled personnel	5.5a	0.318	0.020	0.062	0.595	0.771	332	331	0.278	0.358
Antenatal care coverage – at least four times by any provider	5.5b	0.032	0.011	0.326	1.171	1.082	332	331	0.011	0.053
Skilled attendant at delivery	5.7	0.372	0.023	0.063	0.775	0.880	332	331	0.325	0.419
Institutional deliveries	5.8	0.098	0.015	0.151	0.812	0.901	332	331	0.068	0.127
Caesarean section	5.9	0.017	0.007	0.410	0.984	0.992	332	331	0.003	0.032
Literacy rate among young women	7.1	0.364	0.024	0.067	1.135	1.065	450	448	0.316	0.413
Marriage before age 18	8.7	0.419	0.016	0.039	0.930	0.965	841	836	0.386	0.452
Polygyny	8.9	0.226	0.021	0.091	1.519	1.232	635	631	0.185	0.267
Prevalence of female genital mutilation/cutting (FGM/C) among women	8.12	0.974	0.004	0.005	0.820	0.906	1,077	1,070		

Table SE.6: Sampling errors:

Nugal Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Northeast Zone, Somalia 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	
										0.965	0.983
Comprehensive knowledge about HIV prevention among young people	9.2	0.072	0.010	0.134	0.624	0.790	450	448	0.053	0.091
Knowledge of mother- to-child transmission of HIV	9.3	0.423	0.020	0.047	1.748	1.322	1,077	1,070	0.383	0.463
Accepting attitudes towards people living with HIV	9.4	0.082	0.011	0.140	1.521	1.233	871	870	0.059	0.105
Women who have been tested for HIV and know the results	9.6	0.026	0.004	0.139	0.557	0.746	1,077	1,070	0.019	0.034
Prevalence of female genital mutilation/cutting (FGM/C) among girls	8.13	0.322	1.658	0.051	1.398	1.182	1,116	1,111	0.289	1.000
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.065	0.020	0.299	0.576	0.759	93	93	0.026	0.105
Age-appropriate breastfeeding	2.14	0.204	0.023	0.112	1.161	1.078	365	364	0.158	0.249
Tuberculosis immunization coverage	-	0.221	0.030	0.134	0.920	0.959	182	181	0.161	0.280
Received polio immunization	-	0.126	0.027	0.214	1.194	1.093	183	182	0.072	0.180
Received DPT immunization	-	0.130	0.026	0.203	1.106	1.052	183	182	0.077	0.182
Received measles immunization	-	0.263	0.043	0.164	1.729	1.315	182	181	0.177	0.350
Diarrhoea in the previous 2 weeks	-	0.122	0.013	0.108	1.606	1.267	993	989	0.096	0.148
Illness with a cough in the previous 2 weeks	-	0.056	0.007	0.124	0.899	0.948	993	989	0.042	0.070
Fever in last two weeks	-	0.136	0.016	0.118	2.155	1.468	993	989	0.104	0.168
Oral rehydration therapy with continued feeding	3.8	0.181	0.020	0.113	0.339	0.582	121	121	0.140	0.222
Antibiotic treatment of suspected pneumonia	3.10	0.439	0.066	0.150	0.966	0.983	56	56	0.308	0.571
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.278	0.019	0.067	1.709	1.307	987	983	0.241	0.316
Anti-malarial treatment of children under age 5	3.18	0.093	0.023	0.245	0.835	0.914	135	136	0.047	0.139
Support for learning	6.1	0.610	0.027	0.045	1.286	1.134	417	416	0.555	0.664
Attendance to early childhood education	6.7	0.039	0.011	0.279	1.326	1.151	417	416	0.017	0.061

Table SE.7: Sampling errors: Mudug

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Northeast Zone, 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***
HOUSEHOLDS										
Household availability of insecticide-treated nets (ITNs)	3.12	0.4133	0.0182	0.044	2.306	1.519	1,686	1,694	0.377	0.450
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.688	0.018	0.026	2.470	1.572	9,841	1,694	0.653	0.723
Use of improved sanitation	4.3	0.813	0.018	0.022	3.544	1.883	9,841	1,694	0.777	0.848
Secondary school net attendance ratio (adjusted)	7.5	0.103	0.015	0.140	1.742	1.320	759	768	0.074	0.132
Child labour	8.2	0.280	0.015	0.055	4.252	2.062	3,627	3,650	0.249	0.311
Prevalence of children with one or both parents dead	9.18	0.135	0.010	0.074	5.174	2.275	5,936	5,971	0.115	0.155
School attendance of orphans	9.19	*	*	*	*	*	28	28	*	*
School attendance of non-orphans	9.20	0.425	0.025	0.058	2.622	1.619	1,057	1,064	0.376	0.474
Violent discipline	8.5	0.661	0.011	0.017	0.815	0.903	4,845	1,426	0.638	0.683
WOMEN										
Pregnant women	-	0.149	0.010	0.065	1.364	1.168	1,830	1,836	0.130	0.169
Pregnant women sleeping under insecticide-treated nets (ITNs)	3.19	0.357	0.029	0.082	1.002	1.001	271	272	0.299	0.415
Intermittent preventive treatment for malaria	3.20	0.000	0.000					98	0.000	0.000
Early childbearing	5.2	0.257	0.029	0.112	1.516	1.231	350	351	0.200	0.315
Contraceptive prevalence	5.3	0.018	0.005	0.283	1.601	1.265	1,094	1,096	0.008	0.028
Unmet need	5.4	0.127	0.011	0.089	1.268	1.126	1,094	1,096	0.104	0.149
Antenatal care coverage - at least once by skilled personnel	5.5a	0.174	0.019	0.109	1.395	1.181	553	554	0.136	0.212
Antenatal care coverage – at least four times by any provider	5.5b	0.023	0.006	0.271	0.959	0.979	553	554	0.011	0.036
Skilled attendant at delivery	5.7	0.349	0.023	0.064	1.233	1.110	553	554	0.304	0.394
Institutional deliveries	5.8	0.092	0.014	0.150	1.251	1.119	553	554	0.064	0.119
Caesarean section	5.9	0.016	0.005	0.307	0.832	0.912	553	554	0.006	0.025
Literacy rate among young women	7.1	0.274	0.017	0.063	1.072	1.035	717	721	0.239	0.308
Marriage before age 18	8.7	0.386	0.012	0.031	0.894	0.946	1,462	1,466	0.362	0.410
Polygyny	8.9	0.199	0.014	0.068	1.252	1.119	1,094	1,096	0.172	0.226
Prevalence of female genital mutilation/cutting (FGM/C) among women	8.12	0.988	0.003	0.003	1.048	1.024	1,830	1,836	0.982	0.993

Table SE.7: Sampling errors: Mudug

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Northeast Zone, 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***
Comprehensive knowledge about HIV prevention among young people	9.2	0.115	0.019	0.168	2.640	1.625	717	721	0.077	0.154
Knowledge of mother- to-child transmission of HIV	9.3	0.414	0.018	0.043	2.379	1.542	1,830	1,836	0.378	0.449
Accepting attitudes towards people living with HIV	9.4	0.104	0.013	0.120	2.478	1.574	1,468	1,476	0.079	0.129
Women who have been tested for HIV and know the results	9.6	0.012	0.003	0.229	1.201	1.096	1,830	1,836	0.007	0.018
Prevalence of female genital mutilation/cutting (FGM/C) among girls	8.13	0.271	1.194	0.044	1.574	1.254	2,176	2,181	0.247	1.000
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.026	0.011	0.410	0.870	0.933	194	195	0.005	0.047
Age-appropriate breastfeeding	2.14	0.185	0.016	0.088	1.042	1.021	592	596	0.152	0.217
Tuberculosis immunization coverage	-	0.225	0.025	0.113	1.057	1.028	283	285	0.174	0.276
Received polio immunization	-	0.067	0.016	0.232	1.094	1.046	282	284	0.036	0.098
Received DPT immunization	-	0.066	0.016	0.242	1.167	1.080	282	284	0.034	0.098
Received measles immunization	-	0.223	0.026	0.117	1.108	1.053	281	283	0.171	0.276
Diarrhoea in the previous 2 weeks	-	0.079	0.007	0.090	1.221	1.105	1,768	1,776	0.065	0.093
Illness with a cough in the previous 2 weeks	-	0.030	0.004	0.131	0.941	0.970	1,768	1,776	0.022	0.038
Fever in last two weeks	-	0.070	0.006	0.080	0.862	0.928	1,768	1,776	0.059	0.081
Oral rehydration therapy with continued feeding	3.8	0.374	0.044	0.119	1.164	1.079	139	139	0.285	0.463
Antibiotic treatment of suspected pneumonia	3.10	0.430	0.056	0.130	0.661	0.813	53	53	0.318	0.542
Children under age 5 sleeping under insecticide-treated nets (ITNs)	3.15	0.358	0.020	0.056	3.059	1.749	1,758	1,766	0.318	0.398
Anti-malarial treatment of children under age 5	3.18	0.080	0.014	0.171	0.309	0.556	123	124	0.052	0.107
Support for learning	6.1	0.498	0.025	0.050	1.949	1.396	777	780	0.448	0.548
Attendance to early childhood education	6.7	0.005	0.002	0.505	0.986	0.993	777	780	0.000	0.010

Appendix D: Data Quality Tables

Table DQ.1: Age distribution of household population

Single-year age distribution of household population by sex, Northeast Zone, Somalia 2011

	Males		Females	
	Number	Percent	Number	Percent
0	431	3.1	400	2.7
1	400	2.9	422	2.9
2	559	4.0	497	3.4
3	538	3.9	540	3.7
4	525	3.8	517	3.5
5	637	4.6	589	4.0
6	674	4.9	645	4.4
7	569	4.1	568	3.9
8	626	4.5	582	4.0
9	487	3.5	486	3.3
10	618	4.5	506	3.4
11	367	2.6	297	2.0
12	485	3.5	476	3.2
13	368	2.7	459	3.1
14	384	2.8	479	3.3
15	381	2.7	228	1.6
16	334	2.4	288	2.0
17	240	1.7	250	1.7
18	375	2.7	351	2.4
19	208	1.5	181	1.2
20	319	2.3	409	2.8
21	120	0.9	130	0.9
22	155	1.1	243	1.7
23	114	0.8	185	1.3
24	87	0.6	146	1.0
25	230	1.7	410	2.8
26	94	0.7	133	0.9
27	85	0.6	194	1.3
28	112	0.8	210	1.4
29	51	0.4	99	0.7
30	370	2.7	497	3.4
31	32	0.2	43	0.3
32	91	0.7	128	.9
33	41	0.3	74	0.5
34	41	0.3	58	0.4
35	276	2.0	333	2.3
36	53	0.4	99	0.7
37	34	0.2	84	0.6
38	85	0.6	140	1.0
39	29	0.2	72	0.5
40	542	3.9	414	2.8
41	26	0.2	32	0.2
42	63	0.5	72	0.5
43	32	0.2	31	0.2
44	13	0.1	17	0.1
45	229	1.7	158	1.1
46	28	0.2	18	0.1
47	21	0.1	13	0.1
48	48	0.3	48	0.3
49	22	0.2	30	0.2
50	344	2.5	273	1.9
51	15	0.1	23	0.2
52	26	0.2	88	0.6
53	19	0.1	56	0.4
54	16	0.1	45	0.3
55	87	0.6	115	0.8
56	22	0.2	36	0.2
57	9	0.1	9	0.1
58	14	0.1	34	0.2
59	1	0.0	8	0.1
60	240	1.7	211	1.4
61	8	0.1	15	0.1
62	14	0.1	10	0.1
63	6	0.0	11	0.1
64	6	0.0	4	0.0
65	40	0.3	52	0.4
66	1	0.0	4	0.0
67	9	0.1	6	0.0
68	4	0.0	10	0.1
69	4	0.0	3	0.0
70	148	1.1	149	1.0
71	5	0.0	3	0.0
72	6	0.0	17	0.1
73	1	0.0	6	0.0
74	4	0.0	4	0.0
75	25	0.2	27	0.2
76	2	0.0	4	0.0
77	2	0.0	3	0.0
78	2	0.0	4	0.0
79	1	0.0	2	0.0
80+	129	0.9	154	1.1
DK/Missing	4	0.0	4	0.0
Total	13865	100.0	14670	100.0

Figure DQ.1: Number of household population by single ages, Northeast Zone, Somalia 2011

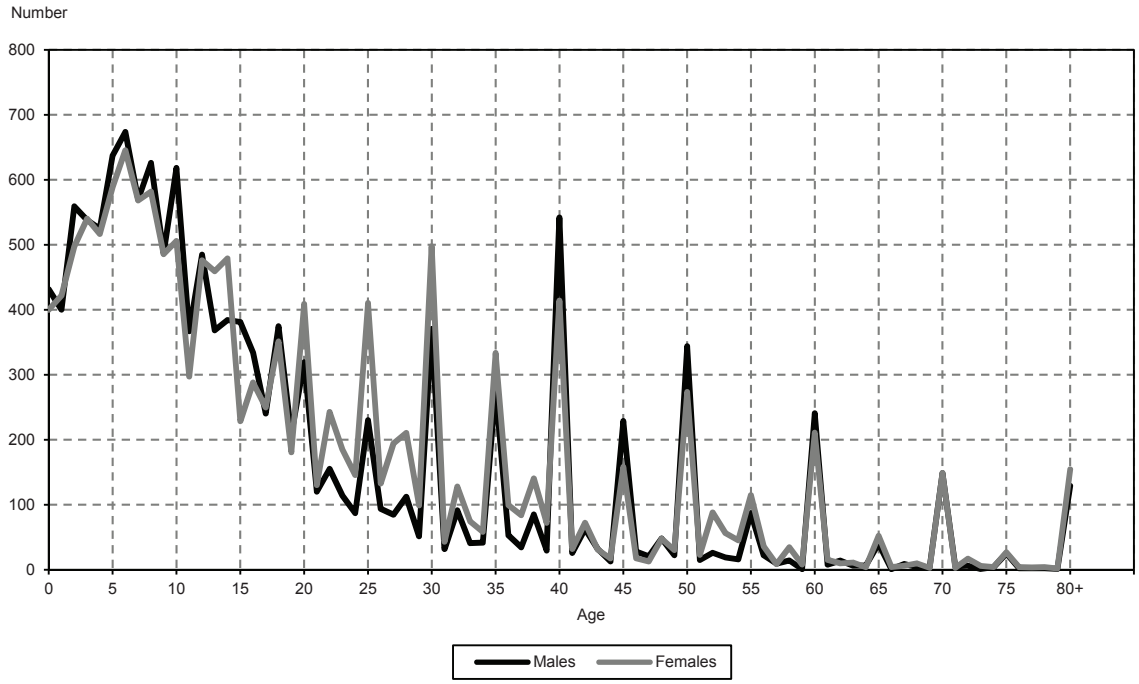

Table DQ.2: Age distribution of eligible and interviewed women

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, Northeast Zone, Somalia 2011

	Household population of women age 10-54 years	Interviewed women age 15-49 years		Percentage of eligible women interviewed (Completion rate)
	Number	Number	Percent	
Age				
10-14	2,217	na	na	na
15-19	1,298	1,168	21.3	90.0
20-24	1,113	1,020	18.6	91.7
25-29	1,046	1,012	18.5	96.7
30-34	801	775	14.2	96.8
35-39	729	706	12.9	96.9
40-44	566	543	9.9	96.0
45-49	266	252	4.6	94.7
50-54	486	na	na	na
Total (15-49)	5,819	5,476	100.0	94.1
Ratio of 50-54 to 45-49	1.82			

na: not applicable

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, Northeast Zone, Somalia 2011

	Household population of children 0-7 years	Interviewed under-5 children		Percentage of eligible under-5s interviewed (Completion rate)
	Number	Number	Percent	
Age				
0	831	815	17.3	98.1
1	822	796	16.9	96.8
2	1,056	1,040	22.0	98.4
3	1,078	1,057	22.4	98.1
4	1,041	1,009	21.4	96.9
5	1,227	na	na	na
6	1,319	na	na	na
7	1,138	na	na	na
Total (0-4)	4,829	4,717	100.0	97.7
Ratio of 5 to 4	1.18			

na: not applicable

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, Northeast Zone, Somalia 2011

	Household population of women age 15-49 years		Interviewed women age 15-49 years		Percent of eligible women interviewed (Completion rates)
	Number	Percent	Number	Percent	
Region					
Bari	2,746	47.2	2,578	47.1	93.9
Nugal	1,181	20.3	1,075	19.6	91.0
Mudug	1,892	32.5	1,823	33.3	96.4
Area					
Urban	3,775	64.9	3,525	64.4	93.4
Rural	2,043	35.1	1,951	35.6	95.5
Household size					
1-3	682	11.7	665	12.1	97.5
4-6	2,262	38.9	2,169	39.6	95.9
7+	2,874	49.4	2,642	48.2	91.9
Education of household head					
None	4,125	70.9	3,897	71.2	94.5
Primary	698	12.0	641	11.7	91.9
Secondary +	964	16.6	909	16.6	94.2
Wealth index quintiles					
Poorest	1,035	17.8	997	18.2	96.3
Second	1,138	19.6	1,080	19.7	94.9
Middle	1,159	19.9	1,086	19.8	93.7
Fourth	1,194	20.5	1,123	20.5	94.0
Richest	1,292	22.2	1,191	21.7	92.1
Total	5,819	100.0	5,476	100.0	94.1

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, Northeast Zone, Somalia 2011

	Household population of under-5 children		Interviewed under-5 children		Percent of eligible under-5s with completed under-5 questionnaires (Completion rates)
	Number	Percent	Number	Percent	
Region					
Bari	1,990	41.2	1,954	41.4	98.2
Nugal	1,033	21.4	994	21.1	96.2
Mudug	1,805	37.4	1,769	37.5	98.0
Area					
Urban	2,979	61.7	2,902	61.5	97.4
Rural	1,850	38.3	1,815	38.5	98.1
Household size					
1-3	360	7.4	347	7.4	96.6
4-6	2,095	43.4	2,052	43.5	98.0
7+	2,374	49.2	2,317	49.1	97.6
Education of household head					
None	3,376	69.9	3,307	70.1	98.0
Primary	608	12.6	593	12.6	97.6
Secondary +	809	16.8	781	16.6	96.5
Wealth index quintiles					
Poorest	1,018	21.1	1,007	21.3	98.9
Second	978	20.3	967	20.5	98.8
Middle	944	19.5	921	19.5	97.6
Fourth	1,001	20.7	964	20.4	96.3
Richest	887	18.4	858	18.2	96.8
Total	4,829	100.0	4,717	100.0	97.7

Table DQ.6: Completeness of reporting

Percentage of observations that are missing information for selected questions and indicators, Northeast Zone, Somalia 2011

Questionnaire and type of missing information	Reference group	Percent with missing/incomplete information[a]	Number of cases
Household			
Age	All household members	0.0	28,604
Starting time of interview	All households interviewed	4.3	4,785
Ending time of interview	All households interviewed	3.1	4,785
Women			
Woman's date of birth	All women age 15-49		5,492
Only month		31.6	
Both month and year		5.2	
Age at first marriage/union	All ever married women age 15-49 with year of first marriage not known	5.9	3,866
Starting time of interview	All women interviewed	4.3	5,492
Ending time of interview	All women interviewed	3.3	5,492
Under-5			
Date of birth	All under-5 children		
Only month		2.3	4,714
Both month and year		0.2	4,714
Starting time of interview	All under-5 children	6.2	4,714
Ending time of interview	All under-5 children	3.7	4,714

[a] Includes "Don't know" responses

Table DQ.7: Observation of bed nets and places for hand washing

Percentage of bed nets in all households interviewed observed by the interviewer, and percentage of places for handwashing observed by the interviewer in all interviewed households, Northeast Zone, Somalia 2011

	Percentage of bed nets observed by interviewer	Total number of bed nets	Place for handwashing					
				Not observed				
			Observed	Not in the dwelling, plot or yard	No permission to see	Other	Total	Number of households interviewed
Region								
Bari	89.8	666	33.4	60.8	2.4	2.8	100.0	2,149
Nugal	90.7	619	27.9	68.5	0.5	2.9	100.0	942
Mudug	93.6	1,494	35.7	60.6	1.5	1.6	100.0	1,694
Area								
Urban	92.1	2,122	39.2	56.5	1.6	2.3	100.0	3,104
Rural	91.2	657	22.0	72.8	1.8	2.5	100.0	1,681
Wealth index quintiles								
Poorest	91.3	236	11.9	83.4	2.4	1.8	100.0	997
Second	91.1	373	20.4	73.6	2.1	3.0	100.0	968
Middle	90.6	559	32.0	62.9	1.4	3.2	100.0	933
Fourth	93.5	774	42.4	53.7	1.4	2.2	100.0	968
Richest	91.9	837	60.9	35.7	1.2	1.7	100.0	919
Total	91.8	2,779	33.1	62.2	1.7	2.4	100.0	4,785

Table DQ.8: 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, Northeast Zone, Somalia 2011

	Woman has health card					
	Woman does not have health card	Seen by the interviewer (1)	Not seen by the interviewer (2)	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
Region							
Bari	70.1	7.2	20.2	2.5	100.0	26.1	642
Nugal	68.3	8.5	18.1	5.1	100.0	31.8	331
Mudug	79.1	4.9	14.6	1.4	100.0	25.0	554
Area							
Urban	68.4	7.8	20.9	2.9	100.0	27.2	988
Rural	81.3	4.5	12.1	2.2	100.0	27.0	539
Wealth index quintiles							
Poorest	79.5	2.4	14.7	3.4	100.0	14.0	293
Second	75.8	7.3	15.0	1.9	100.0	32.9	314
Middle	72.1	8.1	16.2	3.7	100.0	33.3	297
Fourth	70.8	5.3	21.1	2.8	100.0	20.2	318
Richest	66.9	9.8	21.6	1.6	100.0	31.3	305
Total	73.0	6.6	17.7	2.7	100.0	27.2	1,527

Table DQ.9: 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, Northeast Zone, Somalia 2011

	Child does not have vaccination card		Child has vaccination card					
	Had vaccination card previously	Never had vaccination card	Seen by the interviewer (1)	Not seen by the interviewer (2)	Don't know/Missing	Total	Percent of vaccination cards seen by the interviewer (1)/(1+2)*100	Number of children under age 5
Region								
Bari	1.9	65.5	10.9	20.6	1.0	100.0	34.6	1,949
Nugal	1.4	65.1	12.4	20.8	0.2	100.0	37.4	989
Mudug	1.4	71.8	5.6	20.1	1.0	100.0	21.9	1,776
Area								
Urban	1.3	65.3	10.3	22.3	0.8	100.0	31.6	3,036
Rural	2.2	72.3	7.4	17.2	0.9	100.0	30.0	1,678
Child's age								
0	0.5	75.3	12.7	10.9	0.6	100.0	53.7	851
1	1.8	64.9	13.0	19.3	1.0	100.0	40.2	787
2	2.0	64.9	9.0	23.4	0.7	100.0	27.7	1,024
3	2.0	64.9	7.4	24.7	1.1	100.0	23.0	1,070
4	1.8	69.9	5.6	22.0	0.7	100.0	20.3	982
Total	1.6	67.8	9.2	20.5	0.8	100.0	31.1	4,714

Table DQ.10: 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, Northeast Zone, Somalia 2011

	Mother in the household					Mother not in the household					
	Mother interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Other person interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Other person interviewed	Total	Number of children under 5
Age											
0	94.9	0.0	0.4	0.0	0.1	0.0	4.6	0.0	0.0	100.0	831
1	90.6	0.0	0.9	0.0	0.0	0.1	8.3	0.1	0.0	100.0	822
2	89.6	0.2	0.4	0.0	0.0	0.3	9.2	0.3	0.1	100.0	1,056
3	85.4	0.0	0.6	0.0	0.3	0.3	13.2	0.3	0.0	100.0	1,078
4	87.3	0.0	0.5	0.1	0.1	0.6	11.1	0.2	0.1	100.0	1,041
Total	89.3	0.0	0.5	0.0	0.1	0.3	9.5	0.2	0.0	100.0	4,829

Table DQ.11: 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, Northeast Zone, Somalia 2011

	Percent of households where correct selection was performed	Number of households with 2 or more children age 2-14 years
Region		
Bari	74.5	1,477
Nugal	75.0	668
Mudug	74.7	1,177
Area		
Urban	73.2	2,181
Rural	77.6	1,141
Number of children age 2-14 years		
2	80.2	812
3	78.1	789
4	75.2	706
5+	67.3	1,015
Total	74.7	3,322

Table DQ.12: 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, Northeast Zone, Somalia 2011

	Currently attending																		
			Primary school Grade									Secondary school Grade							
	Not attending school	Preschool	1	2	3	4	5	6	7	8	Missing / Answer inconsistent	1	2	3	4	Higher than secondary	Missing/DK/ Answer inconsistent	Total	Number of household members
Age at beginning of school year																			
5	90.1	2.7	4.0	1.9	0.9	0.2	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	100.0	1,253
6	75.6	3.5	8.3	8.5	2.6	1.0	0.2	0.1	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,490
7	61.5	3.6	7.7	14.2	8.1	3.0	0.7	0.2	0.4	0.2	0.2	0.0	0.0	0.0	0.1	0.0	0.2	100.0	1,210
8	56.3	1.9	6.3	14.2	11.4	5.5	2.4	0.7	0.8	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.1	100.0	972
9	47.2	1.5	4.9	12.9	14.4	9.7	5.7	2.3	0.8	0.3	0.2	0.0	0.0	0.0	0.0	0.0	0.1	100.0	1,125
10	42.2	1.3	2.7	10.0	14.1	14.2	8.2	4.1	2.2	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.3	100.0	664
11	43.5	0.7	2.3	7.5	10.2	10.5	10.7	8.2	3.8	1.7	0.0	0.2	0.2	0.2	0.0	0.0	0.3	100.0	960
12	41.7	0.6	2.2	4.5	9.6	10.3	11.4	9.4	6.0	3.1	0.1	0.3	0.3	0.2	0.1	0.0	0.1	100.0	847
13	46.8	0.4	0.9	2.3	3.7	7.9	6.9	8.1	9.4	9.7	0.0	1.8	0.8	0.8	0.3	0.0	0.3	100.0	710
14	42.7	0.3	1.3	1.8	3.2	6.5	5.5	8.8	10.1	10.0	0.0	3.8	2.7	1.4	1.6	0.0	0.3	100.0	687
15	47.3	0.2	0.9	1.1	3.4	3.8	3.7	5.0	7.4	13.8	0.0	3.4	4.5	3.3	1.3	0.3	0.5	100.0	595
16	55.0	0.2	1.1	0.9	1.6	2.8	2.6	3.1	4.2	7.4	0.0	4.8	7.4	4.1	3.9	0.3	0.7	100.0	571
17	63.3	0.0	1.3	0.7	1.4	1.7	1.7	3.2	2.3	6.7	0.0	2.7	4.7	5.2	3.9	0.7	0.4	100.0	727
18	67.6	0.0	0.8	0.3	0.3	1.8	1.1	1.3	2.6	6.9	0.5	1.5	3.8	4.3	4.8	1.8	0.8	100.0	389
19	78.0	0.1	0.3	0.3	0.1	0.3	1.0	0.7	1.5	2.3	0.0	0.9	2.5	3.1	4.7	2.9	1.1	100.0	728
20	82.6	0.0	0.0	0.0	0.4	2.0	0.4	0.8	0.4	1.2	0.0	0.4	3.1	2.3	2.7	3.1	0.4	100.0	250
21	88.0	0.0	0.0	0.5	0.0	0.2	0.5	0.2	0.7	0.8	0.0	0.5	1.7	1.9	2.6	1.9	0.2	100.0	398
22	90.4	0.0	0.0	0.0	0.0	0.3	1.0	0.0	0.7	1.0	0.0	1.3	1.0	1.3	1.0	2.0	0.0	100.0	299
23	94.0	0.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.4	0.8	1.3	0.9	0.8	0.0	100.0	233
24	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	640

Table DQ.13: 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, Northeast Zone, Somalia 2011

	Children Ever Born			Children Living			Children Deceased			
	Number of sons ever born	Number of daughters ever born	Sex ratio at birth	Number of sons living	Number of daughters living	Sex ratio	Number of deceased sons	Number of deceased daughters	Sex ratio	Number of women
Age										
15-19	88	73	1.21	78	67	1.16	10	6	1.67	1,193
20-24	586	561	1.04	555	535	1.04	31	26	1.19	1,021
25-29	1,591	1,388	1.15	1,510	1,326	1.14	81	62	1.31	1,021
30-34	1,680	1,492	1.13	1,604	1,432	1.12	76	60	1.27	765
35-39	1,920	1,700	1.13	1,833	1,618	1.13	87	82	1.06	707
40-44	1,563	1,393	1.12	1,491	1,326	1.12	72	67	1.07	547
45-49	637	593	1.07	602	565	1.07	35	28	1.25	238
Total	8,065	7,200	1.12	7,673	6,869	1.11	392	331	1.26	5,492

Table DQ.14: Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted, unimputed), Northeast Zone, Somalia 2011

	Number of births			Percent with complete birth date[a]			Sex ratio at birth[b]			Calendar year ratio[c]		
	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total	Living	Dead	Total
Year of birth												
2011	396	19	415	99.5	100.0	99.5	124.2	111.9	123.6	na	na	na
2010	895	41	936	99.4	97.4	99.3	96.9	213.2	100.2	na	na	na
2009	897	29	925	98.9	96.3	98.8	112.9	123.3	113.2	96.6	66.9	95.3
2008	961	45	1,006	97.3	97.6	97.3	111.7	103.4	111.4	105.3	124.4	106.0
2007	928	44	971	98.3	97.8	98.3	103.9	95.2	103.5	97.2	103.6	97.5
2006	949	39	988	98.0	94.8	97.9	110.4	86.6	109.3	94.4	95.9	94.5
2005	1,082	38	1,119	96.7	97.4	96.7	107.5	73.0	106.1	113.5	86.4	112.3
2004	957	49	1,005	96.7	95.8	96.7	105.3	160.2	107.4	95.6	114.6	96.4
2003	920	47	967	96.6	91.3	96.3	114.0	87.2	112.5	101.8	118.2	102.5
2002	850	31	881	97.1	100.0	97.2	106.3	119.9	106.7	101.0	82.2	100.2
2001	764	28	792	97.9	92.4	97.7	116.4	255.2	119.4	98.9	93.2	98.7
2000	695	30	724	97.2	93.5	97.1	127.7	232.6	130.7	103.9	101.7	103.8
1999	573	30	603	97.0	96.8	97.0	107.6	147.9	109.3	91.5	118.1	92.6
1998	558	21	579	96.5	90.4	96.3	97.3	108.5	97.6	101.6	90.4	101.1
1997	525	17	542	97.3	100.0	97.4	92.1	146.7	93.5	106.7	75.1	105.3
1996	426	24	450	96.5	96.0	96.5	130.5	97.5	128.4	91.2	119.9	92.4
1995	410	23	433	96.8	100.0	96.9	139.7	76.9	135.3	116.9	101.7	116.0
1994	275	21	296	95.5	100.0	95.8	121.0	50.0	113.8	78.1	90.2	78.9
1993	294	24	318	96.0	100.0	96.3	127.8	120.5	127.2	120.4	144.3	122.0
1992	213	12	225	96.7	100.0	96.9	143.0	293.4	148.2	89.3	71.0	88.1
1991	183	10	194	97.8	90.6	97.4	138.9	26.3	128.1	8.5	10.9	8.6
2007–2011	4,075	177	4,253	98.6	97.6	98.5	107.9	123.4	108.5	na	na	na
2002–2006	4,757	203	4,960	97.0	95.5	96.9	108.6	102.1	108.4	na	na	na
1997–2001	3,115	126	3,241	97.2	94.4	97.1	109.0	173.9	110.9	na	na	na
1992–1996	1,619	104	1,723	96.3	99.1	96.5	132.1	96.0	129.6	na	na	na
<1992	680	63	743	96.7	96.8	96.7	138.7	106.8	135.6	na	na	na
DK/missing	312	50	362	0.0	0.0	22.5	122.7	154.4	126.6	na	na	na
Total	14,559	723	15,282	95.3	89.9	95.6	112.4	119.8	112.7	na	na	na

na: Not Applicable

Interviews were conducted from March to May, July/August and December 2011

[a] Both month and year of birth given

[b] (Bm/Bf) x 100, where Bm and Bf are the numbers of male and female births, respectively

[c] (2 x Bt/(Bt-1 + Bt+1)) x 100, where Bt is the number of births in calendar year t

Table DQ.15: Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0–6 days, by 5-year periods preceding the survey (weighted, unimputed), Northeast Zone, Somalia 2011

	Number of years preceding the survey				
	0–4	5–9	10–14	15–19	Total 0–19
Age at death (days)					
0	17	16	6	7	46
1	6	6	10	5	27
2	12	3	3	2	20
3	10	9	4	4	27
4	2	3	0	2	7
5	1	2	4	1	8
6	0	2	0	2	4
7	3	4	3	1	11
8	0	1	1	0	2
9	1	0	0	1	2
10	0	1	0	0	1
11	0	1	0	0	1
12	2	1	0	0	3
13	1	1	0	0	2
15	1	1	0	1	3
16	0	0	1	0	1
18	0	2	0	0	2
20	2	3	5	0	10
21	1	1	0	0	2
23	1	0	0	0	1
24	0	1	0	0	1
25	3	1	0	0	4
26	0	1	0	0	1
27	0	0	0	1	1
28	1	0	0	0	1
30	1	0	0	0	1
Total 0–30 days	65	60	37	28	190
Percent early neonatal[a]	73.5	68.3	72.8	85.2	73.4

[a] <7 days / <31 days

Table DQ.16: Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, by 5-year periods preceding the survey (weighted, unimputed), Northeast Zone, Somalia 2011

	Number of years preceding the survey				Total 0–19
	0–4	5–9	10–14	15–19	
Age at death (months)					
0	65	60	37	28	190
1	7	9	4	7	27
2	9	12	11	4	37
3	6	16	9	6	37
4	8	14	7	1	30
5	3	4	3	1	11
6	10	11	9	4	34
7	4	10	5	6	25
8	0	2	4	1	7
9	4	10	3	5	22
10	0	1	2	0	3
11	0	2	0	0	2
12	2	5	6	5	18
14	0	3	2	0	5
16	0	0	2	0	2
17	0	0	0	1	1
18	0	0	1	0	1
19	1	0	0	0	1
20	0	1	1	0	2
Total 0–11 months	116	152	94	62	424
Percent neonatal[a]	56.2	39.7	39.4	44.1	44.8

[a] <1 month / <1 year

Appendix E. Northeast Zone MICS4 Indicators: Numerators and Denominators

MICS4 INDICATOR		Module[18]	Numerator	Denominator	MDG[19]
2. NUTRITION					
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 children under age 5	
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[20]	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[21] 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[22] or more, according to breastfeeding status, during the previous day	Total number of children age 6-23 months	

18 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.

19 MDG indicators as of February 2010

20 Infants receiving breast milk, and not receiving any other fluids or foods, with the exception of oral rehydration solution, vitamins, mineral supplements and medicines

21 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)

22 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

MICS4 INDICATOR		Module[18]	Numerator	Denominator	MDG[19]
2.14	Age-appropriate breastfeeding	BF	Number of children age 0-23 months appropriately fed[23] 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	
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	
2.19	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	
3. CHILD HEALTH					
3.1	Tuberculosis immunization coverage[16]	IM	Number of children age 12-23 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 12-23 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 12-23 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 12-23 months who received measles vaccine before their first birthday	Total number of children age 12-23 months	MDG 4.3
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[24] 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	

23 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

24 See MICS4 manual for a detailed description

MICS4 INDICATOR		Module[18]	Numerator	Denominator	MDG[19]
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	
3.12	Household availability of insecticide-treated nets (ITNs)[25]	TN	Number of households with at least one insecticide treated net (ITN)	Total number of households	
3.13	Households protected by a vector control method	TN - IR	Number of households with at least one insecticide-treated net (ITN) or that received spraying through an IRS[26] campaign in the last 12 months preceding the survey	Total number of households	
3.14	Children under age 5 sleeping under any type of mosquito net	TN	Number of children under age 5 who slept under any type of mosquito net the previous night	Total number of children under age 5	
3.15	Children under age 5 sleeping under insecticide-treated nets (ITNs)	TN	Number of children under age 5 who slept under an insecticide-treated mosquito net (ITN) the previous night	Total number of children under age 5	MDG 6.7
3.16	Malaria diagnostics usage	ML	Number of children under age 5 reported to have had fever in the previous 2 weeks who had a finger or heel stick for malaria testing	Total number of children under age 5 reported to have had fever in the previous 2 weeks	
3.17	Anti-malarial treatment of children under age 5 the same or next day	ML	Number of children under age 5 reported to have had fever in the previous 2 weeks who were treated with any anti-malarial drug within the same or next day of onset of symptoms	Total number of children under age 5 reported to have had fever in the previous 2 weeks	
3.18	Anti-malarial treatment of children under age 5	ML	Number of children under age 5 reported to have had fever in the previous 2 weeks who received any antimalarial treatment	Total number of children under age 5 reported to have had fever in the previous 2 weeks	MDG 6.8
3.19	Pregnant women sleeping under insecticide-treated nets (ITNs)	TN	Number of pregnant women who slept under an insecticide-treated net (ITN) the previous night	Total number of pregnant women	

25 An ITN is (a) a factory treated net which does not require any treatment, (b) a pretreated net obtained within the past 12 months, or (c) a net that has been soaked with or dipped in insecticide within the past 12 months

26 Indoor residual spraying

MICS4 INDICATOR		Module[18]	Numerator	Denominator	MDG[19]
3.20	Intermittent preventive treatment for malaria	MN	Number of women age 15-49 years who received at least 2 doses of SP/Fansidar to prevent malaria during antenatal care visits for their last pregnancy leading to a live birth in the 2 years preceding the survey	Total number of women age 15-49 years who have had a live birth in the 2 years preceding the survey	
4. WATER AND SANITATION					
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	
4.5	Place for handwashing	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	
5. REPRODUCTIVE HEALTH					
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[27]	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

27 See MICS4 manual for a detailed description

MICS4 INDICATOR		Module[18]	Numerator	Denominator	MDG[19]
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	
6. CHILD DEVELOPMENT					
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	
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	

MICS4 INDICATOR		Module[18]	Numerator	Denominator	MDG[19]
7. LITERACY AND EDUCATION					
7.1	Literacy rate among young women [M]	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
8. CHILD PROTECTION					
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	
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	

MICS4 INDICATOR		Module[18]	Numerator	Denominator	MDG[19]
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	
8.11	Approval for female genital mutilation/ cutting (FGM/C)	FG	Number of women age 15-49 years favouring the continuation of FGM/C	Total number of women age 15-49 years who have heard of FGM/C	
8.12	Prevalence of female genital mutilation/ cutting (FGM/C) among women	FG	Number of women age 15-49 years who report to have undergone any form of FGM/C	Total number of women age 15-49 years	
8.13	Prevalence of female genital mutilation/ cutting (FGM/C) among girls	FG	Number of girls age 0-14 years who have undergone any form of FGM/C, as reported by mothers	Total number of girls age 0-14 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	

MICS4 INDICATOR		Module[18]	Numerator	Denominator	MDG[19]
9. HIV/AIDS, SEXUAL BEHAVIOUR AND ORPHANS					
9.1	Comprehensive knowledge about HIV prevention	HA	Number of women age 15-49 years who correctly identify two ways of preventing HIV infection[28], 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[29], 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[29] 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[30] 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	
9.8	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	
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	
9.17	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	

28 Using condoms and limiting sex to one faithful, uninfected partner

29 Transmission during pregnancy, during delivery, and by breastfeeding

30 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

MICS4 INDICATOR		Module[18]	Numerator	Denominator	MDG[19]
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
10. ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY					
MT.1	Exposure to mass media	MT	Number of women age 15-49 years who, at least once a week, read a newspaper or magazine, listen to the radio, and watch television	Total number of women age 15-49 years	
MT.2	Use of computers	MT	Number of young women age 15-24 years who used a computer during the last 12 months	Total number of women age 15-24 years	
MT.3	Use of internet	MT	Number of young women age 15-24 who used the internet during the last 12 months	Total number of women age 15-24 years	

Appendix F. MICS4 Questionnaires

MICS

HOUSEHOLD QUESTIONNAIRE

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 ..... 11 Rural Sedentary ..... 21 Nomadic 22	HH7. ZONE: NORTH WEST ZONE ..... 1 HH7A. REGION: MAROODI JEEX/SAHIL ..... 11 AWDAL ..... 12 TOGDHEER ..... 13 SOOL ..... 14 SANAAG 15

WE ARE FROM MOPIC. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 20 – 30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

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 (*specify*) 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 woman's questionnaires completed: ___ ___
HH14. Number of children under age 5: ___ ___	HH15. Number of under-5 questionnaires completed: ___ ___
HH16. Field edited by (Name and number): Name_____ ___ ___	HH17. Data entry clerk (Name and number): Name_____ ___ ___

HH18.
Record the time:

Hour .....__ __

Minutes .....__ __

HOUSEHOLD LISTING FORM — HL

FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES HERE, STARTING WITH THE HEAD OF THE HOUSEHOLD.

List the head of the household in line 01. List all 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?

If yes, complete listing for questions HL2-HL4. Then, ask questions starting with HL6 for each person at a time.

Use an additional questionnaire if all rows in the household listing form have been used.

		*For all household members age **0-6** AND women age **14-16** or **50-51***	*For women age **15-49***	*For children age **5-14***	*For children under age **5***	*For all household members*	*For children age **0-17** years*			
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	HL6. HOW OLD IS (*name*)? *Record in completed years* *If age is 95 or above, record '95'*	HL5. WHAT IS (*name*)'S DATE OF BIRTH? *If unknown, probe for documents or use the calendar of events* *Reconcile with HL6* 98 DK 9998 DK	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*	HL10. DID (*name*) STAY HERE LAST NIGHT? 1 Yes 2 No	HL11. IS (*name*)'S NATURAL MOTHER ALIVE? 1 Yes 2 No⇘ HL13 8 DK⇘ HL13	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⇘ Next Line 8 DK⇘ 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	Age	Month	Year	15-49	Mother	Mother	Y N	Y N DK	Mother	Y N DK	Father
01		0 1	1 2	__ __	__ __	__ __ __ __	01	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
02		__ __	1 2	__ __	__ __	__ __ __ __	02	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
03		__ __	1 2	__ __	__ __	__ __ __ __	03	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
04		__ __	1 2	__ __	__ __	__ __ __ __	04	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
05		__ __	1 2	__ __	__ __	__ __ __ __	05	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
06		__ __	1 2	__ __	__ __	__ __ __ __	06	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
07		__ __	1 2	__ __	__ __	__ __ __ __	07	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
08		__ __	1 2	__ __	__ __	__ __ __ __	08	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
09		__ __	1 2	__ __	__ __	__ __ __ __	09	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
10		__ __	1 2	__ __	__ __	__ __ __ __	10	__ __	__ __	1 2	1 2 8	__ __	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	HL6. HOW OLD IS (*name*)? *Record in completed years* *If age is 95 or above, record '95'*	HL5. WHAT IS (*name*)'S DATE OF BIRTH? *If unknown, probe for documents or use the calendar of events* *Reconcile with HL6* 98 DK 9998 DK		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*	HL10. DID (*name*) STAY HERE LAST NIGHT? 1 Yes 2 No	HL11. IS (*name*)'S NATURAL MOTHER ALIVE? 1 Yes 2 No⇘ HL13 8 DK⇘ HL13	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⇘ Next Line 8 DK⇘ 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	Age	Month	Year	15-49	Mother	Mother	Y N	Y N DK	Mother	Y N DK	Father
11		__ __	1 2	__ __	__ __	__ __ __ __	11	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
12		__ __	1 2	__ __	__ __	__ __ __ __	12	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
13		__ __	1 2	__ __	__ __	__ __ __ __	13	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
14		__ __	1 2	__ __	__ __	__ __ __ __	14	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
15		__ __	1 2	__ __	__ __	__ __ __ __	15	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __

Tick here if additional questionnaire used ☐

Probe for additional household members. Probe especially for any infants or small children not listed, and others who may not be members of the family (such as servants, friends) but who usually live in the household. Insert names of additional members in the household list and complete form accordingly.

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 age 5, 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.
You should now have a separate questionnaire for each eligible woman and each child under five in the household.

** Codes for HL3: Relationship to head of household:*

01 Head	06 Parent	11 Niece / Nephew
02 Wife / Husband	07 Parent-In-Law	12 Other relative
03 Son / Daughter	08 Brother / Sister	13 Adopted / Foster / Stepchild
04 Son-In-Law / Daughter-In-Law	09 Brother-In-Law / Sister-In-Law	14 Not related
05 Grandchild	10 Uncle / Aunt	98 Don't know

EDUCATION ED

For household members age **5 and above**

For household members age **5-24** *years*

ED1. *Line number*	ED2. *Name and age* — *Copy all household members from Household Listing Form, HL2 and HL6*		ED3. HAS (*name*) EVER ATTENDED FORMAL SCHOOL SUCH AS PRE-SCHOOL, PRIMARY, SECONDARY, AND HIGHER? 1 Yes 2 No ⇨ *Next Line* 8 DK ⇨ *Next Line*	ED4A WHAT IS THE HIGHEST LEVEL OF SCHOOL HAS (*name*) ATTENDED? Level: 0 Preschool 1 Primary 2 Secondary 3 Higher 8 DK *If level=0, skip to ED5*	ED4B WHAT IS THE HIGHEST GRADE (*name*) COMPLETED AT THIS LEVEL? Grade: 98 DK *If less than 1 grade, enter 00.*	ED5. DURING THE (**2010-2011**) SCHOOL YEAR, DID (*name*) ATTEND FORMAL SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No ⇨ *ED7*	ED6. DURING THIS/THAT SCHOOL YEAR, WHICH LEVEL AND GRADE IS/WAS (*name*) ATTENDING? Level: 0 Preschool 1 Primary 2 Secondary 3 Higher 8 DK *If level=0, go to ED7*	Grade/ years of schooling: 98 DK	ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS (**2009-2010**), DID (*name*) ATTEND FORMAL SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No ⇨ *Next Line* 8 DK ⇨ *Next Line*	ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND GRADE DID (*name*) ATTEND? Level: 0 Preschool 1 Primary 2 Secondary 3 Higher 8 DK *If level=0, go to Next Line*	Grade or years of schooling 98 DK
Line	Name	Age	Y N DK	Level	Grade	Yes No	Level	Grade	Y N DK	Level	Grade
01		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
02		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
03		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
04		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
05		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
06		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
07		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
08		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
09		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
10		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
11		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
12		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
13		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
14		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___
15		__ __	1 2 8	0 1 2 3 8	___ ___	1 2	0 1 2 3 8	___ ___	1 2 8	0 1 2 3 8	___ ___

NON-FORMAL EDUCATION — NF

NF1. *Does any child aged 5-17 reside in the household?*

Check household listing, column HL6, for any child 5-17 years.

☐ *Yes.* ⇨ *Copy all names, line numbers and ages of household members age 5-17 into NF2. Then, ask questions NF3 to NF17 for each member at a time. Start by filling NF2 for all the household members across the columns.*

☐ NO. ⇨*Go to next module.*

	HH member #1	HH member #2	HH member #3	HH member #4	HH member #5
NF2. *Household member's:*					
Line number (HL1)	___ ___	___ ___	___ ___	___ ___	___ ___
Name (HL2)	_____	_____	_____	_____	_____
Age (HL6)	___ ___	___ ___	___ ___	___ ___	___ ___
NF3. HAS (*name*) EVER ATTENDED NON-FORMAL EDUCATION SUCH AS KORANIC SCHOOL, ALTERNATIVE BASIC EDUCATION, VOCATIONAL TRAINING AND NON-FORMAL EDUCATION FOR YOUTH?	Yes.....1 No .....2 DK .....8 *If "No" or "DK", go to NF3 for next member. If no more members, go to next module*	Yes.....1 No .....2 DK .....8 *If "No" or "DK", go to NF3 for next member. If no more members, go to next module*	Yes .....1 No .....2 DK .....8 *If "No" or "DK", go to NF3 for next member. If no more members, go to next module*	Yes .....1 No .....2 DK .....8 *If "No" or "DK", go to NF3 for next member. If no more members, go to next module*	Yes .....1 No .....2 DK .....8 *If "No" or "DK", go to NF3 in first column of additional questionnaire for next member. If no more members, go to next module*
NF4. HAS (*name*) EVER ATTENDED KORANIC SCHOOL?	Yes.....1 No .....2 DK .....8 *If "No" or "DK", go to NF7*	Yes.....1 No .....2 DK .....8 *If "No" or "DK", go to NF7*	Yes .....1 No .....2 DK .....8 *If "No" or "DK", go to NF7*	Yes .....1 No .....2 DK .....8 *If "No" or "DK", go to NF7*	Yes .....1 No .....2 DK .....8 *If "No" or "DK", go to NF7*
NF5. IN THIS KORANIC SCHOOL, IS/WAS (*name*) TAUGHT OTHER SUBJECTS THAN THE KORAN? *Probe:* A KORANIC SCHOOL TEACHING OTHER SUBJECTS LIKE READING AND WRITING ARABIC, SOMALI, ENGLISH OR MATHEMATICS, IS SOMETIMES CALLED AN INTEGRATED KORANIC SCHOOL.	Yes.....1 No .....2 DK 8	Yes.....1 No .....2 DK 8	Yes .....1 No .....2 DK 8	Yes .....1 No .....2 DK 8	Yes .....1 No .....2 DK 8

NF6. DURING THE CURRENT 2010-2011 SCHOOL YEAR, DID (*name*) ATTEND KORANIC SCHOOL?	Yes.....1 No .....2 DK.....8	Yes.....1 No .....2 DK.....8	Yes .....1 No .....2 DK.....8	Yes .....1 No.....2 DK.....8	Yes .....1 No.....2 DK 8
NF7. HAS (*name*) EVER ATTENDED ALTERNATIVE BASIC EDUCATION? THIS EDUCATION IS SOMETIMES CALLED ABE CLASSES.	Yes.....1 No .....2 DK.....8 *If "No" or "DK", go to NF10*	Yes.....1 No .....2 DK.....8 *If "No" or "DK", go to NF10*	Yes .....1 No .....2 DK.....8 *If "No" or "DK", go to NF10*	Yes .....1 No.....2 DK.....8 *If "No" or "DK", go to NF10*	Yes .....1 No.....2 DK .....8 *If "No" or "DK", go to NF10*
NF8.HAS (*name*) COMPLETED THE ALTERNATIVE BASIC EDUCATION?	Yes.....1 No .....2 DK.....8	Yes.....1 No .....2 DK.....8	Yes .....1 No .....2 DK.....8	Yes .....1 No.....2 DK.....8	Yes .....1 No.....2 DK 8
NF9. DURING THE CURRENT 2010-2011 SCHOOL YEAR, DID (*name*) ATTEND THIS ALTERNATIVE BASIC EDUCATION/ABE?	Yes.....1 No .....2 DK.....8	Yes.....1 No .....2 DK.....8	Yes .....1 No .....2 DK.....8	Yes .....1 No.....2 DK.....8	Yes .....1 No.....2 DK 8
NF10. HAS (*name*) EVER ATTENDED NON-FORMAL EDUCATION FOR YOUTH PROGRAMME?	Yes.....1 No .....2 DK.....8 *If "No" or "DK", go to NF13*	Yes.....1 No .....2 DK.....8 *If "No" or "DK", go to NF13*	Yes .....1 No .....2 DK.....8 *If "No" or "DK", go to NF13*	Yes .....1 No.....2 DK.....8 *If "No" or "DK", go to NF13*	Yes .....1 No.....2 DK .....8 *If "No" or "DK", go to NF13*
NFNF11. HAS (NAME) COMPLETED THE EDUCATION FOR YOUTH PROGRAMME?	Yes.....1 No .....2 DK.....8	Yes.....1 No .....2 DK.....8	Yes .....1 No .....2 DK.....8	Yes .....1 No.....2 DK.....8	Yes .....1 No.....2 DK 8
NF12. DURING THE CURRENT 2010-2011 SCHOOL YEAR, DID (*name*) ATTEND THIS NON-FORMAL EDUCATION FOR YOUTH PROGRAMME?	Yes.....1 No .....2 DK.....8	Yes.....1 No .....2 DK.....8	Yes .....1 No .....2 DK.....8	Yes .....1 No.....2 DK.....8	Yes .....1 No.....2 DK 8
NF13. HAS (*name*) EVER ATTENDED VOCATIONAL TRAINING CLASSES?	Yes.....1 No .....2 DK.....8 *If "No" or "DK", go to NF16.*	Yes.....1 No .....2 DK.....8 *If "No" or "DK", go to NF16.*	Yes .....1 No .....2 DK.....8 *If "No" or "DK", go to NF16.*	Yes .....1 No.....2 DK.....8 *If "No" or "DK", go to NF16.*	Yes .....1 No.....2 DK .....8 *If "No" or "DK", go to NF16.*
NF 14. HAS (*name*) COMPLETED THE VOCATIONAL TRAINING CLASSES?	Yes.....1 No .....2 DK.....8	Yes.....1 No .....2 DK.....8	Yes .....1 No .....2 DK.....8	Yes .....1 No.....2 DK.....8	Yes .....1 No.....2 DK 8

NF15. DURING THE CURRENT 2010-2011 SCHOOL YEAR, DID (*name*) ATTEND THIS VOCATIONAL TRAINING CLASSES?	Yes.....1 No.....2 DK.....8	Yes.....1 No.....2 DK.....8	Yes.....1 No.....2 DK.....8	Yes.....1 No.....2 DK.....8	Yes.....1 No.....2 DK.....8
NF16.*Check NF4, NF7, NF10, and NF13.* *If 'yes' to at least one of them, go to NF17.* *If no or DK to* <u>*all four*</u>*, probe:* JUST TO CONFIRM, YOU HAVE MENTIONED THAT (*name*) HAS ATTENDED NON-FORMAL EDUCATION, BUT NEVER KORANIC SCHOOL, ALTERNATIVE BASIC EDUCATION, NFE FOR YOUTH, AND VOCATIONAL TRAINING. IS THAT CORRECT?	Yes ☐ *If yes, probe and write name/details of other NFE here and check with your supervisor:* __________ No ☐ *If no, reconcile information in module*	Yes ☐ *If yes, probe and write name/details of other NFE here and check with your supervisor:* __________ No ☐ *If no, reconcile information in module*	Yes ☐ *If yes, probe and write name/details of other NFE here and check with your supervisor:* __________ No ☐ *If no, reconcile information in module*	Yes ☐ *If yes, probe and write name/details of other NFE here and check with your supervisor:* __________ No ☐ *If no, reconcile information in module*	Yes ☐ *If yes, probe and write name/details of other NFE here and check with your supervisor:* __________ No ☐ *If no, reconcile information in module*
NF17.	*Go back to NF3 for next member. If no more members, go to next module*	*Go back to NF3 for next member. If no more members, go to next module*	*Go back to NF3 for next member. If no more members, go to next module*	*Go back to NF3 for next member. If no more members, go to next module*	*Go back to NF3 in first column of additional questionnaire for next member. If no more members, go to next module*
					Tick here if additional questionnaire used ☐

WATER AND SANITATION		WS
WS1. WHAT IS THE **MAIN** 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 / kiosk ..... 14 Tube Well, Borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection Roof Top ..... 52 Berkad ..... 53 Rain water catchment (Bally) ..... 54 Tanker-truck ..... 61 Cart with small tank / drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel, hole in river bed) ..... 81 Bottled water ..... 91 Other (*specify*) 96	11⇨WS6 12⇨WS6 13⇨WS6 14⇨WS3 21⇨WS3 31⇨WS3 32⇨WS3 41⇨WS3 42⇨WS3 52⇨WS3 53⇨WS3 54⇨WS3 61⇨WS3 71⇨WS3 81⇨WS3 96⇨WS3
WS2. WHAT IS THE **MAIN** SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HAND WASHING?	Piped water Piped into dwelling ..... 11 Piped into compound, yard or plot ..... 12 Piped to neighbour ..... 13 Public tap / standpipe / kiosk ..... 14 Tube Well, Borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection Roof Top ..... 52 Berkad ..... 53 Rain water catchment (Bally) ..... 54 Tanker-truck ..... 61 Cart with small tank / drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel, hole in river bed) ..... 81 Other (*specify*) 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	

WS5. WHO **USUALLY** GOES TO THIS SOURCE TO COLLECT THE WATER FOR YOUR HOUSEHOLD? *Probe:* IS THIS PERSON UNDER AGE 15? WHAT SEX?	Adult woman (age 15+ years) ..... 1 Adult man (age 15+ years) ..... 2 Female child (under 15) ..... 3 Male child (under 15) ..... 4 DK 8	
WS6. DO YOU DO ANYTHING TO THE WATER TO MAKE IT SAFER TO DRINK?	Yes ..... 1 No ..... 2 DK 8	2⇨WS8 8⇨WS8
WS7. WHAT DO YOU USUALLY DO TO MAKE THE WATER SAFER TO DRINK? *Probe:* ANYTHING ELSE? *Record all items mentioned.*	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 Wash hands before collecting water ..... G Store drinking water in a clean container with cover ..... H Use a separate clean cup with a long handle for taking water out of the container ..... I Keep animals away from the container ..... J Other (specify) _____ X DK ..... Z	
WS8. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE? *If "flush" or "pour flush", probe:* WHERE DOES IT FLUSH TO? *If necessary, ask permission to observe the facility.*	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 Bucket ..... 41 No facility, Bush, Field, Beach ..... 95 Other (*specify*) _____ 96	95⇨Next MODULE
WS9. DO YOU SHARE THIS FACILITY WITH OTHERS WHO ARE NOT MEMBERS OF YOUR HOUSEHOLD?	Yes ..... 1 No 2	2⇨Next Module
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?	Other households only (not public) ..... 1 Public facility 2	2⇨Next Module
WS11. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY, INCLUDING YOUR OWN HOUSEHOLD?	Number of households (if less than 10) 0 __ Ten or more households ..... 10 DK 98	

HOUSEHOLD CHARACTERISTICS		HC
HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	Number of rooms ..... __ __	
HC3. Main material of the dwelling floor. *Record observation.*	Natural floor Earth / Sand ..... 11 Dung ..... 12 Rudimentary floor Wood planks ..... 21 Palm / Bamboo ..... 22 Finished floor Parquet or polished wood ..... 31 Vinyl or asphalt strips ..... 32 Ceramic tiles ..... 33 Cement ..... 34 Carpet (Wall to Wall) ..... 35 Other (*specify*) _____ 96	
HC4. Main material of the roof. *Record observation.*	Natural roofing No Roof ..... 11 Thatch / Palm leaf ..... 12 Sod (Mud & Grass) ..... 13 Rudimentary Roofing Rustic mat ..... 21 Palm / Bamboo ..... 22 Wood planks ..... 23 Cardboard ..... 24 Sacks/Plastic Sheets/Cloth ..... 25 Canvas/Tent ..... 26 Finished roofing Metal/Corrugated Iron Sheets ..... 31 Wood ..... 32 Corrugated cement /Asbestos/ Cement fibre ..... 33 Ceramic tiles ..... 34 Cement ..... 35 Other (*specify*) _____ 96	
HC5. Main material of the exterior walls. *Record observation.*	Natural walls No walls ..... 11 Sticks / Palm / Trunks ..... 12 Mud ..... 13 Rudimentary walls Bamboo/Sticks with mud ..... 21 Stone with mud ..... 22 Uncovered adobe ..... 23 Plywood ..... 24 Cardboard/Carton/Tin/Plastic/Sacks/ Cloth ..... 25 Reused wood ..... 26 Canvas/Tent ..... 27 Finished walls Cement ..... 31 Stone with lime / cement ..... 32 Bricks ..... 33 Cement blocks ..... 34 Covered adobe ..... 35 Wood planks / shingles ..... 36 Other (*specify*) _____ 96	

HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD **MAINLY** USE FOR COOKING?	Electricity ..... 01 Liquefied Petroleum Gas (LPG) ..... 02 Kerosene ..... 05 Charcoal ..... 07 Wood ..... 08 Straw / Shrubs / Grass ..... 09 Animal dung ..... 10 Agricultural crop residue ..... 11 No food cooked in household .....95 Other (*specify*) _____ 96	01⇨HC8 02⇨HC8 05⇨HC8 95⇨HC8
HC7. IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS? *If 'In the house', probe*: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN?	In the house In a separate room used as kitchen ..... 1 Elsewhere in the house ..... 2 In a separate building ..... 3 Outdoors ..... 4 Other (*specify*) _____ 6	

HC8. DOES YOUR HOUSEHOLD HAVE:	Yes	No
[A] ELECTRICITY?	Electricity 1	2
[B] A RADIO?	Radio 1	2
[C] A TELEVISION?	Television.....1	2
[D] A NON-MOBILE TELEPHONE?	Non-mobile telephone.....1	2
[E] A REFRIGERATOR?	Refrigerator.....1	2
[F] A CHARCOAL STOVE/JIKO?	Charcoal stove/Jiko.....1	2
[G] A WHEEL BARROW?	Wheel barrow.....1	2
[H] A MAT?	Mat.....1	2
[I] A VACUUM FLASK?	Vacuum Flask 1	2
[J] A KEROSENE LAMP?	Kerosene lamp.....1	2
[K] A FAN?	Fan 1	2
[L] A BED?	Bed 1	2
[M] A SOFA?	Sofa 1	2
[N] A SOMALI STOOL?	Somali Stool.....1	2
[O] A SITTING CUSHION/PILLOW?	Sitting Cushion/Pillow 1	2

HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:	Yes No	
[A] A WATCH?	Watch 1 2	
[B] A MOBILE TELEPHONE?	Mobile telephone..... 1 2	
[C] A BICYCLE?	Bicycle 1 2	
[D] A MOTORCYCLE OR SCOOTER?	Motorcycle / Scooter 1 2	
[E] AN ANIMAL-DRAWN CART?	Animal drawn-cart..... 1 2	
[F] A CAR OR TRUCK?	Car / Truck..... 1 2	
[G] A BOAT WITH A MOTOR?	Boat with motor..... 1 2	
HC10. DO YOU OR SOMEONE LIVING IN THIS HOUSEHOLD OWN THIS DWELLING? *If "No", then ask:* DO YOU RENT THIS DWELLING FROM SOMEONE NOT LIVING IN THIS HOUSEHOLD? *If "Rented from someone else", circle "2". For other responses, circle "6".*	Own ..... 1 Rent..... 2 Other (Not owned or rented) 6	
HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?	Yes ..... 1 No..... 2	2⇨HC13
HC12. HOW MANY HECTARES OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN? *If number of hectares is unknown ask:* DO YOU KNOW HOW MANY (DAARB, JIBAILE, QOODI)? *Record number in measurement used by respondent and circle appropriate code* *If less than 1, record "00".* *If 95 or more, record '95'.* *If unknown, record '98'.*	Hectares ..... 1 ___ ___ Daarb..... 2 ___ ___ Jibaile ..... 3 ___ ___ Qoodi..... 4 ___ ___	
HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?	Yes ..... 1 No..... 2	2⇨ HC15

HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD HAVE? [A] CATTLE, MILK COWS, OR BULLS? [B] HORSES, DONKEYS, OR MULES? [C] GOATS? [D] SHEEP? [E] CHICKENS? [G] CAMELS? *If none, record '00'.* *If 95 or more, record '95'.* *If unknown, record '98'.*	 Cattle, milk cows, or bulls.....___ ___ Horses, donkeys, or mules.....___ ___ Goats .....___ ___ Sheep .....___ ___ Chickens.....___ ___ Camels .....___ ___	
HC15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT?	Yes ..... 1 No 2	

INSECTICIDE TREATED NETS		TN
TN1. DOES YOUR HOUSEHOLD HAVE ANY MOSQUITO NETS THAT CAN BE USED WHILE SLEEPING?	Yes ..... 1 No 2	2⇨Next Module
TN2. HOW MANY MOSQUITO NETS DOES YOUR HOUSEHOLD HAVE?	Number of nets .....___ ___	
TN3. *Ask the respondent to show you the nets in the household. If more than 3 nets, use additional questionnaire(s).*		

	1st Net	2nd Net	3rd Net
TN4. *Mosquito net observed?*	Observed .....1 Not observed 2	Observed .....1 Not observed 2	Observed .....1 Not observed.....2
TN5. *Observe or ask the brand/type of mosquito net* *If brand is unknown and you cannot observe the net, show pictures of typical net types/brands to respondent*	Long-lasting treated nets Permnet.....11 Netprotect.....12 Olyset .....13 Badbaado .....14 Daawa…… …15 Other (*specify*) _____ 16 DK brand .....18 Pre-treated nets Other(*specify*) _____ 26 DK brand .....28 Other net Other (*specify*) _____ 31 DK brand / type.....98	Long-lasting treated nets Permnet.....11 Netprotect.....12 Olyset .....13 Badbaado .....14 Daawa…… 15 Other (*specify*) _____ 16 DK brand .....18 Pre-treated nets Other(*specify*)_____ 26 DK brand .....28 Other net Other (*specify*) _____31 DK brand / type.....98	Long-lasting treated nets Permnet .....11 Netprotect .....12 Olyset.....13 Badbaado .....14 Daawa…… …15 Other (*specify*) _____ 16 DK brand .....18 Pre-treated nets Other(*specify*)_____ 26 DK brand .....28 Other net Other (*specify*) _____31 DK brand / type.....98
TN6. HOW MANY MONTHS AGO DID YOUR HOUSEHOLD GET THE MOSQUITO NET? *If less than one month, record "00"*	Months ago .....___ ___ More than 36 mo. ago ...95 DK / Not sure 98	Months ago .....___ ___ More than 36 mo. ago ...95 DK / Not sure 98	Months ago ..... ___ ___ More than 36 mo. ago....95 DK / Not sure 98
TN7. *Check TN5 for type of net*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (26-28)* ⇨ *TN9* ☐ *Else⇨ Continue*	☐ *Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (26-28)* ⇨ *TN9* ☐ *Else⇨ Continue*	☐*Long-lasting (11-18)* ⇨ *TN11* ☐ *Pre-treated (26-28)* ⇨ *TN9* ☐ *Else⇨ Continue*
TN8. WHEN YOU GOT THE NET, WAS IT ALREADY TREATED WITH AN INSECTICIDE TO KILL OR REPEL MOSQUITOES?	Yes.....1 No .....2 DK / Not sure 8	Yes.....1 No .....2 DK / Not sure 8	Yes .....1 No.....2 DK / Not sure 8
TN9. SINCE YOU GOT THE NET, WAS IT EVER SOAKED OR DIPPED IN A LIQUID TO KILL OR REPEL MOSQUITOES?	Yes.....1 No .....2 ⇨ TN11 DK / Not sure .....8 ⇨ TN11	Yes.....1 No .....2 ⇨ TN11 DK / Not sure .....8 ⇨ TN11	Yes .....1 No.....2 ⇨ TN11 DK / Not sure .....8 ⇨ TN11
TN10. HOW MANY MONTHS AGO WAS THE NET LAST SOAKED OR DIPPED? *If less than one month, record "00"*	Months ago .....___ ___ More than 24 mo. ago ...95 DK / Not sure 98	Months ago .....___ ___ More than 24 mo. ago ...95 DK / Not sure 98	Months ago ..... ___ ___ More than 24 mo. ago....95 DK / Not sure 98

TN11. DID ANYONE SLEEP UNDER THIS MOSQUITO NET LAST NIGHT?	Yes.....1 No .....2 ⇨ TN13 DK / Not sure .....8 ⇨ TN13	Yes.....1 No .....2 ⇨ TN13 DK / Not sure .....8 ⇨ TN13	Yes.....1 No.....2 ⇨ TN13 DK / Not sure .....8 ⇨ TN13
TN12. WHO SLEPT UNDER THIS MOSQUITO NET LAST NIGHT? *Record the person's line number from the household listing form* *If someone not in the household list slept under the mosquito net, record "00"*	Name _____ Line number.....___ ___ Name _____ Line number.....___ ___ Name _____ Line number.....___ ___ Name _____ Line number.....___ ___	Name _____ Line number.....___ ___ Name _____ Line number.....___ ___ Name _____ Line number.....___ ___ Name _____ Line number.....___ ___	Name _____ Line number..... ___ ___ Name _____ Line number..... ___ ___ Name _____ Line number..... ___ ___ Name _____ Line number..... ___ ___
TN13.	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 for next net. If no more nets, go to next module*	*Go back to TN4 in first column of a new questionnaire for next net. If no more nets, go to next module*
			Tick here if additional questionnaire used ☐

INDOOR RESIDUAL SPRAYING		IR
IR1. AT ANY TIME IN THE PAST 12 MONTHS, HAS ANYONE COME INTO YOUR DWELLING TO SPRAY THE INTERIOR WALLS AGAINST MOSQUITOES?	Yes ..... 1 No ..... 2 DK..... 8	 2⇨Next Module 8⇨Next Module
IR2. WHO SPRAYED THE DWELLING? *Circle all that apply.*	Government worker / program ..... A Private company ..... B Non-governmental organization ..... C Other (*specify*)_____X DK..... Z	

CHILD LABOUR — CL

To be administered for children in the household age **5-17** *years. For household members below age 5 or above age 17, fill-up CL2 and leave the rest of the row blank.*

NOW I WOULD LIKE TO ASK ABOUT ANY WORK CHILDREN IN THIS HOUSEHOLD MAY DO.

CL1. *Line number*	CL2. *Name and Age* *Copy all household members from Household Listing Form, HL2 and HL6*		CL3. DURING THE PAST WEEK, DID (*name*) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If yes*: FOR PAY IN CASH OR KIND? 1 Yes, for pay (cash or kind) 2 Yes, unpaid 3 No ⇨CL5			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? *If more than one job, include all hours at all jobs.*	CL5. DURING THE PAST WEEK, DID (*name*) FETCH WATER OR COLLECT FIREWOOD FOR HOUSEHOLD USE? 1 Yes 2 No ⇨ CL7		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 ON A FAMILY FARM OR HERDING LIVESTOCK OR FISHING OR IN A FAMILY BUSINESS OR SELLING GOODS IN THE STREET? *Include work for a business run by the child, alone or with one or more partners.* 1 Yes 2 No ⇨ CL9		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? 1 Yes 2 No ⇨Next Line		CL10. SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE SPEND DOING THESE CHORES?
			Yes		No											
Line	Name	Age	Paid	Unpaid		Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	
01		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
02		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
03		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
04		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
05		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
06		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
07		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
08		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
09		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
10		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
11		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
12		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
13		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
14		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	
15		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	

CHILD DISCIPLINE CD

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.	**Total Number of Eligible Children in the Household (CD6)**							
Last digit of household number (HH2)	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

CD8.*Record the rank number of the selected child*.....___

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.*	Name _____ Line number ..... __ __	
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. CD11. TOOK AWAY PRIVILEGES, FORBADE SOMETHING *(name)* LIKED OR DID NOT ALLOW HIM/HER TO LEAVE HOUSE.	Yes ..... 1 No 2	
CD12. EXPLAINED WHY (*name*)'S BEHAVIOR WAS WRONG.	Yes ..... 1 No 2	
CD13. SHOOK HIM/HER.	Yes ..... 1 No 2	
CD14. SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.	Yes ..... 1 No 2	
CD15. GAVE HIM/HER SOMETHING ELSE TO DO.	Yes ..... 1 No 2	
CD16. SPANKED, HIT OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.	Yes ..... 1 No 2	
CD17. HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, HAIRBRUSH, STICK OR OTHER HARD OBJECT.	Yes ..... 1 No 2	
CD18. CALLED HIM/HER DUMB, LAZY, OR ANOTHER NAME LIKE THAT.	Yes ..... 1 No 2	
CD19. HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.	Yes ..... 1 No 2	
CD20. HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.	Yes ..... 1 No 2	
CD21. BEAT HIM/HER UP, THAT IS HIT HIM/HER OVER AND OVER AS HARD AS ONE COULD.	Yes ..... 1 No 2	
CD22. DO YOU BELIEVE THAT IN ORDER TO BRING UP, RAISE, OR EDUCATE A CHILD PROPERLY, THE CHILD NEEDS TO BE PHYSICALLY PUNISHED?	Yes ..... 1 No ..... 2 Don't know / No opinion 8	

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

HH19. *Record the time.* Hour and minutes..... __ __ : __ __

HH20. *Thank the respondent for his/her cooperation and check the Household Listing Form:*

☐ *A separate Questionnaire for Individual Women has been issued for each woman age 15-49 years in the household list (HL7)*

☐ *A separate Questionnaire for Children Under Five has been issued for each child under age 5 years in the household list (HL8)*

Return to the cover page and make sure that all information is entered, including the number of eligible women (HH12 and under-5s (HH14)

Make arrangements for the administration of the remaining questionnaire(s) in this household.

___ ___

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

MICS

QUESTIONNAIRE FOR INDIVIDUAL WOMEN

WOMAN'S INFORMATION PANEL	WM
This questionnaire is to be administered to all women age 15 through 49 (see column HL7 of Household Listing Form). Fill in one form for each eligible woman	
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 MOPIC. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT ***20 - 30*** MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

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 - 30*** MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

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):	WM9. Data entry clerk (Name and number):
Name_____ ___ ___ ___	Name_____ ___ ___

WM10. *Record the time.*	Hour and minutes..... __ __ : __ __	

WOMAN'S BACKGROUND		**WB**
WB1. IN WHAT MONTH AND YEAR WERE YOU BORN? *If unknown month or year, ask for documents or use the calendar of events*	Date of birth Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	
WB2. HOW OLD ARE YOU? *Probe:* HOW OLD WERE YOU AT YOUR LAST BIRTHDAY? *Compare and correct WB1 and/or WB2 if inconsistent*	Age (in completed years) ..... __ __	
WB3. HAVE YOU EVER ATTENDED FORMAL SCHOOL OR PRESCHOOL?	Yes..... 1 No 2	2⇨WB7
WB4. WHAT IS THE HIGHEST LEVEL OF FORMAL SCHOOL YOU ATTENDED?	Preschool..... 0 Primary..... 1 Secondary..... 2 Higher 3	0⇨WB7
WB5. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL? *If less than 1 grade, enter "00"*	Grade..... __ __	
WB6. *Check WB4:* ☐*Secondary or higher ⇨ Go to Next Module* ☐*Else ⇨ Continue with WB7*		
WB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME. *Show sentence on the card to the respondent. If respondent cannot read whole sentence, probe:* CAN YOU READ PART OF THE SENTENCE TO ME?	Cannot read at all..... 1 Able to read only parts of sentence..... 2 Able to read whole sentence ..... 3 No sentence in required language _____ 4 *(specify language)* Blind / mute, visually / speech impaired 5	

ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY		MT
MT1. *Check WB7:* ☐*Question left blank (Respondent has secondary or higher education) ⇨ Continue with MT2* ☐*Able to read or no sentence in required language (codes 2, 3 or 4) ⇨ Continue with MT2* ☐*Cannot read at all or blind (codes 1 or 5) ⇨ Go to MT3*		
MT2. HOW OFTEN DO YOU READ A NEWSPAPER OR MAGAZINE: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day ..... 1 At least once a week ..... 2 Less than once a week ..... 3 Not at all 4	
MT3. DO YOU LISTEN TO THE RADIO ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day ..... 1 At least once a week ..... 2 Less than once a week ..... 3 Not at all 4	
MT4. HOW OFTEN DO YOU WATCH TELEVISION: WOULD YOU SAY THAT YOU WATCH ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day ..... 1 At least once a week ..... 2 Less than once a week ..... 3 Not at all 4	
MT5. *Check WB2: Age of respondent 15-24 years?* ☐*Yes, age 15-24 ⇨ Continue with MT6* ☐ *No, age 25-49 ⇨ Go to Next Module*		
MT6. HAVE YOU EVER USED A COMPUTER?	Yes ..... 1 No 2	2⇨MT9
MT7. HAVE YOU USED A COMPUTER FROM ANY LOCATION IN THE LAST 12 MONTHS?	Yes ..... 1 No 2	2⇨MT9
MT8. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE A COMPUTER: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day ..... 1 At least once a week ..... 2 Less than once a week ..... 3 Not at all 4	
MT9. HAVE YOU EVER USED THE INTERNET?	Yes ..... 1 No 2	2⇨Next Module
MT10. IN THE LAST 12 MONTHS, HAVE YOU USED THE INTERNET? *If necessary, probe for use from any location, with any device.*	Yes ..... 1 No 2	2⇨Next Module
MT11. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE THE INTERNET: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?	Almost every day ..... 1 At least once a week ..... 2 Less than once a week ..... 3 Not at all 4	

MARRIAGE		MA
MA1. ARE YOU CURRENTLY MARRIED?	Yes, currently married ..... 1 No, not in marriage 3	3⇨MA5
MA2. HOW OLD IS YOUR HUSBAND? *Probe*: HOW OLD WAS YOUR HUSBAND ON HIS LAST BIRTHDAY?	Age in years ..... __ __ DK 98	
MA3. BESIDES YOURSELF, DOES YOUR HUSBAND HAVE ANY OTHER WIVES?	Yes ..... 1 No 2	2⇨MA7
MA4. HOW MANY OTHER WIVES DOES HE HAVE?	Number ..... __ __ DK 98	⇨MA7 98⇨MA7
MA5. HAVE YOU EVER BEEN MARRIED?	Yes, formerly married ..... 1 No 3	3⇨Illness Symptoms 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 MORE THAN ONCE?	Only once ..... 1 More than once 2	
MA8. IN WHAT MONTH AND YEAR DID YOU FIRST MARRY?	Date of first marriage Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	⇨Next Module
MA9. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND?	Age in years ..... __ __	

CHILD MORTALITY		CM
This module is to be administered to all ever-married women *All questions refer only to LIVE births.*		
CM1. NOW I WOULD LIKE TO ASK ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER GIVEN BIRTH?	Yes..... 1 No 2	2⇨CM8
CM4. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?	Yes..... 1 No 2	2⇨CM6
CM5. HOW MANY SONS LIVE WITH YOU? HOW MANY DAUGHTERS LIVE WITH YOU? *If none, record '00'.*	Sons at home..... __ __ Daughters at home ..... __ __	
CM6. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?	Yes..... 1 No 2	2⇨CM8
CM7. HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU? HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU? *If none, record '00'.*	Sons elsewhere ..... __ __ Daughters elsewhere ..... __ __	
CM8. HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED? *If "No" probe by asking:* I MEAN, TO A CHILD WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE – EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?	Yes..... 1 No 2	2⇨CM10
CM9. HOW MANY BOYS HAVE DIED? HOW MANY GIRLS HAVE DIED? *If none, record '00'.*	Boys dead..... __ __ Girls dead ..... __ __	
CM10.*Sum answers to CM5, CM7, and CM9.*	Sum ..... __ __	

CM11. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL (*total number in CM10*) LIVE BIRTHS DURING YOUR LIFE. IS THIS CORRECT?

☐ *Yes. Check below:*

☐ *No live births ⇨ Go to ILLNESS SYMPTOMS Module*

☐ *One or more live births ⇨ Continue with the BIRTH HISTORY module*

☐ *No ⇨ Check responses to CM1-CM10 and make corrections as necessary before proceeding to the BIRTH HISTORY Module or ILLNESS SYMPTOMS Module*

BIRTH HISTORY — BH

NOW I WOULD LIKE TO RECORD THE NAMES OF ALL OF YOUR BIRTHS, WHETHER STILL ALIVE OR NOT, STARTING WITH THE FIRST ONE YOU HAD.
Record names of all of the births in BH1. Record twins and triplets on separate line. If there are more than 14 births, use an additional questionnaire.

BH Line No.	BH1. WHAT NAME WAS GIVEN TO YOUR (*first/next*) BABY?	BH2. WERE ANY OF THESE BIRTHS TWINS? 1 Single 2 Multiple	BH3. IS (*name*) A BOY OR A GIRL? 1 Boy 2 Girl	BH4. IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe*: WHAT IS HIS/HER BIRTHDAY?		BH5. IS (*name*) STILL ALIVE? 1 Yes 2 No	BH6. HOW OLD WAS (*name*) AT HIS/HER LAST BIRTHDAY? *Record age in completed years.*	BH7. IS (*name*) LIVING WITH YOU? 1 Yes 2 No	BH8. *Record household line number of child (from HL1)* *Record "00" if child is not listed.*	BH9. *If dead:* HOW OLD WAS (*name*) WHEN HE/SHE DIED? *If "1 year", probe:* HOW MANY MONTHS OLD WAS (*name*)? *Record days if less than 1 month; record months if less than 2 years; or years*		BH10. WERE THERE ANY OTHER LIVE BIRTHS BETWEEN (*name of previous birth*) AND (*name*), INCLUDING ANY CHILDREN WHO DIED AFTER BIRTH? 1 Yes 2 No
Line	Name	S M	B G	Month	Year	Y N	Age	Y N	Line No	Unit	Number	Y N
01		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨Next Line	Days ..... 1 Months..... 2 Years 3	__ __	
02		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
03		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
04		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
05		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
06		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth
07		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 Add Birth 2 Next Birth

BH Line No.	BH1. WHAT NAME WAS GIVEN TO YOUR (*first/next*) BABY?	BH2. WERE ANY OF THESE BIRTHS TWINS? 1 Single 2 Multiple	BH3. IS (*name*) A BOY OR A GIRL? 1 Boy 2 Girl	BH4. IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe*: WHAT IS HIS/HER BIRTHDAY?		BH5. IS (*name*) STILL ALIVE? 1 Yes 2 No	BH6. HOW OLD WAS (*name*) AT HIS/HER LAST BIRTHDAY? *Record age in completed years.*	BH7. IS (*name*) LIVING WITH YOU? 1 Yes 2 No	BH8. *Record household line number of child (from HL1)* *Record "00" if child is not listed.*	BH9. *If dead:* HOW OLD WAS (*name*) WHEN HE/SHE DIED? *If "1 year", probe:* HOW MANY MONTHS OLD WAS (*name*)? *Record days if less than 1 month; record months if less than 2 years; or years*		BH10. WERE THERE ANY OTHER LIVE BIRTHS BETWEEN (*name of previous birth*) AND (*name*), INCLUDING ANY CHILDREN WHO DIED AFTER BIRTH? 1 Yes 2 No
Line	Name	S M	B G	Month	Year	Y N	Age	Y N	Line No	Unit	Number	Y N
08		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 2 Add Birth Next Birth
09		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 2 Add Birth Next Birth
10		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 2 Add Birth Next Birth
11		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 2 Add Birth Next Birth
12		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 2 Add Birth Next Birth
13		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 2 Add Birth Next Birth
14		1 2	1 2	__ __	__ __ __ __	1 2 ⇨ BH9	__ __	1 2	__ __ ⇨BH10	Days ..... 1 Months..... 2 Years 3	__ __	1 2 Add Birth Next Birth

BH11. HAVE YOU HAD ANY LIVE BIRTHS SINCE THE BIRTH OF (*name of last birth in Birth History*)?	Yes.....1 No.....2	1⇨Record Birth(s) in Birth History

CM12. *Compare number in CM10 with number of births in the Birth History above and check:*

☐ *Numbers are same ⇨ Continue with CM13*

☐ *Numbers are different ⇨ Probe and reconcile*

CM13. *Check BH4 in BIRTH HISTORY: Last birth occurred within the last 2 years, that is, since (day and month of interview) in 2009*

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

☐ *One or more live births in last 2 years. ⇨ Record name of last born child and continue with next module*

*Name of child*_____

If child has died, take special care when referring to this child by name in the following modules.

DESIRE FOR LAST BIRTH		DB
This module is to be administered to all ever-married women with a live birth in the 2 years preceding date of interview. *Check child mortality module CM13 and record name of last-born child here _____.* *Use this child's name in the following questions, where indicated.*		
DB1. WHEN YOU GOT PREGNANT WITH (*name*), DID YOU WANT TO GET PREGNANT AT THAT TIME?	Yes ..... 1 No 2	1⇨Next Module
DB2. DID YOU WANT TO HAVE A BABY LATER ON, OR DID YOU 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
This module is to be administered to all ever-married women with a live birth in the 2 years preceding date of interview. Check child mortality module CM13 and record name of last-born child here _____. Use this child's name in the following questions, where indicated.		
MN1. DID YOU SEE ANYONE FOR ANTENATAL CARE DURING YOUR PREGNANCY WITH (*name*)?	Yes ..... 1 No 2	2⇨MN5
MN2. WHOM DID YOU SEE? *Probe:* ANYONE ELSE? *Probe for the type of person seen and circle all answers given.*	Health professional: Doctor ..... A Nurse / Midwife ..... B Auxiliary midwife ..... C Other person Traditional birth attendant ..... F Community health worker ..... G Other (*specify*) _____ X	
MN2A. WHERE DID YOU MAINLY RECEIVE THE ANTENATAL CARE? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Home Home ..... 11 Other Home ..... 12 Public sector Govt. hospital ..... 21 Govt. clinic / health centre ..... 22 Govt. health post ..... 23 Other public (*specify*) _____ 24 Private Medical Sector Private hospital ..... 31 Private clinic ..... 32 Private maternity home ..... 33 Other private medical (*specify*) _____ 34 Other (*specify*) _____ 96	
MN3. HOW MANY TIMES DID YOU RECEIVE ANTENATAL CARE DURING YOUR PREGNANCY WITH (*name*)?	Number of times ..... __ __ DK 98	
MN4. AS PART OF YOUR ANTENATAL CARE DURING YOUR PREGNANCY WITH (*name*)?, 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?	Yes No Blood pressure ..... 1 2 Urine sample ..... 1 2 Blood sample 1 2	
MN5. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED (SUCH AS A CHILD HEALTH DAYS CARD)? MAY I SEE IT PLEASE? *If a card is presented, use it to assist with answers to the following questions.*	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*)? *If 7 or more times, record '7'.*	Number of times ..... __ DK 8	 8⇨MN9
MN8. *How many tetanus injections during last pregnancy were reported in MN7?* ☐ *At least two tetanus injections during last pregnancy. ⇨ Go to MN12* ☐ *Only one tetanus injection during last pregnancy. ⇨ Continue with MN9*		
MN9. DID YOU RECEIVE ANY TETANUS INJECTION AT ANY TIME BEFORE YOUR PREGNANCY WITH (*name*), EITHER TO PROTECT YOURSELF OR ANOTHER BABY?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN12 8⇨MN12
MN10. HOW MANY TIMES DID YOU RECEIVE A TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)? *If 7 or more times, record '7'.*	Number of times ..... __ DK 8	 8⇨MN12
MN11. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)?	Years ago ..... __ __	
MN12. *Check MN1 for presence of antenatal care during pregnancy with (name)?:* ☐ *Yes, antenatal care received. ⇨ Continue with MN13* ☐ *No antenatal care received ⇨ Go to MN17*		
MN13. DURING ANY OF THESE ANTENATAL VISITS FOR THE PREGNANCY, DID YOU TAKE ANY MEDICINE IN ORDER TO PREVENT YOU FROM GETTING MALARIA?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN17 8⇨MN17
MN14. WHICH MEDICINES DID YOU TAKE TO PREVENT MALARIA? *Circle all medicines taken. If type of medicine is not determined, show typical anti-malarial to respondent.*	SP / Fansidar ..... A Chloroquine ..... B Other (*specify*) _____ X DK ..... Z	
MN15. *Check MN14 for medicine taken:* ☐ *SP / Fansidar taken. ⇨ Continue with MN16* ☐ *SP / Fansidar not taken. ⇨ Go to MN17*		
MN16. DURING YOUR PREGNANCY WITH (*name*)? HOW MANY TIMES DID YOU TAKE SP/ FANSIDAR?	Number of times ..... __ __ DK 98	

MN17. WHO ASSISTED WITH THE DELIVERY OF (*name*)? *Probe:* ANYONE ELSE? *Probe for the type of person assisting and circle all answers given.* *If respondent says no one assisted, probe to determine whether any adults were present at the delivery.*	Health professional: Doctor .....A Nurse / Midwife.....B Auxiliary midwife.....C Other person Traditional birth attendant.....F Community health worker..... G Relative / Friend .....H Other (specify) _____X No one .....Y	
MN18. WHERE DID YOU GIVE BIRTH TO (*name*)? *Probe to identify the type of source.* *If unable to determine whether public or private, write the name of the place.* _____ *(Name of place)*	Home Your home..... 11 Other home ..... 12 Public sector Govt. hospital ..... 21 Govt. clinic / health centre ..... 22 Govt. health post ..... 23 Other public (*specify*) _____ 26 Private Medical Sector Private hospital..... 31 Private clinic..... 32 Private maternity home ..... 33 Other private .....medical (*specify*) Other (*specify*)..... 96	11⇨MN19A 12⇨MN19A 96⇨MN19A
MN19. WAS (*name*) DELIVERED BY CAESAREAN SECTION? THAT IS, DID THEY CUT YOUR BELLY OPEN TO TAKE THE BABY OUT?	Yes..... 1 No 2	
MN19A. WHO ADVISED YOU ON WHERE TO GIVE BIRTH TO (*name*)?	Govt. doctor .....A Govt. health worker .....B Private Doctor .....C Husband.....D Other relatives.....E Friend(s).....F NGO Health worker..... G Other (*specify*)_____X No one / DK .....Y	
MN20. WHEN (*name*) WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?	Very large..... 1 Larger than average..... 2 Average..... 3 Smaller than average ..... 4 Very small ..... 5 DK..... 8	

MN21. WAS (*name*) WEIGHED AT BIRTH?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN23 8⇨MN23
MN22. HOW MUCH DID (*name*) WEIGH? *Record weight from health card, if available.*	 From card ..... 1 (kg) __ . __ __ __ From recall ..... 2 (kg) __ . __ __ __ DK 99998	
MN23. HAS YOUR MENSTRUAL PERIOD RETURNED SINCE THE BIRTH OF (*name*)?	Yes ..... 1 No 2	
MN24. DID YOU EVER BREASTFEED (*name*)?	Yes ..... 1 No 2	 2⇨Next Module
MN25. HOW LONG AFTER BIRTH DID YOU FIRST PUT (*name*) TO THE BREAST? *If less than 1 hour, record '00' hours.* *If less than 24 hours, record hours.* *Otherwise, record days.*	Immediately ..... 000 Hours ..... 1 __ __ Days ..... 2 __ __ Don't know / remember 998	
MN26. IN THE FIRST THREE DAYS AFTER DELIVERY, WAS (NAME) GIVEN ANYTHING TO DRINK OTHER THAN BREAST MILK? *If No probe:* NOT EVEN WATER, HONEY, PORRIDGE, SOUP, SUGAR WATER, OR ANYTHING ELSE?	Yes ..... 1 No 2	 2⇨Next Module
MN27. WHAT WAS (*name*) GIVEN TO DRINK? *Probe:* ANYTHING ELSE?	Milk (other than breast milk) ..... A Plain water ..... B Sugar or glucose water ..... C Gripe water ..... D Sugar-salt-water solution ..... E Fruit juice ..... F Infant formula ..... G Tea / Infusions ..... H Honey ..... I Other (*specify*) _____ X	

ILLNESS SYMPTOMS		IS
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 Other (specify) _____X Other (specify) _____Y Other (specify) _____Z	

CONTRACEPTION		CP
CP0. *Check MA1: Is respondent currently married?* ☐ Yes (MA1 = 1). ⇨ Continue with CP1. ☐ No (MA1 = 3). ⇨ Go to FGM/C Module.		
CP1. I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING. ARE YOU PREGNANT NOW?	Yes, currently pregnant ..... 1 No ..... 2 Unsure or DK 8	1⇨Next Module
CP2. COUPLES USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?	Yes ..... 1 No 2	2⇨CP4
CP3. WHAT ARE YOU DOING TO DELAY OR AVOID A PREGNANCY? *Do not prompt.* *If more than one method is mentioned, circle each one.*	Female sterilization ..... A Male sterilization ..... B IUD ..... C Injectables ..... D Implants ..... E Pill ..... F Male condom ..... G Female condom ..... H Diaphragm ..... I Foam / Jelly ..... J Lactational amenorrhoea method (LAM) ..... K Periodic abstinence/Rhythm ..... L Withdrawal ..... M Other (*specify*) _____ X	⇨Next Module
CP4. WHAT IS THE MAIN REASON FOR NOT USING ANY METHOD TO DELAY OR AVOID A PREGNANCY?	Religious ..... 1 Husband against ..... 2 Other family members against ..... 3 Contraceptives not available ..... 4 Desire for child ..... 5 Other (*specify*) _____ 6 DK 8	

UNMET NEED		UN
UN1. *Check CP1. Currently pregnant?* ☐ Yes, currently pregnant ⇨ Continue with UN2 ☐No, unsure or DK ⇨ Go to UN5		
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?	Yes .....1 No 2	1⇨UN4
UN3. DID YOU WANT TO HAVE A BABY LATER ON OR DID YOU NOT WANT ANY (MORE) CHILDREN?	Later .....1 No more 2	
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?	Have another child .....1 No more / None .....2 Undecided / Don't know 8	1⇨UN7 2⇨UN13 8⇨UN13
UN5. *Check CP3. Currently using "Female sterilization"?* ☐ Yes. ⇨ Go to UN13 ☐ No. ⇨ Continue with UN6		
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?	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
UN7. HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (A/ANOTHER) CHILD?	Months .....1 __ __ Years .....2 __ __ Soon / Now .....993 Says she cannot get pregnant .....994 Other .....996 Don't know 998	 994⇨UN11
UN8. *Check CP1. Currently pregnant?* ☐ Yes, currently pregnant ⇨ Go to UN13 ☐ No, unsure or DK ⇨ Continue with UN9		

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

FEMALE GENITAL MUTILATION/CUTTING		FG
FG1. HAVE YOU EVER HEARD OF FEMALE CIRCUMCISION?	Yes ..... 1 No 2	1⇨FG3
FG2. IN SOME COUNTRIES, THERE IS A PRACTICE IN WHICH A GIRL MAY HAVE PART OF HER GENITALS CUT OR NICKED SLIGHTLY (SUNI). HAVE YOU EVER HEARD ABOUT THIS PRACTICE?	Yes ..... 1 No 2	2⇨Next Module
FG3. HAVE YOU YOURSELF EVER BEEN CIRCUMCISED OR UNDERGONE SUNI?	Yes ..... 1 No 2	2⇨FG8
FG4. NOW I WOULD LIKE TO ASK YOU WHAT WAS DONE TO YOU AT THAT TIME. WAS ANY FLESH REMOVED FROM THE GENITAL AREA?	Yes ..... 1 No ..... 2 DK 8	1⇨FG6
FG5. WAS THE GENITAL AREA JUST NICKED WITHOUT REMOVING ANY FLESH?	Yes ..... 1 No ..... 2 DK 8	
FG6. WAS THE GENITAL AREA SEWN CLOSED? *If necessary, probe*: WAS IT SEALED?	Yes ..... 1 No ..... 2 DK 8	
FG7. HOW OLD WERE YOU WHEN YOU WERE CIRCUMCISED? *If the respondent does not know the exact age, probe to get an estimate using your calendar of events and other information available to you*	Age at circumcision ..... __ __ DK / Don't remember / Not sure 98	
FG8. WHO PERFORMED THE CIRCUMCISION?	Health professional Doctor ..... 11 Nurse/Midwife ..... 12 Other health professional (*specify*)_____ 16 Traditional persons Traditional 'circumciser' ..... 21 Traditional birth attendant ..... 22 Other traditional (*specify*) ..... 26 DK 98	
FG8A. *Check if woman was ever married:*	☐ *MA5=3 (Never married) ⇨ Skip toFG22* ☐ *MA5=1 or MA5=No answer (formerly or currently married) ⇨ Continue with FG9*	
FG9. *Check CM5 for Number of daughters at home and CM7 for Number of daughters elsewhere, and sum the answers here*	Total number of living daughters ..... ___ ___	
FG10. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE *(total number in FG9)* LIVING DAUGHTERS. IS THIS CORRECT? ☐*Yes* ☐*One or more living daughters ⇨ Continue with FG11* ☐*Does not have any living daughters ⇨ Go to FG22* ☐*No ⇨ Check responses to CM1 – CM12 and BH1 – BH10 and make corrections as necessary, until FG10 = Yes*		

FG11. *Ask the respondent to tell you the name(s) of her daughter(s), beginning with the youngest daughter (if more than one daughter). Write down the name of each daughter in FG12. Then, ask questions FG13 to FG20 for each daughter at a time.*

The total number of daughters in FG12 should be equal to the number in FG9

If more than 4 daughters, use additional questionnaires

	Daughter #1	Daughter #2	Daughter #3	Daughter #4
FG12. *Name of daughter*	_____	_____	_____	_____
FG13. HOW OLD IS (*name)*?	Age..... ___ ___	Age..... ___ ___	Age..... ___ ___	Age..... ___ ___
FG14. *IS (name) YOUNGER THAN 15 YEARS OF AGE?*	Yes.....1 No .....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes.....1 No .....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes.....1 No .....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes.....1 No .....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*
FG15. IS (*name*) CIRCUMCISED OR HAS UNDERGONE SUNI?	Yes.....1 No .....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes.....1 No .....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes.....1 No .....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*	Yes.....1 No .....2 *If "No", go to FG13 for next daughter. If no more daughters, go to FG22*
FG16. HOW OLD WAS (*name*) WHEN THIS OCCURRED? *If the respondent does not know the exact age, probe to get an estimate using your calendar of events and other information available to you*	Age..... ___ ___ DK 98	Age..... ___ ___ DK 98	Age..... ___ ___ DK 98	Age..... ___ ___ DK 98
FG17. NOW I WOULD LIKE TO ASK YOU WHAT WAS DONE TO (*name*) AT THAT TIME. WAS ANY FLESH REMOVED FROM THE GENITAL AREA?	Yes.....1 ⇨FG19 No .....2 DK 8	Yes.....1 ⇨FG19 No .....2 DK 8	Yes.....1 ⇨FG19 No .....2 DK 8	Yes.....1 ⇨FG19 No .....2 DK 8
FG18. WAS HER GENITAL AREA JUST NICKED WITHOUT REMOVING ANY FLESH?	Yes.....1 No .....2 DK 8	Yes.....1 No .....2 DK 8	Yes.....1 No .....2 DK 8	Yes.....1 No .....2 DK 8

FG19. WAS HER GENITAL AREA SEWN CLOSED? *If necessary, probe*: WAS IT SEALED?	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8	Yes ..... 1 No ..... 2 DK 8
FG20. WHO PERFORMED THE CIRCUMCISION?	Health professional Doctor ..... 11 Nurse/midwife 12 Other health professional (*specify*)____ 16 Traditional persons Traditional 'circumciser' .. 21 Traditional birth attendant ..... 22 Other traditional (*specify*) ____ 26 DK 98	Health professional Doctor ..... 11 Nurse/midwife 12 Other health professional (*specify*)____ 16 Traditional persons Traditional 'circumciser' .. 21 Traditional birth attendant ..... 22 Other traditional (*specify*) ____ 26 DK 98	Health professional Doctor ..... 11 Nurse/midwife 12 Other health professional (*specify*) ____ 16 Traditional persons Traditional 'circumciser' .. 21 Traditional birth attendant ..... 22 Other traditional (*specify*)____ 26 DK 98	Health professional Doctor ..... 11 Nurse/midwife 12 Other health professional (*specify*) ____16 Traditional persons Traditional 'circumciser' .. 21 Traditional birth attendant ..... 22 Other traditional (*specify*) ____26 DK 98
FG21.	*Go back to FG13 for next daughter. If no more daughters, go to FG22*	*Go back to FG13 for next daughter. If no more daughters, go to FG22*	*Go back to FG13 for next daughter. If no more daughters, go to FG22*	*Go back to FG13 in first column of additional questionnaire for next daughter. If no more daughters, go to FG22*
				Tick here if additional questionnaire used ☐

FG22. DO YOU THINK THE PRACTICE OF CIRCUMCISION SHOULD BE CONTINUED OR SHOULD IT BE DISCONTINUED?	Continued ..... 1 Discontinued ..... 2 Depends ..... 3 DK 8	

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 ARGUES WITH HIM?	Argues	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	

HIV/AIDS	HA	
HA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?	Yes ..... 1 No 2	 2⇨WM11
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 WITCHCRAFT 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? [B] DURING DELIVERY? [C] BY BREASTFEEDING?	Yes No DK During pregnancy ..... 1 2 8 During delivery ..... 1 2 8 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	

HA13. *Check CM13: Any live birth in last 2 years?* ☐ *No live birth in last 2 years. ⇨ Go to HA24.* ☐ *Yes, live birth in last 2 years. ⇨ Continue with HA14.*		
HA14. *Check MN1: Received antenatal care?* ☐ *Yes, antenatal care received. ⇨ Continue with HA15* ☐ *No antenatal care received ⇨ Go to HA24*		
HA15. DURING ANY OF THE ANTENATAL VISITS FOR YOUR PREGNANCY WITH (*name*), WERE YOU GIVEN ANY INFORMATION ABOUT: [A] BABIES GETTING THE AIDS VIRUS FROM THEIR MOTHER? [B] THINGS THAT YOU CAN DO TO PREVENT GETTING THE AIDS VIRUS? [C] GETTING TESTED FOR THE AIDS VIRUS? WERE YOU: [D] OFFERED A TEST FOR THE AIDS VIRUS?	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	
HA16. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS AS PART OF YOUR ANTENATAL CARE?	Yes 1 No 2 DK 8	 2⇨HA19 8⇨HA19
HA17. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes 1 No 2 DK 8	 2⇨HA22 8⇨HA22
HA18. REGARDLESS OF THE RESULT, ALL WOMEN WHO ARE TESTED ARE SUPPOSED TO RECEIVE COUNSELLING AFTER GETTING THE RESULT. AFTER YOU WERE TESTED, DID YOU RECEIVE COUNSELLING?	Yes 1 No 2 DK 8	1⇨HA22 2⇨HA22 8⇨HA22
HA19. *Check MN17: Birth delivered by health professional (A, B or C)?* ☐ *Yes, birth delivered by health professional ⇨ Continue with HA20* ☐ *No, birth not delivered by health professional ⇨ Go to HA24*		
HA20. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS BETWEEN THE TIME YOU WENT FOR DELIVERY BUT BEFORE THE BABY WAS BORN?	Yes 1 No 2	 2⇨HA24
HA21. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes 1 No 2	
HA22. HAVE YOU BEEN TESTED FOR THE AIDS VIRUS SINCE THAT TIME YOU WERE TESTED DURING YOUR PREGNANCY?	Yes 1 No 2	1⇨HA25
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⇨WM11 2⇨WM11 3⇨WM11

HA24. I DO NOT 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 DO NOT WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2 DK 8	1⇨WM11 2⇨WM11 8⇨WM11
HA27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes ..... 1 No 2	

WM11. *Record the time*.	Hour and minutes ..... __ __ : __ __	

WM12. *Is the respondent the mother or caretaker of any child age 0-4 living in this household? Check household listing, column HL9.*

☐ *Yes.* ⇨ *Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE 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 child under-5 in the household.*

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

MICS

QUESTIONNAIRE FOR CHILDREN UNDER FIVE

UNDER-FIVE CHILD INFORMATION PANEL	UF
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.	
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 MOPIC. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT (*name*)'S HEALTH AND WELL-BEING. THE INTERVIEW WILL TAKE ABOUT 20 - 30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of the household questionnaire or for another child's questionnaire has already been read to this woman, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT (*name*)'S HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 20 - 30 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

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 Codes refer to mother/caretaker.	Completed ..... 01 Not at home ..... 02 Refused ..... 03 Partly completed ..... 04 Incapacitated ..... 05 Other (specify) _____ 96

UF10. Field edited by (Name and number):	UF11. Data entry clerk (Name and number):
Name _____ ___ ___	Name _____ ___ ___

UF12. *Record the time.*	Hour and minutes ..... __ __ : __ __	

AGE		AG
AG1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH OF (*name*). IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe:* WHAT IS HIS / HER BIRTHDAY? DO YOU HAVE ANY DOCUMENTS THAT MAY HAVE (*name*)'S DATE OF BIRTH (SUCH AS A CHILD HEALTH DAY CARD, BIRTH NOTIFICATION, OR BIRTH CERTIFICATE)? If the mother/caretaker knows the exact birth date and/or it is printed in a document/card , also enter the day; otherwise, circle 98 for day Month and year must be recorded If unknown month or year, ask for documents or use the calendar of events	Date of birth Day ..... __ __ DK day ..... 98 Month ..... __ __ Year ..... __ __ __ __	
AG2. HOW OLD IS (*name*)? *Probe*: HOW OLD WAS (*name*) AT HIS / HER LAST BIRTHDAY? Record age in completed years. Record '0' if less than 1 year. Note: For most children, the age indicated on the Routine Immunization Card is not current	Age (in completed years) ..... __	
AG3. *Compare AG1 and AG2:* ☐ *Date of birth and age are consistent ⇨ Continue with next AG4* ☐ *Date of birth and age are not consistent ⇨ Probe further for both date of birth and age until consistent*		

AG4. *Indicate how date of birth was obtained:*

- ☐ *Mother's/caretaker's response alone*
- ☐ *Any documentation used (tick all that apply):*
  - ☐ *Child Health Day card*
  - ☐ *Birth notification*
  - ☐ *Birth certificate*
  - ☐ *Calendar of events and/or known events in household*
  - ☐ *Other documentation (specify)* _____
- ☐ *Other (specify)* _____

EARLY CHILDHOOD DEVELOPMENT		EC
EC1. How many children's books or picture books do you have for (*name*)?	None.....00 Number of children's books .....0 __ Ten or more books 10	
EC2. I am interested in learning about the things that (*name*) plays with when he/she is at home. Does he/she play with: [A] homemade toys (such as dolls, cars, or other toys made at home)? [B] toys from a shop or manufactured toys? [C] household objects (such as bowls or pots) or objects found outside (such as sticks, rocks, animal shells or leaves)? If the respondent says "YES" to the categories above, then probe to learn specifically what the child plays with to ascertain the response	Y N DK Homemade toys .....1 2 8 Toys from a shop.....1 2 8 Household objects or outside objects 1 2 8	
EC3. Sometimes adults taking care of children have to leave the house to go shopping, wash clothes, or for other reasons and have to leave young children. On how many days in the past week was (*name*): [A] left alone for more than an hour? [B] left in the care of another child that is, someone less than 10 years old for more than an hour? If 'none' enter' 0'. If 'don't know' enter' 8'	Number of days left alone for more than an hour .....__ Number of days left with other child for more than an hour.....__	
EC4. Check AG2: Age of child ☐*Child age 3 or 4 ⇨ Continue with EC5* ☐ *Child age 0, 1 or 2 ⇨ Go to Next Module*		
EC5. Does (*name*) attend any organized learning or early childhood education	Yes 1	

PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	No.....2 DK 8	2⇨EC6A 8⇨EC6A
EC6. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (*name*) ATTEND?	Number of hours.....__ __	⇨ EC7
EC6A. DOES (*name*) ATTEND KORANIC SCHOOL?	Yes .....1 No.....2 DK 8	 2⇨EC7 8⇨EC7
EC6B. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (*name*) ATTEND KORANIC SCHOOL?	Number of hours.....__ __	
EC7. IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER OVER 15 YEARS OF AGEENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (*name*): *If yes, ask:* WHO ENGAGED IN THIS ACTIVITY WITH (*name*)? *Circle all that apply.*		
[A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH (*name*)?	Read books A B X Y	
[B] TOLD STORIES TO (*name*)?	Told stories A B X Y	
[C] SANG SONGS TO (*name*) OR WITH (*name*), INCLUDING LULLABYS?	Sang songs A B X Y	
[D] TOOK (*name*) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?	Took outside A B X Y	
[E] PLAYED WITH (*name*)?	Played with A B X Y	
[F] NAMED, COUNTED, OR DREW THINGS TO OR WITH (*name*)?	Named/counted A B X Y	
EC8. I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH AND DEVELOPMENT OF YOUR CHILD. CHILDREN DO NOT ALL DEVELOP AND LEARN AT THE SAME RATE. FOR EXAMPLE, SOME WALK EARLIER THAN OTHERS. THESE QUESTIONS ARE RELATED TO SEVERAL ASPECTS OF YOUR CHILD'S DEVELOPMENT. CAN (*name*) IDENTIFY OR NAME AT LEAST TEN LETTERS OF THE ALPHABET?	Yes .....1 No.....2 DK 8	
EC9. CAN (*name*) READ AT LEAST FOUR SIMPLE, POPULAR WORDS?	Yes .....1 No.....2	

If no, probe: THIS CAN BE IN ANY LANGUAGE (SOMALI, ARABIC, ETC.)	DK 8	
EC10. DOES (*name*) KNOW THE NAME AND RECOGNIZE THE SYMBOL OF ALL NUMBERS FROM 1 TO 10?	Yes .....1 No.....2 DK 8	
EC11. CAN (*name*) PICK UP A SMALL OBJECT WITH TWO FINGERS, LIKE A STICK OR A ROCK FROM THE GROUND?	Yes .....1 No.....2 DK 8	
EC12. IS (*name*) SOMETIMES TOO SICK TO PLAY?	Yes .....1 No.....2 DK 8	
EC13. DOES (*name*) FOLLOW SIMPLE DIRECTIONS ON HOW TO DO SOMETHING CORRECTLY?	Yes .....1 No.....2 DK 8	
EC14. WHEN GIVEN SOMETHING TO DO, IS (*name*) ABLE TO DO IT INDEPENDENTLY?	Yes .....1 No.....2 DK 8	
EC15. DOES *(name*) GET ALONG WELL WITH OTHER CHILDREN?	Yes .....1 No.....2 DK 8	
EC16. DOES (*name*) KICK, BITE, OR HIT OTHER CHILDREN OR ADULTS?	Yes .....1 No.....2 DK 8	
EC17. DOES (*name*) GET DISTRACTED EASILY?	Yes .....1 No.....2 DK 8	

BREASTFEEDING		BF
BF1. HAS (*name*) 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 (*name*) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. I AM INTERESTED IN WHETHER (*name*) HAD THE ITEM EVEN IF IT WAS COMBINED WITH OTHER FOODS. DID (*name*) DRINK PLAIN WATER YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF4. DID (*name*) DRINK INFANT FORMULA YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	 2⇨BF6 8⇨BF6
BF5. HOW MANY TIMES DID (*name*) DRINK INFANT FORMULA?	Number of times ..... __ __	
BF6. DID (*name*) DRINK MILK, SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	 2⇨BF8 8⇨BF8
BF7. HOW MANY TIMES DID (*name*) DRINK TINNED, POWDERED OR FRESH ANIMAL MILK?	Number of times ..... __ __	
BF8. DID (*name*) DRINK JUICE OR JUICE DRINKS YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF9. DID (*name*) DRINK MARAQCAD YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF10. DID (*name*) DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	

BF11. DID (*name*) DRINK ORS (ORAL REHYDRATION SOLUTION) YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF12. DID (*name*) DRINK ANY OTHER LIQUIDS YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF13. DID (*name*) 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 (*name*) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?	Number of times ..... __ __	
BF15. DID (NAME) EAT THIN PORRIDGE YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF16. DID (*name*) 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 (*name*) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT?	Number of times ..... __ __	
BF18. YESTERDAY, DURING THE DAY OR NIGHT, DID (*name*) DRINK ANYTHING FROM A BOTTLE WITH A NIPPLE?	Yes ..... 1 No ..... 2 DK 8	

CARE OF ILLNESS		CA
CA1. IN THE LAST TWO WEEKS, HAS (*name*) HAD DIARRHOEA?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA7 8⇨CA7
CA2. I WOULD LIKE TO KNOW HOW MUCH (*name*) WAS GIVEN TO DRINK DURING THE DIARRHOEA (INCLUDING BREASTMILK). DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO DRINK, ABOUT THE SAME AMOUNT, OR MORE THAN USUAL? *If less, probe*: WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO DRINK, OR SOMEWHAT LESS?	Much less ..... 1 Somewhat less ..... 2 About the same ..... 3 More ..... 4 Nothing to drink ..... 5 DK 8	
CA3. DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO EAT, ABOUT THE SAME AMOUNT, MORE THAN USUAL, OR NOTHING TO EAT? If "less", probe: WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO EAT OR SOMEWHAT LESS?	Much less ..... 1 Somewhat less ..... 2 About the same ..... 3 More ..... 4 Stopped food ..... 5 Never gave food ..... 6 DK 8	
CA4. DURING THE EPISODE OF DIARRHOEA, WAS (*name*) GIVEN TO DRINK A FLUID MADE FROM A SPECIAL PACKET CALLED ORS SUCH AS THIS? *Show sample ORS packet*	Yes ..... 1 No ..... 2 DK 8	
CA5. WAS ANYTHING (ELSE) GIVEN TO TREAT THE DIARRHOEA?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA7 8⇨CA7

CA6. WHAT (ELSE) WAS GIVEN TO TREAT THE DIARRHOEA? *Probe*: ANYTHING ELSE? *Record all treatments given. Write brand name(s) of all medicines mentioned.* _____ (Name)	Pill or Syrup Antibiotic.....A Antimotility.....B Zinc .....C Other (Not antibiotic, antimotility or zinc) ..... G Unknown pill or syrup .....H Injection Antibiotic.....L Non-antibiotic .....M Unknown injection .....N Intravenous ..... O Home remedy / Herbal medicine ..... Q Other (*specify*)_____X	
CA7. AT ANY TIME IN THE LAST TWO WEEKS, HAS (*name*) HAD AN ILLNESS WITH A COUGH?	Yes.....1 No .....2 DK.....8	 2⇨CA14 8⇨CA14
CA8. WHEN (*name*) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, RAPID BREATHS OR HAVE DIFFICULTY BREATHING?	Yes.....1 No .....2 DK.....8	 2⇨CA14 8⇨CA14
CA9. WAS THE FAST OR DIFFICULT BREATHING DUE TO A PROBLEM IN THE CHEST OR A BLOCKED OR RUNNY NOSE?	Problem in chest only .....1 Blocked or runny nose only .....2 Both .....3 Other (*specify*) _____6 DK.....8	 2⇨CA14 6⇨CA14
CA10. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?	Yes.....1 No .....2 DK.....8	 2⇨CA12 8⇨CA12

CA11. FROM WHERE DID YOU SEEK ADVICE OR TREATMENT? *Probe:* ANYWHERE ELSE? Circle all providers mentioned, but do NOT prompt with any suggestions. Probe to identify each type of source. If unable to determine if public or private sector, write the name of the place. _____ (Name of place)	Public sector Govt. hospital ..... A Govt. health centre ..... B Govt. health post ..... C Village health worker ..... D Mobile / Outreach clinic ..... E Other public (*specify*)_____ H Private medical sector Private hospital / clinic.....I Private physician .....J Private pharmacy ..... K Mobile clinic .....L Other private medical (*specify*) _____ O Other source Relative / Friend ..... P Shop .....Q Traditional practitioner ..... R Sheikh ..... S Traditional Birth Attendant..... T Other (*specify*) _____ X	
CA12. WAS (*name*) GIVEN ANY MEDICINE TO TREAT THIS ILLNESS?	Yes..... 1 No ..... 2 DK..... 8	 2⇨CA14 8⇨CA14
CA13. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? Circle all medicines given. Write brand name(s) of all medicines mentioned. _____ (Names of medicines)	Antibiotic Pill / Syrup .....A Injection.....B Anti-malarials ..... M Paracetamol / Panadol / Acetaminophen ...P Aspirin ..... Q Ibuprofen.....R Other (*specify*) _____X DK.....Z	
CA14. Check AG2: Child aged under 3? ☐ Yes. ⇨ Continue with CA15 ☐*No. ⇨ Go to Next Module*		
CA15. THE LAST TIME *(name)* PASSED STOOLS, WHAT WAS DONE TO DISPOSE OF THE STOOLS?	Child used toilet / latrine..... 01 Put / Rinsed into toilet or latrine..... 02 Put / Rinsed into drain or ditch ..... 03 Thrown into garbage (solid waste) ..... 04 Buried..... 05 Left in the open ..... 06 Other (*specify*) _____ 96 DK..... 98	

MALARIA		ML
ML1. IN THE LAST TWO WEEKS, HAS (*name*) BEEN ILL WITH A FEVER AT ANY TIME?	Yes ..... 1 No ..... 2 DK 8	2⇨Next Module 8⇨Next Module
ML2. AT ANY TIME DURING THE ILLNESS, DID (*name*) HAVE BLOOD TAKEN FROM HIS/HER FINGER OR HEEL FOR TESTING?	Yes ..... 1 No ..... 2 DK 8	
ML3. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML8 8⇨ML8
ML4. WAS (NAME) TAKEN TO A HEALTH FACILITY DURING THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML8 8⇨ML8
ML5. WAS (*name*) GIVEN ANY MEDICINE FOR FEVER OR MALARIA AT THE HEALTH FACILITY?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML7 8⇨ML7
ML6. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? *Circle all medicines mentioned. Write brand name(s) of all medicines, if given.* _____ (Name)	Anti-malarials: SP / Fansidar ..... A Chloroquine ..... B Amodiaquine ..... C Quinine ..... D Combination with Artemisinin ..... E Other anti-malarial (*specify*) _____ H Antibiotic drugs Pill / Syrup ..... I Injection ..... J Other medications: Paracetamol/ Panadol /Acetaminophen . P Aspirin ..... Q Ibuprofen ..... R Other (specify) _____ X DK ..... Z	
ML7. WAS (*name*) GIVEN ANY MEDICINE FOR THE FEVER OR MALARIA BEFORE BEING TAKEN TO THE HEALTH FACILITY?	Yes ..... 1 No ..... 2 DK 8	1⇨ML9 2⇨ML10 8⇨ML10
ML8. WAS (*name*) GIVEN ANY MEDICINE FOR FEVER OR MALARIA DURING THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨ML10 8⇨ML10

ML9. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? *Circle all medicines mentioned. Write brand name(s) of all medicines, if given.* _____ (Name) .	Anti-malarials: SP / Fansidar .....A Chloroquine.....B Amodiaquine .....C Quinine.....D Combination with Artemisinin .....E Other anti-malarial (*specify*) _____ H Antibiotic drugs Pill / Syrup..... I Injection..... J Other medications: Paracetamol/ Panadol/ Acetaminophen .P Aspirin ..... Q Ibuprofen.....R Other (*specify*) _____X DK.....Z	
ML10. Check ML6 and ML9: Anti-malarial mentioned (codes A - H)? ☐*Yes. ⇨Continue with ML11* ☐ *No. ⇨ Go to Next Module*		
ML11. HOW LONG AFTER THE FEVER STARTED DID (*name*) FIRST TAKE (*name of anti-malarial from ML6 or ML9*)? *If multiple anti-malarials mentioned in ML6 or ML9, name all anti-malarial medicines mentioned.* *Record how long after the fever started the first anti-malarial was given.*	Same day .....0 Next day .....1 2 days after the fever .....2 3 days after the fever .....3 4 or more days after the fever .....4 DK.....8	

IMMUNIZATION		IM
If immunization card(s) is/are available, copy the dates in IM3 for each type of immunization recorded on the card(s). IM6-IM16A are for registering vaccinations that are not recorded on the card(s). IM6-IM16A will only be asked when card(s) is/are not available.		
IM1. DO YOU HAVE ONE OR MORE CARDS WHERE (*name*)'S VACCINATIONS ARE WRITTEN DOWN? (*If yes*) MAY I SEE IT/THEM PLEASE?	Yes, at least one card seen Yes, no cards seen No cards	 2⇨IM2A 3⇨IM2
IM1A. *Observe and record the type of card(s)*	Routine EPI Card Child Health Days Card 2009 Child Health Days Card 2010 Other (*specify*) _____	A⇨IM3 B⇨IM3 B⇨IM3 X⇨IM3
IM2. DID YOU EVER HAVE A VACCINATION OR CHILD HEALTH DAYS CARD FOR (*name*)?	Yes No	 2⇨IM6
IM2A. DO OR DID YOU HAVE ONE OR MORE OF THE CARDS SHOWN HERE WHERE (*name*)'S VACCINATIONS ARE OR WERE WRITTEN DOWN? *Show the sample cards and record the response*	Routine EPI Card Child Health Days Card 2009 Child Health Days Card 2010 Other(*specify*) _____ DK	A⇨IM6 B⇨IM6 C⇨IM6 X⇨IM6 Y⇨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			Card	
		Day	Month	Year	A.Routine EPI Card. B.CHD 2009 C.CHD 2010 X.Other	
BCG	BCG				A B C	X
POLIO AT BIRTH	OPV0				A B C	X
POLIO 1	OPV1				A B C	X
POLIO 2	OPV2				A B C	X
POLIO 3	OPV3				A B C	X
DPT1	DPT1				A B C	X
DPT2	DPT2				A B C	X
DPT3	DPT3				A B C	X
MEASLES	MEASLES				A B C	X
VITAMIN A (MOST RECENT)	VITA				A B C	X

IM4. *Check IM3. Are all vaccines (BCG to Measles) recorded?*

☐*Yes⇨Continue with IM18*
☐*No ⇨Continue with IM5*

IM5. IN ADDITION TO WHAT IS RECORDED ON THIS/THESE CARDS, DID (*name*) RECEIVE ANY OTHER VACCINATIONS – INCLUDING NATIONAL IMMUNIZATION DAYS AND CHILD HEALTH DAYS? Record 'Yes' only if respondent mentions vaccines shown in the table above.	Yes ..... 1 (*Probe for vaccinations and write '66' in the corresponding day column for each vaccine mentioned. Then skip to IM18)* No ..... 2 DK 8	 2⇨IM18 8⇨IM18
IM6. HAS (*name*) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING NATIONAL IMMUNIZATION DAYS AND CHILD HEALTH DAYS?	Yes ..... 1 No ..... 2 DK 8	 2⇨IM18 8⇨IM18
IM7. HAS (*name*) EVER RECEIVED A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION USUALLY IN THE LEFT ARM OR SHOULDER THAT USUALLY CAUSES A SCAR?	Yes ..... 1 No ..... 2 DK 8	 2⇨IM8 8⇨IM8
IM7A. DID (*name*) (OR THE PERSON WITH (*name*) AT THE TIME) RECEIVE FREE ORS PACKET(S) SUCH AS THIS AT THE TIME OF THIS VACCINATION? *Show sample ORS packet*	Yes ..... 1 No ..... 2 DK 8	
IM8. HAS (*name*) EVER RECEIVED ANY "VACCINATION DROPS IN THE MOUTH" TO PROTECT HIM/HER FROM GETTING DISEASES – THAT IS, POLIO? *Show and probe:* THE VACCINATION IS MOST COMMONLY GIVEN IN A VIAL SUCH AS THIS	Yes ..... 1 No ..... 2 DK 8	 2⇨IM11 8⇨IM11
IM8A. DID (*name*) (OR THE PERSON WITH (*name*) AT THE TIME) RECEIVE FREE ORS PACKET(S) SUCH AS THIS AT THE TIME OF THIS VACCINATION? *Show sample ORS packet*	Yes ..... 1 No ..... 2 DK 8	
IM9. WAS THE FIRST POLIO VACCINE RECEIVED IN THE FIRST TWO WEEKS AFTER BIRTH OR LATER?	First two weeks ..... 1 Later ..... 2 DK 8	
IM10. HOW MANY TIMES WAS THE POLIO VACCINE RECEIVED?	Number of times ..... __	
IM11. HAS (*name*) EVER RECEIVED A DPT VACCINATION – THAT IS, AN INJECTION USUALLY IN THE RIGHT THIGH – TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, DIPHTHERIA? *Probe by indicating that DPT vaccination is sometimes given at the same time as Polio*	Yes ..... 1 No ..... 2 DK 8	 2⇨IM16 8⇨IM16

IM11A. DID (*name*) (OR THE PERSON WITH (*name*) AT THE TIME) RECEIVE FREE ORS PACKET(S) SUCH AS THIS AT THE TIME OF THIS VACCINATION? *Show sample ORS packet*	Yes ..... 1 No ..... 2 DK 8	
IM12. HOW MANY TIMES WAS A DPT VACCINE RECEIVED?	Number of times ..... __	
IM16. HAS (*name*) EVER RECEIVED A MEASLES INJECTION – THAT IS, A SHOT USUALLY IN THE RIGHT ARM OR SHOULDER 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. DID (*name*) (OR THE PERSON WITH (*name*) AT THE TIME) RECEIVE FREE ORS PACKET(S) SUCH AS THIS AT THE TIME OF THIS VACCINATION? *Show sample ORS packet*	Yes ..... 1 No ..... 2 DK 8	
IM18. HAS (*name*) RECEIVED A VITAMIN A DOSE LIKE THIS WITHIN THE LAST 6 MONTHS? *Show capsule(s)*	Yes ..... 1 No ..... 2 DK 8	
IM19. PLEASE TELL ME IF (*name*) HAS PARTICIPATED IN ANY OF THE FOLLOWING NATIONAL IMMUNIZATION DAYS AND CHILD HEALTH DAYS:	Y N DK	
[A] Jan/Feb *2009 CHDS* (Vit A, measles & polio)	Jan/Feb, 2009 CHDs 1 2 8	
[B] ***JUNE** 2009 NIDS* (Polio)	Jun 2009 NIDs 1 2 8	
[C] JULY 2009 NIDS	Jul, 2009 NIDs 1 2 8	
[D] Jul/Aug *2009 CHDS (VIT A, MEASLES & POLIO)*	Nov/Dec, 2009 CHDs 1 2 8	
[E] June *2010 CHDS (VIT A, MEASLES & POLIO)*	Jun, 2010 CHDs 1 2 8	
[F] SEPT 2010 NIDS (Polio)	Sept, *2010 NIDs* 1 2 8	
[G] OCTOBER 2010 *NIDS* (Polio)	Oct, *2010 NIDs* 1 2 8	
[H] December *2010 CHDS (VIT A, MEASLES & POLIO)*	Dec, 2010 CHDs 1 2 8	

IM20. CHECK IM19: DID CHILD PARTICIPATE IN THE DECEMBER 2010 CHDS (IM19[H] = 1)? ☐ YES (IM19[H]=1) ⇨ GO TO IM21 ☐ NO (IM19[H]=2 OR 8) ⇨ GO TO UF13		
IM21. DID (*name*) (OR THE PERSON WITH (*name*) AT THE TIME) RECEIVE FREE ORS PACKET(S) SUCH AS THIS IN THE DECEMBER 2010 CHILD HEALTH DAYS? *Show sample ORS packet*	Packet(s) received ..... 1 No packet(s) received ..... 2 DK 8	 2⇨UF13 8⇨UF13
IM22. *CHECK CA1: DID CHILD HAVE AN EPISODE OF DIARRHOEA IN THE PAST 2 WEEKS (CA1 = 1)?* ☐ *YES (CA1=1) ⇨ GO TO IM24* ☐ *NO (CA1=2 OR 8) ⇨ GO TO IM23*		
IM23. SINCE THE RECEIPT OF THE FREE ORS PACKET(S) IN DECEMBER, HAS (*name*) HAD ANY EPISODE OF DIARRHOEA?	Yes, at least once ..... 1 No episodes ..... 2 DK 8	 2⇨UF13 8⇨UF13
IM24. WAS/WERE THE FREE ORS PACKET(S) RECEIVED IN DECEMBER USED TO TREAT (*name*) FOR DIARRHOEA?	Used to treat diarrhoea ..... 1 Not used to treat ..... 2 DK 8	

UF13. *Record the time.*	**Hour and minutes** ..... __ __ : __ __	

UF14. Is the respondent the mother or caretaker of another child age 0-4 living in this household?

☐ *Yes. ⇨ Go to the next QUESTIONNAIRE FOR CHILDREN UNDER FIVE to be administered to the same respondent*

☐ *No. ⇨ End the interview with this respondent by thanking him/her for his/her cooperation.*

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.

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

Northeast Zone, Somalia

Multiple Indicator Cluster Survey

2011