

Thailand MICS

Monitoring the situation of children and women



Multiple Indicator Cluster Survey 2015-2016



NSO
National Statistical Office



NHSO
National Health Security Office



UNICEF
United Nations Children's Fund





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Final Report

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The Thailand Multiple Indicator Cluster Survey (MICS) was carried out in 2015-2016 by the National Statistical Office (NSO) in collaboration with the United Nations Children's Fund (UNICEF) as part of the global MICS programme. Technical and financial support was provided by the UNICEF.

The global MICS programme was developed by UNICEF in the 1990s as an international household survey programme to support countries in the collection of internationally comparable data on a wide range of indicators on the situation of children and women. MICS surveys measure key indicators that allow countries to generate data for use in policies and programmes, and to monitor progress towards the Millennium Development Goals (MDGs) and other internationally agreed upon commitments.

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PREFACE

Since the very start of the adoption of the Millennium Development Goals (MDGs), the Royal Thai Government, along with its national and international partners in social development sector, has continuously demonstrated its commitment for their achievement. The national commitment was further reconfirmed with the support for the implementation of the Sustainable Development Goals (SDGs) and the national response to it. Sustaining such a commitment requires a systematic approach to allocate resources, identification of emerging needs and monitoring of the progress based on solid data. Multiple Indicators Cluster Survey (MICS) offers a reliable methodology and sources of data to support effective and evidence-based decision making. The MICS, as developed by UNICEF and implemented by national partners, collects internationally comparable data on a wide range of indicators on the situation of children and women. MICS surveys measure key indicators that allow countries to generate data for use in policies and programmes, and to monitor progress towards the international commitments.

The Thailand National Statistical Office (NSO) carried out the fifth round of MICS between November 2015 and March 2016 with technical and financial support from UNICEF. The survey was also supported by the National Health Security Office. A joint Royal Thai Government Steering Group guided the initial planning of the MICS5. A technical group, composed of key line ministries' representatives, assisted in customising and adopting the global MICS5 tools to the local context. The main objective of the survey is to track progress on various programs, post-MDGs situation and to help establish a baseline on indicators under the SDGs.

The objective of publishing and releasing this Final Report is to disseminate the detailed information on all survey findings by various demographic, socio-economic and cultural characteristics.

NSO would like to express our sincere gratitude to our partners for their continuous support to complete Thailand MICS5 within stipulated time. Special thanks to UNICEF Thailand country office and National Health Security Office for their financial and technical support. We would also like to appreciate contributions from line ministries and organizations namely, Ministry of Public Health, Ministry of Education, Ministry of Social Development and Human Security, Ministry of Labour, Office of the National Economic and Social Development Board, International Health Policy Program, Thai Health Promotion Foundation, Institute for Population and Social Research: Mahidol University, College of Population Studies: Chulalongkorn University). National Statistical Office hopes that the information from this report will be useful to ministries, agencies, both public and private institutions and the general public.

Director General
National Statistical Office

Representative
UNICEF, Thailand Country Office

Summary Table of Survey Implementation and the Survey Population, Thailand MICS, 2015-2016

Survey implementation			
Sample frame	Oct-Dec, 2014	Questionnaires	Household Women (age 15-49) Men (age 15-49) Children under five
Interviewer training	1 st batch: September, 2015 2 nd batch: October, 2015	Fieldwork	November 2015 to March 2016
Survey sample			
Households		Children under five	
- Sampled	31,010	- Eligible	12,313
- Occupied	29,375	- Mothers/caretakers interviewed	12,250
- Interviewed	28,652	- Response rate (Per cent)	99.5
- Response rate (Per cent)	97.5		
Women		Men	
- Eligible for interviews	26,033	- Eligible for interviews	23,642
- Interviewed	25,414	- Interviewed	23,183
- Response rate (Per cent)	98.4	- Response rate (Per cent)	98.1

Survey population			
Average household size	3.2	Percentage of population living in	
Percentage of population under:		- Urban areas	48.4
- Age 5	5.9	- Rural areas	51.6
- Age 18	23.6	- Bangkok	13.5
Percentage of women age 15-49 years with at least one live birth in the last 2 years	0 8.2	- Central	30.1
		- North	16.6
		- North East	26.3
		- South	13.3

Housing characteristics	
Percentage of households with	
- Electricity	99.6
- Finished floor	80.2
- Finished roofing	99.4
- Finished walls	97.1
- Rooms used for sleeping (3 or more)	18.3
Mean number of persons per room used for sleeping	1.91

Household or personal assets	
Percentage of households that own	
- A television (Plain Monitor)	77.0
- A television (LCD/LED/Plasma)	38.0
- A refrigerator	91.9
- Agricultural land	42.3
- Farm animals/livestock	26.0
- Computer	32.0
- Tablet	24.6
- Air Conditioner	28.1
Percentage of households where at least a member has or owns a	
- Mobile phone (traditional)	68.6
- Mobile phone (Smart)	68.2
- Car or truck	46.4
- Motorcycle or scooter	78.9
- Bank account	89.9
- Credit card	23.7

Summary Table of Findings¹

Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Thailand MICS, 2015-2016

NUTRITION				
Nutritional status				
MICS Indicator	Indicator	Description	Value	
2.1a	MDG 1.8	Underweight prevalence	Percentage of children under age 5 who fall below	
2.1b		(a) Moderate and severe (b) Severe	(a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for age of the WHO standard	6.7 1.5
2.2a		Stunting prevalence	Percentage of children under age 5 who fall below	
2.2b		(a) Moderate and severe (b) Severe	(a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median height for age of the WHO standard	10.5 2.6
2.3a		Wasting prevalence	Percentage of children under age 5 who fall below	
2.3b		(a) Moderate and severe (b) Severe	(a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for height of the WHO standard	5.4 1.4
2.4		Overweight prevalence	Percentage of children under age 5 who are above two standard deviations of the median weight for height of the WHO standard	8.2
Breastfeeding and infant feeding				
2.5		Children ever breastfed	Percentage of women with a live birth in the last 2 years who breastfed their last live-born child at any time	97.4
2.6		Early initiation of breastfeeding	Percentage of women with a live birth in the last 2 years who put their last newborn to the breast within one hour of birth	39.9
2.7		Exclusive breastfeeding under 6 months	Percentage of infants under 6 months of age who are exclusively breastfed	23.1
2.8		Predominant breastfeeding under 6 months	Percentage of infants under 6 months of age who received breast milk as the predominant source of nourishment during the previous day	42.1
2.9		Continued breastfeeding at 1 year	Percentage of children age 12-15 months who received breast milk during the previous day	33.3
2.10		Continued breastfeeding at 2 years	Percentage of children age 20-23 months who received breast milk during the previous day	15.6
2.11		Median duration of breastfeeding	The age in months when 50 per cent of children age 0-35 months did not receive breast milk during the previous day	7.9
2.12		Age-appropriate breastfeeding	Percentage of children age 0-23 months appropriately fed during the previous day	28.0
2.13		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	84.6
2.14		Milk feeding frequency for non-breastfed children	Percentage of non-breastfed children age 6-23 months who received at least 2 milk feedings during the previous day	92.0
2.15		Minimum meal frequency	Percentage of children age 6-23 months who received solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum number of times or more during the previous day	84.6
2.16		Minimum dietary diversity	Percentage of children age 6-23 months who received foods from 4 or more food groups during the previous day	75.0

¹ See Appendix C for a detailed description of MICS indicators

MICS Indicator	Indicator	Description	Value
2.17a	Minimum acceptable diet	(a) Percentage of breastfed children age 6-23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day	49.6
2.17b		(b) Percentage of non-breastfed children age 6-23 months who received at least 2 milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day	58.5
2.18	Bottle feeding	Percentage of children age 0-23 months who were fed with a bottle during the previous day	79.3
Salt iodization			
2.19	Iodized salt consumption	Percentage of households with salt testing 15 parts per million or more of iodide/iodate	73.3
Low birth weight			
2.20	Low birth weight infants	Percentage of most recent live births in the last 2 years weighing below 2,500 grams at birth	9.4
2.S20	Low birth weight infants (born during last five years)	Percentage of live births in the last 5 years weighing below 2,500 grams at birth	8.6
2.21	Infants weighed at birth	Percentage of most recent live births in the last 2 years who were weighed at birth	98.9

CHILD HEALTH			
Vaccinations			
3.1	Tuberculosis immunization coverage	Percentage of children age 12-23 months who received BCG vaccine by their first birthday	96.2
3.2	Polio immunization coverage	Percentage of children age 12-23 months who received the third dose of OPV vaccine (OPV3) by their first birthday	85.8
3.3	Diphtheria, pertussis and tetanus (DPT) immunization coverage	Percentage of children age 12-23 months who received the third dose of DPT vaccine (DPT3) by their first birthday	87.6
3.4	MDG 4.3 Measles immunization coverage	Percentage of children age 12-23 months who received measles vaccine by their first birthday	89.0
3.5	Hepatitis B immunization coverage	Percentage of children age 12-23 months who received the third dose of Hepatitis B vaccine (HepB3) by their first birthday	84.3
3.8	Full immunization coverage	Percentage of children age 12-23 months who received all vaccinations recommended in the national immunization schedule by their first birthday	71.6
Tetanus toxoid			
3.9	Neonatal tetanus protection	Percentage of women age 15-49 years with a live birth in the last 2 years who were given at least two doses of tetanus toxoid vaccine within the appropriate interval prior to the most recent birth	73.9
Diarrhoea			
-	Children with diarrhoea	Percentage of children under age 5 with diarrhoea in the last 2 weeks	4.9
3.10	Care-seeking for diarrhoea	Percentage of children under age 5 with diarrhoea in the last 2 weeks for whom advice or treatment was sought from a health facility or provider	70.7
3.S11	Diarrhoea treatment with oral rehydration salts (ORS)	Percentage of children under age 5 with diarrhoea in the last 2 weeks who received ORS	74.1
3.12	Diarrhoea treatment with oral rehydration therapy (ORT) and continued feeding	Percentage of children under age 5 with diarrhoea in the last 2 weeks who received ORT (ORS packet, pre-packaged ORS fluid, recommended homemade fluid or increased fluids) and continued feeding during the episode of diarrhoea	70.5

Acute Respiratory Infection (ARI) symptoms			
MICS Indicator	Indicator	Description	Value
-	Children with ARI symptoms	Percentage of children under age 5 with ARI symptoms in the last 2 weeks	1.4
3.13	Care-seeking for children with ARI symptoms	Percentage of children under age 5 with ARI symptoms in the last 2 weeks for whom advice or treatment was sought from a health facility or provider	79.5
3.14	Antibiotic treatment for children with ARI symptoms	Percentage of children under age 5 with ARI symptoms in the last 2 weeks who received antibiotics	70.0
Solid fuel use			
3.15	Use of solid fuels for cooking	Percentage of household members in households that use solid fuels as the primary source of domestic energy to cook	21.1
Fever			
3.20	Care-seeking for fever	Percentage of children under age 5 with fever in the last 2 weeks for whom advice or treatment was sought from a health facility or provider	75.6

WATER AND SANITATION				
4.1	MDG 7.8	Use of improved drinking water sources	Percentage of household members using improved sources of drinking water	98.0
4.2		Water treatment	Percentage of household members in households using unimproved drinking water who use an appropriate treatment method	21.6
4.3	MDG 7.9	Use of improved sanitation	Percentage of household members using improved sanitation facilities which are not shared	97.2
4.4		Safe disposal of child's faeces	Percentage of children age 0-2 years whose last stools were disposed of safely	42.0
4.5		Place for handwashing	Percentage of households with a specific place for hand washing where water and soap or other cleansing agent are present	81.2
4.6		Availability of soap or other cleansing agent	Percentage of households with soap or other cleansing agent	85.5

REPRODUCTIVE HEALTH				
Contraception and unmet need				
-		Total fertility rate	Total fertility rate for women age 15-49 years	1.5
5.1	MDG 5.4	Adolescent birth rate	Age-specific fertility rate for women age 15-19 years	51.0
5.2		Early childbearing	Percentage of women age 20-24 years who had at least one live birth before age 18	9.4
5.3	MDG 5.3	Contraceptive prevalence rate	Percentage 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	78.4
5.4	MDG 5.6	Unmet need	Percentage 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	6.2

Maternal and newborn health			
MICS Indicator	Indicator	Description	Value
5.5a	MDG 5.5	Antenatal care coverage	Percentage of women age 15-49 years with a live birth in the last 2 years who were attended during their last pregnancy that led to a live birth
5.5b			(a) at least once by skilled health personnel (b) at least four times by any provider
			98.1
			90.8
5.6		Content of antenatal care	Percentage of women age 15-49 years with a live birth in the last 2 years who had their blood pressure measured and gave urine and blood samples during the last pregnancy that led to a live birth
			97.0
5.S6		STI (VDRL 1st) screening during antenatal care	Percentage of women age 15-49 years with a live birth in the last 2 years who had blood screening for STIs (VDRL 1 st)
			93.2
5.S7		STI (VDRL 2nd) screening during antenatal care	Percentage of women age 15-49 years with a live birth in the last 2 years who had blood screening for STIs (VDRL 2 nd)
			48.6
5.S8		Thalassemia screening for women during antenatal care	Percentage of women age 15-49 years with a live birth in the last 2 years who had blood screening for thalassemia
			87.6
5.S9		Thalassemia screening for husband	Percentage of women age 15-49 years with a live birth in the last 2 years whose husband had blood screening for thalassemia
			37.1
5.7	MDG 5.2	Skilled attendant at delivery	Percentage of women age 15-49 years with a live birth in the last 2 years who were attended by skilled health personnel during their most recent live birth
			99.1
5.8		Institutional deliveries	Percentage of women age 15-49 years with a live birth in the last 2 years whose most recent live birth was delivered in a health facility
			98.6
5.9		Caesarean section	Percentage of women age 15-49 years whose most recent live birth in the last 2 years was delivered by caesarean section
			32.7
5.S10		Post-natal health check	Percentage of women age 15-49 years with a live birth in the last 2 years who had at least one post-natal health check within 42 days of delivery.
			78.1

CHILD DEVELOPMENT			
6.1		Attendance in early childhood education	Percentage of children age 36-59 months who are attending an early childhood education programme
			84.7
6.2		Support for learning	Percentage 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 last 3 days
			92.7
6.3		Father's support for learning	Percentage of children age 36-59 months whose biological father has engaged in four or more activities to promote learning and school readiness in the last 3 days
			34.0
6.4		Mother's support for learning	Percentage of children age 36-59 months whose biological mother has engaged in four or more activities to promote learning and school readiness in the last 3 days
			62.8
6.5		Availability of children's books	Percentage of children under age 5 who have three or more children's books
			41.2
6.6		Availability of playthings	Percentage of children under age 5 who play with two or more types of playthings
			75.6
6.S6		Availability of playthings (Electronic devices)	Percentage of children under age 5 who play with electronic devices, i.e., mobile phones, tablets and game players
			50.9
6.7		Inadequate care	Percentage 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 last week
			6.1
6.8		Early child development index	Percentage of children age 36-59 months who are developmentally on track in at least three of the following four domains: literacy-numeracy, physical, social-emotional, and learning
			91.1

LITERACY AND EDUCATION				
MICS Indicator	Indicator	Description	Value	
7.1	MDG 2.3	Literacy rate among young people	Percentage of young people age 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education	
			(a) women	95.4
			(b) men	94.7
7.2		School readiness	Percentage of children in first grade of primary school who attended preschool during the previous school year	98.7
7.3		Net intake rate in primary education	Percentage of children of school-entry age who enter the first grade of primary school	75.7
7.4	MDG 2.1	Primary school net attendance ratio (adjusted)	Percentage of children of primary school age currently attending primary or secondary school	94.8
7.5		Secondary school net attendance ratio (adjusted)	Percentage of children of secondary school age currently attending secondary school or higher	81.0
7.6	MDG 2.2	Children reaching last grade of primary	Percentage of children entering the first grade of primary school who eventually reach last grade	99.5
7.7		Primary completion rate	Number of children attending the last grade of primary school (excluding repeaters) divided by number of children of primary school completion age (age appropriate to final grade of primary school)	99.5
7.8		Transition rate to secondary school	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 divided by number of children attending the last grade of primary school during the previous school year	98.2
7.9	MDG 3.1	Gender parity index (primary school)	Primary school net attendance ratio (adjusted) for girls divided by primary school net attendance ratio (adjusted) for boys	1.00
7.10	MDG 3.1	Gender parity index (secondary school)	Secondary school net attendance ratio (adjusted) for girls divided by secondary school net attendance ratio (adjusted) for boys	1.11

CHILD PROTECTION				
Birth registration				
8.1		Birth registration	Percentage of children under age 5 whose births are reported registered	99.5
Child discipline				
8.3		Violent discipline	Percentage of children age 1-14 years who experienced psychological aggression or physical punishment during the last one month	75.2
Early marriage and polygyny				
8.4		Marriage before age 15	Percentage of people age 15-49 years who were first married or in union before age 15	
			(a) Women	4.3
			(b) Men	1.7
8.5		Marriage before age 18	Percentage of people age 20-49 years who were first married or in union before age 18	
			(a) Women	21.3
			(b) Men	8.0
8.6		Young people age 15-19 years currently married or in union	Percentage of young people age 15-19 years who are married or in union	
			(a) Women	14.1
			(b) Men	6.8

MICS Indicator	Indicator	Description	Value
8.7	Polygyny	Percentage of people age 15-49 years who are in a polygynous union (a) Women (b) Men	3.4 2.9
8.8a 8.8b	Spousal age difference	Percentage of young women who are married or in union and whose spouse is 10 or more years older (a) among women age 15-19 years (b) among women age 20-24 years	7.5 15.1
Attitudes towards domestic violence			
8.12	Attitudes towards domestic violence	Percentage of people age 15-49 years who state that a husband 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 (a) Women (b) Men	8.6 8.7
Children's living arrangements			
8.13	Children's living arrangements	Percentage of children age 0-17 years living with neither biological parent	22.7
8.14	Prevalence of children with one or both parents dead	Percentage of children age 0-17 years with one or both biological parents dead	3.5
8.15	Children with at least one parent living abroad	Percentage of children 0-17 years with at least one biological parent living abroad	1.6

HIV/AIDS			
HIV/AIDS knowledge and attitudes			
-	Have heard of AIDS	Percentage of people age 15-49 years who have heard of AIDS (a) Women (b) Men	96.2 95.2
9.1	MDG 6.3 Knowledge about HIV prevention among young people	Percentage of young people age 15-24 years who correctly identify ways of preventing the sexual transmission of HIV, and who reject major misconceptions about HIV transmission (a) Women (b) Men	46.0 45.1
9.2	Knowledge of mother-to-child transmission of HIV	Percentage of people age 15-49 years who correctly identify all three means of mother-to-child transmission of HIV (a) Women (b) Men	66.4 57.4
9.3	Accepting attitudes towards people living with HIV	Percentage of people age 15-49 years expressing accepting attitudes on all four questions towards people living with HIV (a) Women (b) Men	31.6 33.0
HIV testing			
9.4	People who know where to be tested for HIV	Percentage of people age 15-49 years who state knowledge of a place to be tested for HIV (a) Women (b) Men	84.7 80.3
9.5	People who have been tested for HIV and know the results	Percentage of people age 15-49 years who have been tested for HIV in the last 12 months and who know their results (a) Women (b) Men	9.3 8.5

MICS Indicator	Indicator	Description	Value
9.7	HIV counselling during antenatal care	Percentage of women age 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they received counselling on HIV during antenatal care	69.4
9.8	HIV testing during antenatal care	Percentage of women age 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they were offered and accepted an HIV test during antenatal care and received their results	75.5

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List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infection
ASFR	Age Specific Fertility Rate
BCG	Bacillus-Cereus-Geuerin (Tuberculosis)
CBR	Crude Birth Rate
CSPro	Census and Survey Processing System
DPT	Diphtheria Pertussis Tetanus
ECD	Early Childhood Development
ECDI	Early Childhood Development Index
EPI	Expanded Programme on Immunization
GFR	General Fertility Rate
GPI	Gender Parity Index
HepB	Hepatitis B
HIV	Human Immunodeficiency Virus
IDD	Iodine Deficiency Disorders
IUD	Intrauterine Device
IYCF	Infant and young child feeding
JE	Japanese encephalitis
JMP	Joint Monitoring Programme
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MICS5	Fifth global round of Multiple Indicator Cluster Surveys programme
MMR	Measles, Mumps and Rubella
NAR	Net Attendance Rate
NSO	National Statistical Office
ORS	Oral rehydration salts
ORT	Oral rehydration treatment
ppm	Parts Per Million
PSU	Primary Sampling Unit
RHF	Recommended home fluid
SPSS	Statistical Package for Social Sciences
SSU	Secondary Sampling Unit
STIs	Sexually transmitted infections
TSFB	Time Since First Birth
TFR	Total Fertility Rate
UNAIDS	The Joint 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
VDRL	Venereal disease research laboratory
WFFC	World Fit for Children
WHO	World Health Organization

Executive Summary

The Thailand Multiple Indicator Cluster Survey (MICS 2015-2016) was conducted from November 2015 to March 2016 by the National Statistical Office (NSO). Technical and financial support for the survey was mainly provided by the United Nations Children's Fund (UNICEF) in Thailand. The Thailand MICS, 2015-2016 provides valuable information and the latest evidence on the situation of children and women in Thailand, updating information from the previous MICS and other relevant household surveys. The survey presents data from an equity perspective by indicating disparities by sex, area, region, education, household wealth and other characteristics. The Thailand MICS, 2015-2016 is based on a sample of 28,652 households that were interviewed and provides a comprehensive picture of children, women and men in the five regions of Thailand.

Nutritional Status and Breastfeeding

Almost all children born during the two years prior to the survey were weighed at birth. Overall, 9.4 per cent were reported to weigh less than 2,500 grams at birth. The prevalence of moderate or severe underweight among children under 5 in Thailand is reported at 6.7 per cent. Among children aged 0-5 months, 11.6 per cent are moderately or severely underweight. Children under 5 in the poorest households in Thailand are also more likely to be moderately or severely underweight than children from other wealth index quintiles. However, 1 in 12 children under 5 in Thailand is overweight.

One in 10 children in Thailand is moderately or severely stunted. The highest percentage of stunting is reported for children under 5 living in households headed by a non-Thai speaker (16.3 per cent).

Moderate or severe wasting among children under 5 in Thailand stands at 5.4 per cent. Children aged 0-5 months record the highest percentage of moderate or severe wasting (12.4 per cent).

Almost all (97.4 per cent) newborns in Thailand were breastfed at some point after birth. However, only 39.9 per cent started breastfeeding at the correct time (i.e., within one hour of birth). A total of 23.1 per cent of infants aged 0-5 months are exclusively breastfed. Children under 6 months of age in the North region are more likely to be exclusively breastfed compared to children in other regions. Some 15.6 per cent of children in Thailand continue to receive breastfeeding at 2 years old. Household wealth status shows an inverse relation with the percentage of children breastfed at age 2. Children aged 0-35 months are exclusively breastfed for a median duration of 0.6 months. Among children 6-23 months of age, 55.6 per cent receive a minimum acceptable diet in terms of meal frequency and dietary diversity.

Adequately iodized salt, defined as salt containing 15 or more parts per million (15+ ppm), is used in three out of four households (73.3 per cent), with the percentage considerably higher in the richest households (86.3 per cent). In the Northeast, 39.1 per cent of households use either no iodized salt or inadequately iodized salt for household consumption.

Child Health

In Thailand, 71.6 per cent of children aged 12-23 months received all the recommended vaccinations before their first birthday. However, 79.1 per cent of children in this age group were fully vaccinated at any time before the survey. Among children aged 12-23 months, 96.2 per cent were protected against tuberculosis before their first birthday and almost 9 out of 10 children were given the measles vaccine before the age of 12 months. Three out of four women aged 15-49 who had a live birth during the

previous two years were given at least two doses for tetanus protection. Women in the poorest households are least likely (63.8 per cent) to be protected against tetanus compared to other women.

For 70.7 per cent of children who had an episode of diarrhoea, medical care or advice was sought. Children in the South were least likely to receive any medical attention or advice for diarrhoea. Three out of four children with diarrhoea received ORS or health personnel recommended homemade fluid.

Care-seeking behaviour is also common for episodes of fever in children. For three out of four children with fever, medical treatment or advice was sought from a health facility or provider. Interestingly, children in rural areas were more likely to receive medical treatment or advice for fever from a health facility or provider compared to children in urban areas.

Water and Sanitation

The Thailand MICS, 2015-2016 shows that 98.0 per cent of the population has access to improved sources of drinking water. Similarly, almost the entire population (99.6 per cent) lives in households with access to improved sanitation facilities. Use of an improved source of drinking water is lowest in the South region, at 94.4 per cent, compared to other regions. Open defecation in Thailand is almost non-existent (0.2 per cent). However, only 42.0 per cent of children under 2 years of age had their last stool disposed of safely.

Four out of five households in Thailand with a specific place for handwashing had water and soap or other cleansing agents present at the handwashing place. For the poorest households, this indicator was lower, at 69.6 per cent.

Reproductive Health

The total fertility rate (TFR) as a measure of current fertility is estimated at 1.5 children per woman. Fertility is slightly higher in rural areas compared to urban areas. A total of 9.4 per cent of women aged 20-24 had a live birth before the age of 18. The percentage is highest (20.9 per cent) for primary educated women followed by women in the poorest households (17.8 per cent). Current use of a contraceptive method is reported by 78.4 per cent of currently married women. The most popular method is the pill (32.8 per cent) followed by female sterilization (24.3 per cent). Total unmet need for contraception is 6.2 per cent, but for women aged 15-19 years it is 13.0 per cent.

Among women with who had a live birth in the last two years, almost all (98.1 per cent) received antenatal care from a skilled personnel at least once during their pregnancy. In four out of five cases, antenatal care was provided by a medical doctor. The percentage of women who sought antenatal care from a healthcare center staff or nurse's aide was highest (14.3 per cent) in the Northeast region. A total of 90.8 per cent of women who had a live birth during the last two years, had four or more antenatal care visits during their last pregnancy and 79.8 per cent women had there their first antenatal care visit during the first trimester. However, only around 40.3 per cent of uneducated women had their first antenatal care visit during the first trimester.

Nine out of 10 women who had a live birth during the two years preceding the survey had a test for STIs (VDRL 1st), while 87.6 per cent were tested for thalassemia and 37.1 per cent had their husbands tested for thalassemia.

Almost all deliveries (99.1 per cent) were attended by skilled personnel and 32.7 per cent of deliveries were by C-section. Moreover, large variations were observed across regions and background characteristics. Almost half of the deliveries in the Bangkok region (46.5 per cent) and deliveries to women aged 35-49 (48.8 per cent), higher educated women (54.2 per cent) and women in the richest

households (50.5 per cent) were delivered through C-section. More than 6 out of 10 deliveries (64.1 per cent) in private health facilities were delivered by C-section.

Delivery in a health facility is almost universal (98.6 per cent) in Thailand and in a majority of cases (88.7 per cent) mothers delivered at a public health facility. The percentage of deliveries in a private health facility was positively related to household wealth status. A total of 78.1 per cent of women who had a live birth during the preceding two years had at least one post-natal health check within 42 days of delivery.

Early Childhood Development

In Thailand, 84.7 per cent of children aged 3-4 years are attending an organized early childhood education programme. Interestingly, this percentage is quite low in Bangkok (63.4 per cent) compared to other regions. Moreover, for 92.7 per cent of children, an adult household member engages in four or more activities that promote learning or school readiness. Three out of four children have access to two or more playthings and half the children (50.9 per cent) play with electronic devices. Some 6.1 per cent of children aged under 5 were left with inadequate care during the week preceding the survey.

Among children age 36-59 months, 91.1 per cent are developmentally on track. Children in the richest households (96.0 per cent), children born to higher educated mothers (95.4 per cent), older children (95.6 per cent) and children attending early childhood education (93.4 per cent) are more likely to be developmentally on track.

Literacy and Education

In Thailand, 95.4 per cent of young women aged 15-24 years and 94.7 per cent of young men aged 15-24 years are literate. In terms of school readiness, the percentage of children attending Grade 1 who were attending preschool the previous year is 98.7 per cent. Overall, 75.7 per cent of primary school entry-age children enter primary school Grade 1. However, this percentage is reported as quite low for children born to uneducated mothers (66.0 per cent) and children living in the poorest households (66.9 per cent). The net attendance ratio at primary level (adjusted) is 94.8 per cent, with 4.1 per cent of children of primary school age attending preschool and 1.0 per cent not attending school or preschool. The percentage of children not attending school or preschool is highest (6.2 per cent) among children born to uneducated mothers. Similarly, the net attendance ratio (adjusted) at secondary level is 81.0 per cent. A total of 56.8 per cent of secondary school age children living in households headed by a non-Thai speaker attend secondary school or higher.

Almost all children entering Grade 1 eventually reach Grade 6. Completion of primary school and transition into secondary school is quite high across all background characteristics. At national level, 98.2 per cent complete primary school and transit into secondary school. The primary to secondary transition rate is lowest among children in the poorest households (94.7 per cent).

In Thailand, there is no gender parity at primary level. However, at secondary level, there are 1.11 secondary school age girls attending secondary school for every secondary school age boy attending secondary school.

Child Protection

Birth registration for children under 5 years of age is universal in Thailand (99.5 per cent). Children born to uneducated mothers are somewhat less likely to be registered (92.3 per cent). The use of violent discipline methods is quite high in Thailand, with 75.2 per cent of children aged 1-14 years having faced any violent discipline method during the one month preceding the survey. Household wealth status is

inversely associated with use of any violent discipline method. Similarly, almost one out of two respondents feels that physical punishment should be used to discipline children. This indicator also shows a negative relation with the respondent's education level and household wealth status.

Among women aged 15-19 years, 14.1 per cent are currently married compared to 6.8 per cent of men in the same age group. A total of 3.4 per cent of women aged 15-49 are in polygynous marriages/union compared to 2.9 per cent of men in the 15-49 age group. Moreover, 18.6 per cent of women aged 20-24 are married to or in union with a younger partner. Similarly, 15.1 per cent of women in the same age group are married to or in union with a person older by 10 or more years.

Overall, 8.6 per cent of women in Thailand feel that a husband/partner is justified in hitting or beating his wife if she neglects the children, goes out without her husband's permission, refuses sex with her husband, burns food or argues with her husband. A similar percentage (8.7 per cent) of men also feel that a husband is justified in hitting or beating his wife in at least one of the five situations mentioned above.

Almost one out of four (22.7 per cent) children aged 0-17 lives with neither biological parent. The percentage is higher among children living in the Northeast (33.2 per cent) and in the poorest households (34.0 per cent). In total, 3.5 per cent of children in Thailand have one or both parents dead and 1.6 per cent have at least one parent abroad.

HIV/AIDS

Almost all women (96.2 per cent) and men (95.2 per cent) aged 15-49 in Thailand have ever heard of AIDS. Two thirds (66.9 per cent) of uneducated women in Thailand have ever heard of AIDS compared to slightly more than half (55.0 per cent) of uneducated men. Moreover, 48.8 per cent of women and a similar percentage of men have comprehensive knowledge about HIV prevention. Two thirds of women who have heard of AIDS know that HIV can be transmitted from mother to child during pregnancy, during delivery and by breastfeeding. Among uneducated women the percentage is lower, at 37.3 per cent.

In Thailand, 31.6 per cent of women and 33.0 per cent of men aged 15-49 express an accepting attitude towards people living with HIV. Age for both women and men shows a positive relation with accepting attitudes towards people living with HIV. Moreover, household wealth for both women and men is negatively related with accepting attitudes towards people living with HIV. However, 9 out of 10 women and men in Thailand are willing to take care of a family member with AIDS in their own home. A higher percentage (84.7 per cent) of women aged 15-49 years have knowledge of a place for HIV testing compared to men (80.3 per cent) in the same age group. Similarly, 9.3 per cent of women were tested for HIV during the previous 12 months and know the result compared to 8.5 per cent of men in the same period.

Among women who received antenatal care for their last pregnancy during the previous two years, 69.4 per cent received HIV counselling during antenatal care and 62.3 per cent received HIV counselling, were offered an HIV test, accepted the offer and received the results of the HIV test.

I. INTRODUCTION



I. Introduction

Background

This report is based on the Thailand Multiple Indicator Cluster Survey (MICS), conducted in 2015-2016 by the National Statistical Office (NSO). The survey provides statistically sound and internationally comparable data essential for developing evidence-based policies and programmes, and for monitoring progress toward national goals and global commitments. Among these global commitments are those emanating from the World Fit for Children Declaration and Plan of Action, the goals of the United Nations General Assembly Special Session on HIV/AIDS, the Education for All Declaration and the Millennium Development Goals (MDGs).

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 of the World Fit for Children (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.”

For Thailand, guidance on how to improve the well-being of children and women is articulated in the Policy Statement of the Cabinet and explained in ministerial strategies. The Cabinet’s Policy Statement is aimed at reducing social inequality, creating opportunities to access public services and improving the quality of public health services. The Ministry of Education reform strategy aims to improve the quality of learning and education, as well as increase and diversify educational opportunities for all people. The Ministry of Social Development and Human Security runs projects that work for the protection of children and women and the development of their capacities. The guidelines and operations of various ministries and agencies impact on the lives of children and women. The data from the MICS survey is a reflection of their situation.

The Thailand MICS results will be critically important for the post MDG reporting, and are expected to form part of the baseline data for the 2030 agenda.

The Thailand MICS is expected to contribute to the evidence base of several other important initiatives, including Committing to Child Survival: A Promise Renewed, a global movement to end all child and maternal deaths from preventable causes, and the accountability framework proposed by the Commission on Information and Accountability for the Global Strategy for Women's and Children's Health.

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

Survey Objectives

The 2015-2016 Thailand MICS has as its primary objectives:

- To provide up-to-date information for assessing the situation of children and women in Thailand;
- To generate data for the critical assessment of the progress made in various areas, and to commit additional efforts to those areas that require more attention;
- To furnish data needed for monitoring progress towards goals established in the Millennium Declaration and other internationally agreed upon goals, as a basis for future action;
- To collect disaggregated data for the identification of disparities to allow for evidence-based policy-making aimed at social inclusion of the most vulnerable;
- To contribute to the generation of baseline data for the 2030 agenda;
- To validate data from other sources and the results of focused interventions.

This report covers the result of the indicators at national and regional level. National level results were published earlier this year as part of key report findings. The report consists of 11 chapters with the narratives in each chapter based on the tables presented in the respective sections. The first three chapters are dedicated to an introduction of the survey, the methodology and sample and household characteristics. The remaining chapters are related to nutrition, child health, water and sanitation, reproductive health, early childhood development, literacy and education, child protection and knowledge of HIV/AIDS.

II. SAMPLE AND SURVEY METHODOLOGY



II. Sample and Survey Methodology

Sample Design

The sample for the Thailand Multiple Indicator Cluster Survey was designed to provide estimates for a large number of indicators on the situation of children and women at the national level, for urban and rural areas, and for five regions: Bangkok, Central, North, Northeast and South. In addition, the results are produced for 14 individual provinces. The urban and rural areas by province 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 20 households was drawn in each sample enumeration area: 10 households with under-five children and 10 without under-five children. The sample was stratified by province, urban and rural areas, and is not self-weighting. For reporting all survey results, sample weights are used. A more detailed description of the sample design can be found in Appendix A, Sample Design.

Questionnaires

Four sets of questionnaires were used in the survey:

1. a household questionnaire which was used to collect basic demographic information on all *de jure* household members (usual residents), the household and the dwelling;
2. a questionnaire for individual women administered in each household to all women aged 15-49 years;
3. a questionnaire for individual men administered in each household to all men aged 15-49 years; and
4. a questionnaire for children under the age of five, administered to mothers (or caretakers) for all children under 5 living in the household. The questionnaires included the following modules:

The Household Questionnaire included the following modules:

1. List of Household Members
2. Education
3. Child Discipline
4. Household Characteristics
5. Water and Sanitation
6. Handwashing
7. Salt Iodization

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

1. Woman's Background
2. Fertility²
3. Desire for Last Birth
4. Maternal and Newborn Health
5. Contraception
6. Unmet Need
7. Attitudes Toward Domestic Violence

² Due to very low number of child deaths, the results of child mortality are not included in this report.

8. Marriage/Union
9. HIV/AIDS

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

1. Man's Background
2. Fertility
3. Attitudes Toward Domestic Violence
4. Marriage/Union
5. HIV/AIDS

The Questionnaire for Children aged under five was administered to mothers (or caretakers) of children under 5 years of age³ 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:

1. Age
2. Birth Registration
3. Early Childhood Development
4. Breastfeeding and Dietary Intake
5. Immunization
6. Care of Illness
7. Anthropometry

The questionnaires are based on the MICS5 model questionnaire⁴. From the MICS5 model English version, the questionnaires were customised and translated into Thai⁵ and were tested through three rounds of pre-test in Sing Buri and Phra Nakhon Si Ayutthaya (during July 13-17, 2015), Bangkok (July 27, 2015) and Satun (during August 9-18, 2015). Based on the results of the pre-test, modifications were made to the wording and translation of the questionnaires. A copy of the Thailand MICS questionnaires is provided in Appendix E.

In addition to the administration of questionnaires, fieldwork teams tested the salt used for cooking in the households for iodine content, observed the place for handwashing, and measured the weights and heights of children under 5 years. Details and findings of these observations and measurements are provided in the respective sections of the report.

Training and Fieldwork

Training for the fieldwork was conducted for 10 days during September 15-29, 2015 for the first batch and during 18-29 October for the second batch in a central location (Bangkok). Due to large number of participants, each batch was split into two groups. Sixteen provinces with large number of clusters were

³ The terms "children under 5", "children aged 0-4 years", and "children age 0-59 months" are used interchangeably in this report.

⁴ The model MICS5 questionnaires can be found at <http://mics.unicef.org/tools>

⁵ In addition to the standard questions, a set of country specific questions is also included as follows: items MN5A, MN28, MN29, CP2A1, HA29 and HA30 in questionnaire for women, items MHA29 and MHA30 in questionnaire for men and EC2D, IM16A and IM16B in questionnaire for children under five. These additions are supposed to be analyzed by responsible agencies.

included in the first batch, while staffs from remaining 61 provinces attended the second. In some provinces, there was a gap between the end of training and the start of fieldwork. In those provinces, two-day special refresher trainings were arranged before starting the actual data collection on 1 November 2015.

The main training included lectures on interviewing techniques and the contents of the questionnaires as well as mock interviews between trainees to gain practice in asking questions. Towards the end of the training period, trainees spent one day on interviewing practice in Bangkok. Moreover, for both batches, experts from the Ministry of Public Health were invited to speak about maternal and newborn health issues such as contraception, antenatal care and vaccination. The knowledge and information acquired through the training were useful for the interview process and the accuracy of the survey results.

In Bangkok, the fieldwork was carried out under the responsibility of the Field Administration Bureau, while Provincial Statistical Officers were responsible for the fieldwork undertaken in the other 76 provinces.

The data were collected by 98 teams from the respective provinces; each team on average was comprised of 3 interviewers and a supervisor. All the field team members were NSO staff and have been working with NSO on various regular and ongoing surveys for many years. Most of them had experience using android-based tablet surveys, including from the previous round of the Thailand MICS. In order to facilitate data collection in areas in which non-Thai households were prevalent, a specific translator was also a part of team. Fieldwork concluded in March, 2016.

Data Processing

The Thailand MICS, 2015-2016 used window-based tablets to collect the data. CSPro software, version 5.0.3 was used for data collection and entry. Robust data transfer mechanism were developed to immediately transfer collected data to the central office. Data processing began simultaneously with data collection in November 2015 and was completed in early May 2016. Data were analysed using the Statistical Package for Social Sciences (SPSS) software, Version 21. Model syntax and tabulation plans developed by UNICEF were customized and used for this purpose.

III. SAMPLE COVERAGE AND THE CHARACTERISTICS OF HOUSEHOLDS AND RESPONDENTS



III. Sample Coverage and the Characteristics of Households and Respondents

Sample Coverage

Of the 31,010 households selected for the sample, 29,375 were found to be occupied. Of these, 28,652 were successfully interviewed, for a household response rate of 97.5 per cent.

In the interviewed households, 26,033 women (aged 15-49 years) were identified. Of these, 25,614 were successfully interviewed, yielding a household response rate of 98.4 per cent.

In the interviewed households, 23,642 men (aged 15-49) were identified. Questionnaires were completed for 23,183 eligible men, which corresponds to a response rate of 98.1 per cent within eligible interviewed households.

There were 12,313 children under 5 years of age listed in the household questionnaires. Questionnaires were completed for 12,250 of these children, which corresponds to a response rate of 99.5 per cent within interviewed households.

Overall response rates of 96.0 per cent, 95.6 per cent, and 97.0 per cent are calculated for the individual interviews of women, men and children under 5, respectively (Table HH.1).

Table HH.1: Results of household, women's, men's and under-5 interviews								
Number of households, women, men, and children under 5 by interview results, and household, women's, men's and under-5's response rates, Thailand MICS, 2015-2016								
	Total	Area		Region				
		Urban	Rural	Bangkok	Central	North	Northeast	South
Households								
Sampled ⁶	31,010	15,006	16,004	2,802	5,360	5,395	8,844	8,609
Occupied	29,375	14,086	15,289	2,611	5,067	5,080	8,424	8,193
Interviewed	28,652	13,504	15,148	2,261	4,906	5,059	8,364	8,062
Household response rate	97.5	95.9	99.1	86.6	96.8	99.6	99.3	98.4
Women								
Eligible	26,033	12,531	13,502	2,438	4,600	4,144	6,880	7,971
Interviewed	25,614	12,251	13,363	2,283	4,524	4,109	6,829	7,869
Women's response rate	98.4	97.8	99.0	93.6	98.3	99.2	99.3	98.7
Women's overall response rate	96.0	93.7	98.1	81.1	95.2	98.7	98.6	97.1
Men								
Eligible	23,642	11,198	12,444	2,172	4,308	3,646	6,228	7,288
Interviewed	23,183	10,912	12,271	2,044	4,216	3,600	6,147	7,176
Men's response rate	98.1	97.4	98.6	94.1	97.9	98.7	98.7	98.5
Men's overall response rate	95.6	93.4	97.7	81.5	94.8	98.3	98.0	96.9
Children under 5								
Eligible	12,313	5,520	6,793	766	1,973	2,201	3,750	3,623
Mothers/caretakers interviewed	12,250	5,472	6,778	737	1,964	2,201	3,738	3,610
Under-5's response rate	99.5	99.1	99.8	96.2	99.5	100.0	99.7	99.6
Under-5's overall response rate	97.0	95.0	98.9	83.3	96.4	99.6	99.0	98.0

⁶ The actual number of households in Group 1 (households with children under 5) for some enumeration areas is less than 10. As a result, the actual number of sample households is slightly less than that of the design.

Across regions, response rates remained very high. Bangkok, which is highly urban, had the lowest response rate. The response rate for households in Bangkok was 86.6 per cent, for eligible women 93.6 per cent, for eligible men 94.1 per cent and for children under 5 years of age 96.2 per cent. Despite many follow-ups and at least three revisits, access to some of the households and respondents was limited due to the absence of knowledgeable or eligible household members or the refusal of the respondent to participate in the survey during the time of visits and subsequent revisits.

Characteristics of Households

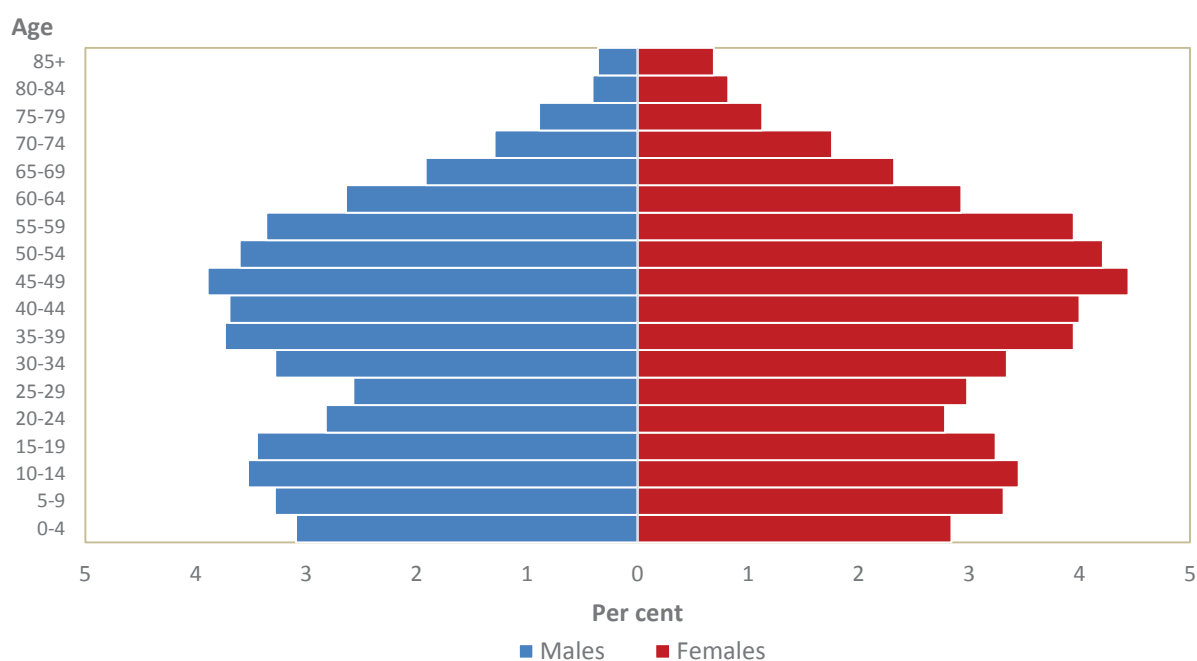
The weighted age and sex distribution of the survey population is provided in Table HH.2. The distribution is also used to produce the population pyramid in Figure HH.1. In the 28,652 households successfully interviewed in the survey, 92,073 household members were listed. Of these, 44,033 were males and 48,040 were females.

Table HH.2: Age distribution of household population by sex						
Per cent 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, Thailand MICS, 2015-2016						
	Total		Males		Females	
	Number	Per cent	Number	Per cent	Number	Per cent
Total	92,073	100.0	44,033	100.0	48,040	100.0
Age						
0-4	5,462	5.9	2,846	6.5	2,616	5.4
5-9	6,072	6.6	3,023	6.9	3,049	6.3
10-14	6,422	7.0	3,248	7.4	3,175	6.6
15-19	6,156	6.7	3,172	7.2	2,984	6.2
20-24	5,162	5.6	2,600	5.9	2,562	5.3
25-29	5,117	5.6	2,370	5.4	2,747	5.7
30-34	6,098	6.6	3,021	6.9	3,077	6.4
35-39	7,075	7.7	3,439	7.8	3,636	7.6
40-44	7,084	7.7	3,401	7.7	3,684	7.7
45-49	7,676	8.3	3,585	8.1	4,091	8.5
50-54	7,193	7.8	3,316	7.5	3,877	8.1
55-59	6,729	7.3	3,095	7.0	3,634	7.6
60-64	5,128	5.6	2,430	5.5	2,698	5.6
65-69	3,903	4.2	1,765	4.0	2,137	4.4
70-74	2,811	3.1	1,192	2.7	1,619	3.4
75-79	1,860	2.0	821	1.9	1,039	2.2
80-84	1,130	1.2	376	0.9	754	1.6
85+	967	1.1	330	0.8	637	1.3
Missing/DK	29	0.0	5	0.0	24	0.0
Dependency age groups						
0-14	17,957	19.5	9,117	20.7	8,840	18.4
15-64	63,417	68.9	30,427	69.1	32,990	68.7
65+	10,671	11.6	4,484	10.2	6,186	12.9
Missing/DK	29	0.0	5	0.0	24	0.0
Child and adult populations						
Children age 0-17 years	21,705	23.6	11,055	25.1	10,649	22.2
Adults age 18+ years	70,340	76.4	32,973	74.9	37,367	77.8
Missing/DK	29	0.0	5	0.0	24	0.0

Table HH.2 shows that 19.5 per cent of the population is under 15 years of age and 11.6 per cent is 65 years or above. Almost one third (31.1 per cent) of the population is dependent on the working age population. Two thirds of the population (68.9 per cent) is of working age (15 to 64 years of age). A large proportion (76.4 per cent) of the population is 18 years or older. It is interesting to note that the proportion of males outnumbered females in the 0-24 and 30-39 age groups. However, this difference narrows, with the proportion of males identical to that of females in the 40-44 age group. In each older age group, the proportion of females surpasses that of males. The gap is most prominent when we compare women and men in the 80-84 and 85+ age groups. The percentage of women in these age groups is almost twice as high as that of men, showing a high survival rate for women in Thailand.

The 2010 Population Census indicates that the male population aged 0-24 years is larger than the female population, while the number of women in the 25-29 age group outnumbers that of males. The current MICS reveals a similar pattern, as shown in Figure HH.1. A large percentage of the population is above 30 years of age, showing the trend of an ageing society in the near future. Moreover, the proportion of children up to 14 years of age is relatively low, indicating a reduction in the fertility rate.

Figure HH.1: Age and sex distribution of household population, Thailand MICS, 2015-2016



Note: 29 household members with missing age and/or sex are excluded

Tables HH.3, HH.4 and HH.5 provide basic information on the households, female respondents aged 15-49, male respondents aged 15-49, and children aged under 5. Both unweighted and weighted numbers are presented. Such information is essential for the interpretation of findings presented later in the report and provides background information on the representativeness of the survey sample. The remaining tables in this report are presented only with weighted numbers.⁷

Table HH.3 provides basic background information on the households, including the sex of the household head, region, area, number of household members, education of household head, language⁸ of the household head and the weighted mean household size. These background characteristics are

⁷ See Appendix A: Sample Design, for more details on sample weights.

⁸ This was determined by asking “What is the mother tongue/native language of the head of this household?”.

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 total number of households is equal, since sample weights were normalized (See Appendix A).

Table HH.3: Household composition			
Per cent and frequency distribution of households by selected characteristics, Thailand MICS, 2015-2016			
	Weighted per cent	Number of households	
		Weighted	Unweighted
Total	100.0	28,652	28,652
Sex of household head			
Male	62.7	17,965	17,816
Female	37.3	10,687	10,836
Region			
Bangkok	13.7	3,932	2,261
Central	30.5	8,747	4,906
North	17.8	5,103	5,059
Northeast	25.0	7,161	8,364
South	12.9	3,708	8,062
Area			
Urban	47.6	13,638	13,504
Rural	52.4	15,014	15,148
Number of household members			
1	13.6	3,885	2,741
2	24.9	7,145	4,924
3	24.2	6,945	6,116
4	18.5	5,287	6,037
5	9.4	2,704	4,169
6	5.2	1,492	2,469
7	2.2	637	1,113
8	1.0	278	551
9	0.5	154	269
10+	0.4	124	263
Education of household head			
None	6.1	1,759	2,418
Primary	57.9	16,584	16,365
Secondary	21.9	6,282	6,102
Higher	14.0	4,008	3,695
Missing/DK	0.1	18	72
Language of household head			
Thai	93.8	26,879	24,523
Non-Thai	6.2	1,773	4,129
Mean household size	3.2	28,652	28,652

Table HH.3 shows that almost 4 in 10 (37.3 per cent) households are female-headed and 6 in 10 (62.7 per cent) have less than four household members. Overall mean household size is 3.2 members (the corresponding figure from the 2010 Population Census is 3.1). It is also interesting to note that nearly 94 per cent of the household heads have attained primary education or above. A total of 6.2 per cent of the household heads speak a language other than Thai as a mother/native tongue.

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

Tables HH.4, HH.4M and HH.5 provide information on the background characteristics of female and male respondents 15-49 years of age and children under age 5. In all three tables, the total numbers of weighted and unweighted observations are equal, since sample weights have been normalized (standardized).⁷ In addition to providing useful information on the background characteristics of women, men and children under age 5, the tables are also intended to show the number of observations in each background category. These categories are used in the subsequent tabulations of this report.

Table HH.4 provides the background characteristics of female respondents aged 15-49 years. The table includes information on the distribution of women according to region, area, age, marital/union status, motherhood status, births in last two years, education,⁹ wealth index quintiles,^{10, 11} and language of the household head.

⁹ Throughout this report, unless otherwise stated, “education” refers to highest educational level ever attended by the respondent when it is used as a background variable.

¹⁰ The wealth index is a composite indicator of wealth. To construct the wealth index, principal components analysis is 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 generate weights (factor scores) for each of the items used. First, initial factor scores are calculated for the total sample. Then, separate factor scores are calculated for households in urban and rural areas. Finally, the urban and rural factor scores are regressed on the initial factor scores to obtain the combined, final factor scores for the total sample. This is carried out to minimize the urban bias in the wealth index values.

Each household in the total sample is then assigned a wealth score based on the assets owned by that household and on the final factor scores obtained as described above. The survey household population is then ranked according to the wealth score of the household they are living in, and is finally divided into five equal parts (quintiles) from lowest (poorest) to highest (richest).

In the Thailand MICS, the following assets were used in these calculations: household characteristics (main material of the dwelling floor, roof and exterior walls), main type of fuel used for cooking, durable goods (such as refrigerator, electric fan, washing machine, microwave oven, television, watch, mobile phone, motorcycle, car, etc.), ownership of agricultural land, ownership of livestock, bank account, credit card account, main source of drinking water, toilet facility, hand washing, number of servants and number of parents living abroad.

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 L. Pritchett, ‘Estimating wealth effects without expenditure data – or tears: An application to educational enrolments in states of India’, in *Demography*, vol. 38, no. 1, February 2001, pp. 115–132; Rutstein, Shea O., and Kiersten Johnson, *The DHS Wealth Index*, DHS Comparative Reports No. 6, August 2004; and Rutstein, Shea O., *The DHS Wealth Index: Approaches for Rural and Urban Areas*, DHS Working Papers No. 60, 2008.

¹¹ When describing survey results by wealth quintiles, appropriate terminology is used when referring to individual household members, such as for instance “women in the richest population quintile”, which is used interchangeably with “women in the wealthiest survey population”, “women living in households in the richest population wealth quintile”, and similar.

Table HH.4: Women's background characteristics			
Per cent and frequency distribution of women age 15-49 years by selected background characteristics, Thailand MICS, 2015-2016			
	Weighted per cent	Number of women	
		Weighted	Unweighted
Total	100.0	25,614	25,614
Region			
Bangkok	15.6	3,998	2,283
Central	32.9	8,415	4,524
North	14.9	3,815	4,109
Northeast	23.2	5,937	6,829
South	13.5	3,450	7,869
Area			
Urban	49.2	12,599	12,251
Rural	50.8	13,015	13,363
Age			
15-19	13.1	3,359	3,277
20-24	11.2	2,878	3,016
25-29	12.1	3,089	3,555
30-34	13.4	3,437	4,117
35-39	15.9	4,084	4,008
40-44	16.2	4,141	3,820
45-49	18.1	4,626	3,821
Marital/Union status			
Currently married/in union	65.4	16,756	18,147
Widowed	1.4	359	371
Divorced	2.4	614	639
Separated	3.6	910	799
Never married/in union	27.2	6,975	5,658
Motherhood and recent births			
Never gave birth	36.5	9,342	7,021
Ever gave birth	63.5	16,272	18,593
Gave birth in last two years	8.2	2,092	3,382
No birth in last two years	55.4	14,179	15,211
Education			
None	3.2	829	1,012
Primary	28.4	7,281	7,090
Secondary	43.1	11,043	11,126
Higher	25.2	6,453	6,319
Missing/DK	0.0	8	67
Wealth index quintile			
Poorest	14.3	3,655	4,933
Second	18.5	4,747	5,198
Middle	21.6	5,522	5,717
Fourth	22.7	5,820	5,618
Richest	22.9	5,870	4,148
Language of household head			
Thai	92.7	23,755	21,188
Non-Thai	7.3	1,859	4,426

Table HH.4 shows that the highest percentage (32.9 per cent) of women interviewed are from the Central region and the lowest (13.5 per cent) are from the South region. Age distribution of the women shows that a large percentage (50.2 per cent) of women interviewed are from the older age group (35-49 years). Two thirds are currently married or in union (65.4 per cent) while 7.4 per cent were formerly

married or in union. More than one third (36.5 per cent) of the women aged 15-49 interviewed have never given birth while 8.2 per cent had given a live birth during the last two years.

A small percentage (3.2 per cent) of the women interviewed had no education; however, 43.1 per cent of the women interviewed had secondary education. The distribution of the women interviewed by wealth quintiles shows that 14.3 per cent are from the poorest households and 22.9 per cent from the richest quintile.

Similarly, Table HH.4M provides background characteristics of the male respondents 15-49 years of age. The table shows information on the distribution of men according to region, area, age, marital status, fatherhood status, education, wealth index quintiles and language of the household head.

Table HH.4M shows that one third (33.1 per cent) of the men interviewed are from the Central region followed by almost one quarter (23.9 per cent) from the Northeast region and 13.6 per cent from the South, which had the lowest percentage of men interviewed. In terms of the age distribution of the men interviewed, the highest percentage of male respondents (16.6 per cent) fall into the 45-49 age group compared to the lowest (10.9 per cent) from the 25-29 age group.

Almost 6 out of 10 (57.6 per cent) of the men interviewed are currently married or in union, while 6.4 per cent were formerly married or in union. More than half (52.3 per cent) of the men interviewed had at least one living child. Overall, 3.1 per cent had no education compared to 46.2 per cent with secondary education. The proportion of men interviewed who are from the poorest quintile (17.9 per cent) is lower than those from other quintiles (19-21 per cent) and 92.0 per cent of the men are from households headed by a Thai speaker.

Table HH.4M: Men's background characteristics			
Per cent and frequency distribution of men age 15-49 years by selected background characteristics, Thailand MICS, 2015-2016			
	Weighted per cent	Number of men	
		Weighted	Unweighted
Total	100.0	23,183	23,183
Region			
Bangkok	14.9	3,460	2,044
Central	33.1	7,663	4,216
North	14.5	3,358	3,600
Northeast	23.9	5,547	6,147
South	13.6	3,155	7,176
Area			
Urban	48.4	11,216	10,912
Rural	51.6	11,967	12,271
Age			
15-19	14.7	3,400	3,180
20-24	12.1	2,797	2,622
25-29	10.9	2,524	3,014
30-34	14.1	3,267	3,704
35-39	15.8	3,666	3,703
40-44	15.9	3,678	3,558
45-49	16.6	3,850	3,402
Marital/Union status			
Currently married/in union	57.6	13,346	14,685
Widowed	0.4	83	54
Divorced	1.8	427	386
Separated	4.2	979	675
Never married/in union	36.0	8,342	7,379
Missing/DK	0.0	6	4
Fatherhood status			
Has at least one living child	52.3	12,123	14,095
Has no living children	47.4	10,993	9,029
Missing/DK	0.3	67	59
Education			
None	3.1	728	681
Primary	29.6	6,870	7,106
Secondary	46.2	10,713	10,797
Higher	21.0	4,865	4,540
Missing/DK	0.0	7	59
Wealth index quintile			
Poorest	17.9	4,155	5,036
Second	20.5	4,757	4,808
Middle	21.0	4,875	5,065
Fourth	21.3	4,937	4,861
Richest	19.2	4,460	3,413
Language of household head			
Thai	92.0	21,325	19,084
Non-Thai	8.0	1,858	4,099

Background characteristics of children under 5 are presented in Table HH.5. These include the distribution of children by several attributes: sex, region, area, age in months, respondent type, mother's (or caretaker's) education, wealth, and language of the household head.

Table HH.5: Under-5's background characteristics			
Per cent and frequency distribution of children under 5 years of age by selected characteristics, Thailand MICS, 2015-2016			
	Weighted per cent	Number of under-5 children	
		Weighted	Unweighted
Total	100.0	12,250	12,250
Sex			
Male	52.2	6,392	6,283
Female	47.8	5,858	5,967
Region			
Bangkok	9.4	1,146	737
Central	28.9	3,546	1,964
North	17.0	2,084	2,201
Northeast	28.9	3,545	3,738
South	15.7	1,929	3,610
Area			
Urban	40.7	4,988	5,472
Rural	59.3	7,262	6,778
Age			
0-5 months	9.3	1,138	661
6-11 months	7.9	973	722
12-23 months	20.5	2,510	2,500
24-35 months	20.8	2,550	2,764
36-47 months	20.9	2,560	2,838
48-59 months	20.6	2,519	2,765
Respondent to the under-5 questionnaire			
Mother	78.5	9,620	9,716
Other primary caretaker	21.5	2,630	2,534
Mother's education^a			
None	4.8	587	524
Primary	29.0	3,557	3,670
Secondary	45.4	5,562	5,063
Higher	20.7	2,537	2,959
Missing/DK	0.1	6	34
Wealth index quintile			
Poorest	20.9	2,565	2,844
Second	21.8	2,675	2,614
Middle	19.3	2,366	2,536
Fourth	22.3	2,727	2,535
Richest	15.6	1,917	1,721
Language of household head			
Thai	90.7	11,112	10,276
Non-Thai	9.3	1,138	1,974

^a In this table and throughout the report, mother's education refers to educational attainment of mothers as well as caretakers of children under 5, who are the respondents to the under-5 questionnaire if the mother is deceased or is living elsewhere.

Table HH.5 shows that approximately 1 out of 10 (9.4 per cent) children under 5 surveyed are from Bangkok compared to 28.9 per cent from both the Northeast and the Central region. Similarly, 59.3 per cent are from rural areas. In almost four out of five (78.5 per cent) cases, the respondent to the under-5 questionnaire was the natural mother and less than 5 per cent of respondents had no education. A total

of 15.6 per cent of the children were from the richest quintile compared to 19 per cent to 22 per cent from other quintiles. One out of 10 (9.3 per cent) children surveyed were from a household headed by a non-Thai speaker.

Housing Characteristics, Asset Ownership and Wealth Quintiles

Tables HH.6, HH.7 and HH.8 provide further details on household level characteristics. Table HH.6 presents characteristics of housing, disaggregated by area and region, distributed by whether the dwelling has electricity, the main materials of the flooring, roof, and exterior walls, as well as the number of rooms used for sleeping.

Table HH.6 shows that almost all the households have access to electricity. Well above 99 per cent of the households have electricity across urban, rural and the five regions. However, some differences were found in the main material of the household flooring. Almost 4 out of 10 (37.3 per cent) households in the North region had rudimentary flooring compared to less than 1 in 10 (9.8 per cent) in the South region. Rural households are more likely (22.8 per cent) to have a rudimentary floor compared to urban households (15.0 per cent). Almost one in five (19.1 per cent) households have rudimentary floors at national level.

The percentage of households with finished roofs and finished exterior walls is also very high across all the regions and urban-rural areas. In terms of the number of rooms for sleeping, both urban and rural areas have the same characteristics in the sense that most of the households have two or fewer rooms (80.5 per cent and 82.8 per cent respectively). Bangkok has the lowest percentage of households with two or fewer rooms for sleeping but almost double the proportion of households with at least three rooms compared to those in the Central and South regions. Furthermore, the mean number of persons sleeping per room is highest in the South and rural areas (1.99 persons per room) followed by the Northeast (1.97 persons per room).

Table HH.6: Housing characteristics								
Per cent distribution of households by selected housing characteristics, according to area of residence and regions, Thailand MICS, 2015-2016								
	Total	Area		Region				
		Urban	Rural	Bangkok	Central	North	Northeast	South
Electricity								
Yes	99.6	99.7	99.5	99.6	99.5	99.5	99.7	99.7
No	0.4	0.3	0.5	0.4	0.5	0.5	0.3	0.3
Flooring								
Natural floor	0.6	0.2	0.9	0.1	0.8	0.2	0.9	0.2
Rudimentary floor	19.1	15.0	22.8	11.3	16.8	37.3	18.1	9.8
Finished floor	80.2	84.6	76.3	87.9	82.4	62.5	81.0	89.8
Other	0.1	0.2	0.0	0.6	0.0	0.0	0.0	0.1
Roof								
Natural roofing	0.2	0.0	0.3	0.0	0.0	0.5	0.1	0.2
Rudimentary roofing	0.4	0.4	0.4	0.4	0.2	0.5	0.4	0.6
Finished roofing	99.4	99.6	99.3	99.3	99.8	99.0	99.4	99.2
Other	0.1	0.1	0.0	0.2	0.0	0.0	0.1	0.0
Exterior walls								
Natural walls	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.3
Rudimentary walls	2.4	2.1	2.7	2.1	2.7	2.7	2.1	2.1
Finished walls	97.1	97.5	96.8	97.1	96.9	97.0	97.4	97.3
Other	0.2	0.2	0.2	0.7	0.2	0.1	0.1	0.2
Rooms used for sleeping								
1	42.2	41.8	42.5	38.0	47.1	42.5	38.5	41.8
2	39.6	38.7	40.3	34.6	37.6	40.5	42.7	42.1
3 or more	18.3	19.5	17.2	27.5	15.3	17.0	18.8	16.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	28,652	13,638	15,014	3,932	8,747	5,103	7,161	3,708
Mean number of persons per room used for sleeping	1.91	1.82	1.99	1.71	1.96	1.81	1.97	1.99

In Table HH.7 households are distributed according to ownership of assets by households and by individual household members. This also includes ownership of the dwelling.

Overall, 13.5 per cent of households at national level own a non-mobile telephone. Households in urban areas are almost four times (22.1 per cent) more likely to own a non-mobile phone compared to their rural (5.8 per cent) counterparts and 3.6 per cent of households in the Northeast region possess a non-mobile phone. More than half of the households in Bangkok have an oven or microwave oven (51.4 per cent), air conditioner (55.5 per cent), computer (53.7 per cent) and LED/LCD/Plasma TV (56.3 per cent), while less than 40 per cent of households in other regions have these items.

Table HH.7: Household and personal assets								
Percentage of households by ownership of selected household and personal assets, and per cent distribution by ownership of dwelling, according to area of residence and regions, Thailand MICS, 2015-2016								
	Total	Area		Region				
		Urban	Rural	Bangkok	Central	North	Northeast	South
Percentage of households that own a								
Electricity	99.6	99.7	99.5	99.6	99.5	99.5	99.7	99.7
Radio	56.8	57.3	56.3	61.0	50.2	66.3	64.0	40.6
Non-mobile phone	13.5	22.1	5.8	42.1	15.0	6.7	3.6	8.2
Refrigerator	91.9	91.2	92.6	89.0	92.5	92.0	92.7	92.2
Electric fan	98.6	99.3	98.0	99.4	99.2	96.8	98.9	98.4
Washing machine	70.1	71.2	69.0	68.1	67.7	76.6	67.2	74.2
Oven/Microwave oven	28.4	37.3	20.3	51.4	30.1	22.6	20.1	23.9
Computer	32.0	41.0	23.9	53.7	32.9	28.2	24.3	27.2
Tablet	24.6	29.5	20.1	38.9	26.9	19.0	18.8	22.8
VCD/DVD player	54.2	60.6	48.4	69.9	59.2	48.6	45.6	49.9
Blu-ray player	2.6	3.7	1.6	6.2	3.0	1.6	1.2	1.9
Air Conditioner	28.2	39.5	17.9	55.5	35.7	20.2	13.8	20.0
Television (Plain monitor)	77.0	72.9	80.7	65.1	74.4	83.3	83.4	74.5
Television (LCD/LED/Plasma monitor)	38.0	45.4	31.2	56.3	45.0	27.9	28.0	35.0
Percentage of households that own								
Agricultural land	42.3	27.9	55.4	13.0	27.1	49.9	67.0	51.0
Farm animals/Livestock	26.0	12.9	38.0	1.1	10.7	36.9	49.9	27.7
Percentage of households where at least one member owns or has a								
Watch	69.1	76.2	62.8	87.8	76.3	58.3	56.9	70.8
Bicycle	60.8	56.7	64.4	46.1	57.8	67.1	74.5	48.0
Car or truck	46.4	50.4	42.8	52.1	49.7	44.3	40.6	46.6
Boat with motor	1.3	1.0	1.5	1.1	1.3	0.5	1.1	2.6
Two-wheeled tractor	16.2	8.1	23.6	1.0	7.4	23.3	37.2	3.0
Four-wheeled tractor	4.2	2.7	5.6	1.7	2.8	6.4	7.1	1.7
Traditional mobile telephone	68.6	62.0	74.6	52.5	62.8	76.7	78.5	68.9
Smart phone	68.2	75.1	62.0	84.5	72.6	58.3	60.0	69.9
Motorcycle or scooter	78.8	72.2	84.9	47.6	75.9	86.9	88.4	89.3
Sport motorcycle (Big bike)	1.4	1.8	1.1	1.9	1.4	1.2	1.2	1.6
Bank account	89.9	91.6	88.5	94.7	89.7	86.6	90.5	89.0
Credit card	23.7	30.1	17.8	46.3	24.1	15.4	19.0	18.9
Ownership of dwelling								
Owned by a household member	79.6	69.5	88.7	57.1	72.4	87.6	93.8	81.9
Not owned	20.4	30.5	11.3	42.9	27.6	12.4	6.2	18.1
Rented	14.5	23.7	6.1	33.6	22.0	5.2	2.6	11.9
Other	6.0	6.8	5.2	9.3	5.6	7.2	3.6	6.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	28,652	13,638	15,014	3,932	8,747	5,103	7,161	3,708

Households in rural areas are twice as likely (55.4 per cent) to own agricultural land compared to their urban counterparts (27.9 per cent). Similarly, rural households are three times more likely (38.0 per cent) to own farm animals and livestock compared to urban households (12.9 per cent). Farm animal and livestock ownership is lowest in Bangkok (1.1 per cent) while in the Northeast every second household (49.9 per cent) owns farm animals and livestock.

At least 4 out of 10 households in the North (44.3 per cent), Northeast (40.6 per cent) and South (46.6 per cent) have a household member who owns a car or truck while 5 out of 10 households (52.1 per cent) in Bangkok and the Central region (49.7 per cent) have a household member who owns a car or truck. Interestingly, ownership of a motorcycle or scooter tells a different story. The percentage of households where a member of the household owns a motorcycle or scooter is lowest in Bangkok (47.6 per cent) while almost 9 out of 10 households in the North (86.9 per cent), Northeast (88.4 per cent) and South (89.3 per cent) regions have a member who owns a motorcycle or scooter.

There are noticeable differences in smartphone ownership. In Bangkok, 84.5 per cent of households have a household member who owns a smartphone. This percentage drops to 58.3 per cent in the North region. However, ownership of a mobile phone (conventional) by a member of the household is highest in the Northeast (78.5 per cent) followed by the North (76.7 per cent) and lowest in Bangkok (52.5 per cent).

Ownership of the dwelling by a household member is lowest in Bangkok (57.1 per cent) and highest in the Northeast region (93.8 per cent). Ownership of the dwelling is more common in rural areas (88.7 per cent) than urban areas (69.5 per cent).

Table HH.8 shows how the household population in areas and regions is distributed according to household wealth quintiles.

Table HH.8 shows that 31.8 per cent of the household population in urban areas falls into the richest category compared to 9.8 per cent in rural areas. This difference is widest in Bangkok where more than half (51.6 per cent) of the household population falls into the richest quintile and less than two per cent into the poorest quintile. However, in the North and Northeast regions, 30.0 per cent and 39.8 per cent respectively fall into the poorest quintile. Interestingly, in the South region, most of the population falls into the middle three quintiles. Almost three quarters (74.6 per cent) of the household population falls into the second (21.3 per cent), middle (27.5 per cent) and fourth (25.8 per cent) wealth quintiles.

Table HH.8: Wealth quintiles							
Per cent distribution of the household population by wealth index quintile, according to area of residence and regions, Thailand MICS, 2015-2016							
	Wealth index quintile					Total	Number of household members
	Poorest	Second	Middle	Fourth	Richest		
Total	20.0	20.0	20.0	20.0	20.0	100.0	92,073
Area							
Urban	11.4	13.7	18.9	24.1	31.8	100.0	42,713
Rural	27.4	25.4	20.9	16.4	9.8	100.0	49,360
Region							
Bangkok	1.7	9.0	14.0	23.7	51.6	100.0	12,517
Central	8.9	17.6	23.2	24.5	25.9	100.0	27,739
North	30.0	25.2	17.6	16.3	10.9	100.0	15,301
Northeast	39.8	24.6	17.2	12.3	6.2	100.0	24,242
South	12.2	21.3	27.5	25.8	13.2	100.0	12,273

IV. NUTRITION



IV. Nutrition

Low Birth Weight

Weight at birth is a good indicator not only of a mother's health and nutritional status but also the newborn's chances for survival, growth, long-term health and psychosocial development. Low birth weight (defined as 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 days, months and years. Those who survive may 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 with low birth weight also risk a lower IQ and cognitive disabilities, affecting their performance in school and their job opportunities as adults.

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

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

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

Because many infants are not weighed at birth and those who are weighed may be a biased sample of all births, the reported birth weights usually cannot be used to estimate the prevalence of low birth weight among all children. Therefore, the percentage of births weighing below 2,500 grams is estimated from two items in the questionnaire: the mother's assessment of the child's **size** at birth (i.e., very small, smaller than average, average, larger than average, very large) and the mother's recall of the child's weight or the weight as recorded on a health card if the child was weighed at birth.¹²

¹² For a detailed description of the methodology, see Boerma, J.T., et al., *Data on Birth Weight in Developing Countries: Can Surveys Help?* Bulletin of the World Health Organization, vol. 74, no. 2, 1996, pp. 209–216.

Table NU.1: Low birth weight infants									
Percentage of last live-born children in the last two years that are estimated to have weighed below 2,500 grams at birth and percentage of live births weighed at birth, Thailand MICS, 2015-2016									
	Per cent distribution of births by mother's assessment of size at birth					Total	Percentage of live births:		Number of last live-born children in the last two years
	Very small	Smaller than average	Average	Larger than average or very large	DK		Below 2,500 grams ¹	Weighed at birth ²	
Total	0.6	10.4	72.8	15.9	0.4	100.0	9.4	98.9	2,092
Mother's age at birth									
Less than 20 years	0.1	12.8	75.5	11.5	0.2	100.0	10.4	99.5	319
20-34 years	0.6	8.8	73.2	16.9	0.5	100.0	8.7	98.5	1,464
35-49 years	0.7	15.1	68.0	16.1	0.1	100.0	11.9	99.6	309
Birth order									
1	0.3	10.1	73.8	15.6	0.3	100.0	8.9	98.3	1,000
2-3	0.5	11.0	72.3	15.8	0.3	100.0	9.9	99.5	1,013
4-5	4.6	6.5	64.8	22.7	1.4	100.0	10.3	98.5	71
6+	(0.5)	(6.4)	(80.4)	(12.7)	(0.0)	(100.0)	(7.2)	(88.1)	8
Region									
Bangkok	0.1	6.1	79.5	13.0	1.3	100.0	6.8	95.8	231
Central	0.3	9.5	74.3	15.8	0.1	100.0	8.6	99.7	713
North	0.3	12.8	68.5	18.2	0.2	100.0	10.3	97.7	354
Northeast	0.1	11.7	73.1	14.8	0.4	100.0	9.9	99.6	437
South	2.3	10.8	69.4	17.1	0.4	100.0	11.3	99.4	359
Area									
Urban	0.5	8.7	75.5	14.7	0.6	100.0	8.5	97.9	932
Rural	0.6	11.7	70.6	16.9	0.1	100.0	10.1	99.6	1,160
Mother's education									
None	0.0	13.0	78.8	7.9	0.3	100.0	10.3	91.6	103
Primary	0.5	10.6	70.5	18.2	0.2	100.0	9.5	99.9	300
Secondary	0.8	10.1	73.4	15.3	0.4	100.0	9.4	99.0	1,173
Higher	0.2	10.3	71.6	17.7	0.3	100.0	9.2	99.4	514
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Wealth index quintile									
Poorest	0.3	11.1	73.5	14.4	0.7	100.0	10.1	98.4	305
Second	0.1	13.5	67.3	19.1	0.0	100.0	10.4	98.5	491
Middle	1.1	9.4	76.1	13.4	0.0	100.0	9.3	98.7	425
Fourth	0.8	6.4	74.6	17.4	0.8	100.0	7.6	99.1	540
Richest	0.4	12.8	73.1	13.4	0.2	100.0	10.5	99.5	331
Language of household head									
Thai	0.6	10.4	72.6	16.1	0.4	100.0	9.4	99.2	1,881
Non-Thai	0.6	10.3	74.6	14.3	0.2	100.0	9.3	95.8	211
¹ MICS indicator 2.20 - Low-birthweight infants									
² MICS indicator 2.21 - Infants weighed at birth									
() Figures that are based on 25-49 unweighted cases (*) Figures that are based on fewer than 25 unweighted cases									

Overall, 98.9 per cent of infants were weighed at birth and approximately 9.4 per cent of infants are estimated to weigh less than 2,500 grams at birth (Table NU.1). There was some variation by region, with the highest percentage of infants weighing under 2,500 grams in the South (11.3 per cent) and the lowest in Bangkok (6.8 per cent). The prevalence of low birth weight is slightly higher in rural areas (10.1 per cent) compared to urban areas (8.5 per cent). Interestingly, children born in the second richest

households are less likely to be low weight at birth (7.6 per cent) compared to children born in other wealth quintiles.

Table NU.S1: Low birth weight children					
Percentage of under-five children who weighed below 2,500 grams at birth, Thailand, 2015-2016					
	Percentage of weight at birth:			Total	Number of under-five children
	Below 2,500 grams ¹	2,500 grams and above	Not weighed/DK/Missing		
Total	8.6	88.2	3.2	100.0	12,250
Region					
Bangkok	5.9	87.2	6.8	100.0	1,146
Central	8.7	88.1	3.2	100.0	3,546
North	10.1	86.6	3.2	100.0	2,084
Northeast	8.2	89.8	2.0	100.0	3,545
South	9.4	87.6	3.0	100.0	1,929
Area					
Urban	7.9	88.4	3.7	100.0	4,988
Rural	9.1	88.0	2.8	100.0	7,262
Mother's education					
None	11.2	81.3	7.5	100.0	587
Primary	9.9	86.1	4.0	100.0	3,557
Secondary	7.0	90.4	2.5	100.0	5,562
Higher	9.8	87.7	2.5	100.0	2,537
Missing/DK	(7.0)	(89.9)	(3.1)	(100.0)	6
Wealth index quintile					
Poorest	8.5	88.2	3.3	100.0	2,565
Second	9.1	87.6	3.3	100.0	2,675
Middle	8.5	88.4	3.1	100.0	2,366
Fourth	7.6	89.2	3.2	100.0	2,727
Richest	9.8	87.2	3.0	100.0	1,917
Language of household head					
Thai	8.6	88.3	3.0	100.0	11,112
Non-Thai	8.7	86.4	4.9	100.0	1,138
¹ Country specific indicator 2.S20 - Low-birthweight infants (born in last five years)					
() Figures that are based on 25-49 unweighted cases					

Apart from the birth weight for children born during the last two years, the birth weight records for under-five children were collected. In cases where the birth weight was recorded on the child's health card, information was copied onto the questionnaire, otherwise mothers were asked to recall the child's birth weight. Table NU.S1 shows that in Thailand, 8.6 per cent of children at birth weighed below 2,500 grams. Children in the North were almost twice as likely (10.1 per cent) to weigh below 2,500 grams at birth compared with children in Bangkok (5.9 per cent). Children born in rural areas (9.1 per cent) and children born to mothers with no education (11.2 per cent) were more likely to weigh below 2,500 grams at birth.

Nutritional Status

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

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

In a well-nourished population, there is a reference distribution of height and weight for children under age five. Under-nourishment in a population can be gauged by comparing children to a reference population. The reference population used in this report is based on the WHO growth standards.¹³ Each of the three nutritional status indicators – weight-for-age, height-for-age, and weight-for-height – can be expressed in standard deviation units (z-scores) from the median of the reference population.

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

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

Weight-for-height can be used to assess wasting and overweight status. Children whose *weight-for-height* is more than two but equal or less than three standard deviations below the median of the reference population are classified as *moderately wasted*, while those who fall more than three standard deviations below the median are classified as *severely wasted*. Wasting is usually the result of a recent nutritional deficiency. The indicator of wasting may exhibit significant seasonal shifts associated with changes in the availability of food or disease prevalence.

Children whose weight-for-height is more than two standard deviations above the median reference population are classified as moderately or severely overweight.

In the Thailand MICS, the weights and heights of all children under 5 years of age were measured using the anthropometric equipment recommended¹⁴ by UNICEF. Findings in this section are based on the results of these measurements.

¹³ http://www.who.int/childgrowth/standards/technical_report

¹⁴ See MICS Supply Procurement Instructions: http://www.childinfo.org/mics5_planning.html

Table NU.2 shows the percentages of children classified into each of the above-described categories based on the anthropometric measurements that were taken during fieldwork. Additionally, the table includes mean z-scores for all three anthropometric indicators.

Table NU.2: Nutritional status of children

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Thailand MICS, 2015-2016

	Weight for age			Height for age			Weight for height			Number of children under age 5			
	Underweight		Mean Z-Score (SD)	Stunted		Mean Z-Score (SD)	Wasted		Mean Z-Score (SD)				
	Per cent below -2 SD ¹	-3 SD ²		Per cent below -2 SD ³	-3 SD ⁴		Per cent below -2 SD ⁵	-3 SD ⁶			Per cent above + 2 SD ⁷		
Total	6.7	1.5	-0.2	11,189	10.5	2.6	-0.5	11,008	5.4	1.4	8.2	0.1	10,942
Sex													
Male	7.6	1.3	-0.2	5,870	11.5	3.1	-0.5	5,764	5.5	1.3	8.8	0.1	5,714
Female	5.6	1.7	-0.2	5,319	9.4	2.1	-0.4	5,243	5.2	1.6	7.5	0.0	5,228
Region													
Bangkok	4.4	0.9	-0.1	806	7.9	1.8	-0.2	756	3.6	0.7	9.1	0.2	746
Central	6.8	2.3	-0.1	3,219	11.8	3.2	-0.5	3,165	5.2	1.8	8.8	0.1	3,162
North	6.9	1.4	-0.2	2,001	9.8	2.2	-0.5	1,975	5.2	1.1	8.2	0.1	1,971
Northeast	5.6	0.7	-0.2	3,369	8.7	1.6	-0.4	3,352	4.8	1.0	7.9	0.0	3,312
South	9.1	1.9	-0.4	1,795	13.6	4.0	-0.7	1,760	7.8	2.2	7.3	-0.1	1,751
Area													
Urban	4.9	1.2	-0.1	4,403	9.8	1.9	-0.3	4,292	4.4	1.4	8.5	0.1	4,278
Rural	7.8	1.7	-0.3	6,786	11.0	3.0	-0.6	6,716	6.0	1.5	8.0	0.0	6,664
Age													
0-5 months	11.6	5.4	-0.5	980	11.4	5.6	-0.3	919	12.4	2.5	3.7	-0.3	916
6-11 months	4.5	1.3	-0.4	920	8.7	1.9	-0.2	894	3.9	1.3	2.8	-0.2	894
12-17 months	6.2	0.9	-0.3	1,236	11.5	1.7	-0.5	1,199	4.4	1.2	3.8	0.0	1,198
18-23 months	5.4	1.1	-0.1	1,072	12.2	3.1	-0.6	1,041	5.1	2.0	9.3	0.3	1,040
24-35 months	7.1	1.0	-0.1	2,342	12.7	4.2	-0.5	2,322	5.4	1.4	10.9	0.2	2,286
36-47 months	5.6	1.5	-0.1	2,349	9.5	1.5	-0.5	2,338	4.0	1.4	9.3	0.2	2,323
48-59 months	6.8	0.9	-0.3	2,291	8.4	1.3	-0.5	2,294	5.2	1.0	10.2	0.0	2,285
Mother's education													
None	5.5	0.7	-0.3	503	16.6	2.0	-0.6	483	8.6	1.8	10.2	0.0	487
Primary	6.9	1.6	-0.3	3,318	9.9	2.2	-0.5	3,273	5.2	1.4	7.2	0.0	3,269
Secondary	7.2	1.9	-0.3	5,113	10.9	2.4	-0.5	5,032	5.3	1.6	8.5	0.0	4,989
Higher	5.2	0.7	0.0	2,249	9.2	3.6	-0.4	2,215	5.0	1.0	8.6	0.2	2,191
Missing/DK	(12.2)	(5.1)	(-0.7)	6	(23.8)	(20.1)	(-1.2)	6	(7.4)	(2.6)	(16.8)	(0.3)	6

Table NU.2: Nutritional status of children (continued)

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Thailand MICS, 2015-2016

	Weight for age			Height for age			Weight for height			Number of children under age 5	
	Underweight		Mean Z-Score (SD)	Stunted		Mean Z-Score (SD)	Wasted		Mean Z-Score (SD)		
	Per cent below -2 SD ¹	-3 SD ²		Per cent below -2 SD ³	-3 SD ⁴		Per cent below -2 SD ⁵	-3 SD ⁶			Per cent above +2 SD ⁷
Wealth index quintile											
Poorest	9.9	2.3	-0.5	13.1	2.1	-0.7	6.1	2.2	7.5	-0.1	2,431
Second	6.6	1.2	-0.3	10.6	2.8	-0.6	5.9	2.5	7.5	0.0	2,459
Middle	5.8	1.3	-0.1	9.3	1.6	-0.4	6.6	0.8	8.2	0.1	2,098
Fourth	5.1	1.6	0.0	8.0	2.7	-0.4	3.8	0.7	9.8	0.2	2,337
Richest	5.3	0.8	-0.1	11.8	4.2	-0.4	4.1	0.5	8.0	0.2	1,617
Language of household head											
Thai	6.6	1.5	-0.2	9.9	2.5	-0.5	5.2	1.4	8.2	0.1	9,923
Non-Thai	7.6	1.6	-0.5	16.3	3.8	-0.7	7.3	1.8	8.6	-0.2	1,019

¹ MICS indicator 2.1a and MDG indicator 1.8 - Underweight prevalence (moderate and severe)

² MICS indicator 2.1b - Underweight prevalence (severe)

³ MICS indicator 2.2a - Stunting prevalence (moderate and severe)

⁴ MICS indicator 2.2b - Stunting prevalence (severe)

⁵ MICS indicator 2.3a - Wasting prevalence (moderate and severe)

⁶ MICS indicator 2.3b - Wasting prevalence (severe)

⁷ MICS indicator 2.4 - Overweight prevalence

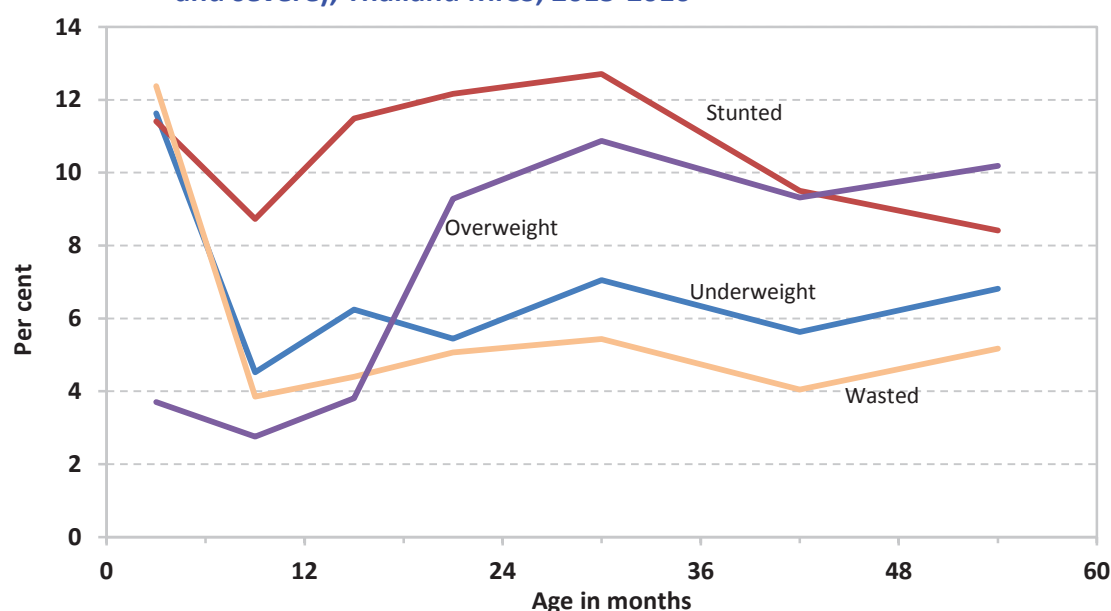
() Figures that are based on 25-49 unweighted cases

Children whose full birth date (month and year) were not obtained, and children whose measurements are outside a plausible range are excluded from Table NU.2. Children are excluded from one or more of the anthropometric indicators when their weights and heights have not been measured, whichever applicable. For example, if a child has been weighed but his/her height has not been measured, the child is included in underweight calculations, but not in the calculations for stunting and wasting. Percentages of children by age and reasons for exclusion are shown in the data quality Tables DQ.12, DQ.13 and DQ.14 in Appendix D. The tables show that due to incomplete dates of birth, implausible measurements, and/or missing weight and/or height, 8.7 per cent of children were excluded from calculations of the weight-for-age indicator, 10.1 per cent from the height-for-age indicator, and 10.7 per cent from the weight-for-height indicator. As shown in Table DQ.8, complete date of birth (month and year) reporting for under-5 children was very high (99.8 per cent). Decimal digits for weight measurements were normally distributed (DQ.15). Somewhat decimal digit preference (21.2 per cent) for height measurements was recorded for zero.

As shown in Table NU.2, 6.7 per cent of children under age 5 in Thailand are moderately or severely underweight and 1.5 per cent are classified as severely underweight. More than 1 in 10 children (10.5 per cent) are moderately or severely stunted or too short for their age and 5.4 per cent are moderately or severely wasted or too thin for their height. Almost 1 in 10 children (8.2 per cent) are overweight or too heavy for their height.

Male children, children in the South and children living in the poorest households are more likely to be underweight, stunted and wasted than other children. Children in rural areas are also likely to be more underweight, stunted and wasted. Children whose mothers have no education are most likely to be stunted (16.6 per cent) and wasted (8.6 per cent) compared to children of mothers with some education. The age pattern shows that a higher percentage of children age 0-5 months are more likely to be underweight and wasted in comparison to children in other age groups. However, children in the 24-35 months age group are more likely to be stunted compared to children in other age groups. Stunting is highest (16.3 per cent) among children born in households headed by non-Thai speakers.

Figure NU.1: Underweight, stunted, wasted and overweight children under age 5 (moderate and severe), Thailand MICS, 2015-2016



Breastfeeding and Infant and Young Child Feeding

Proper feeding of infants and young children can increase their chances of survival; it can also promote optimal growth and development, especially in the critical window from birth to 2 years of age. 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 do not start to breastfeed early enough, do not breastfeed exclusively for the recommended six months or stop breastfeeding too soon. There are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition and can be unsafe if hygienic conditions, including safe drinking water, are not readily available. Studies have shown that, in addition to continued breastfeeding, consumption of appropriate, adequate and safe solid, semi-solid and soft foods from the age of 6 months onwards leads to better health and growth outcomes, with the potential to reduce stunting during the first two years of life.¹⁵

UNICEF and WHO recommend that infants be breastfed within one hour of birth, breastfed exclusively for the first six months of life and continue to be breastfed up to 2 years of age and beyond.¹⁶ Starting at 6 months, breastfeeding should be combined with safe, age-appropriate feeding of solid, semi-solid and soft foods.¹⁷ A summary of key guiding principles^{18, 19} for feeding 6-23 month olds is provided in the table below along with proximate measures for these guidelines collected in this survey.

The guiding principles for which proximate measures and indicators exist are:

- (i) continued breastfeeding;
- (ii) appropriate frequency of meals (but not energy density); and
- (iii) appropriate nutrient content of food.

Feeding frequency is used as a proxy for energy intake, requiring children to receive a minimum number of meals/snacks (and milk feeds for non-breastfed children) for their age. Dietary diversity is used to ascertain the adequacy of the nutrient content of the food (not including iron) consumed. For dietary diversity, seven food groups were created for which a child consuming at least four of these is considered to have a better quality diet. In most populations, consumption of at least four food groups means that the child has a high likelihood of consuming at least one animal-source food and at least one fruit or vegetable, in addition to a staple food (grain, root or tuber).²⁰

These three dimensions of child feeding are combined into an assessment of the children who received appropriate feeding, using the indicator of “minimum acceptable diet”. To have a minimum acceptable diet on the previous day, a child must have received:

- (i) the appropriate number of meals/snacks/milk feeds;
- (ii) food items from at least four food groups; and
- (iii) breastmilk or at least two milk feeds (for non-breastfed children).

¹⁵ Bhuta, Z., et al., ‘Evidence-based interventions for improvement of maternal and child nutrition: What can be done and at what cost?’, in *The Lancet*, 6 June 2013.

¹⁶ WHO, *Implementing the Global Strategy for Infant and Young Child Feeding*, Meeting Report, Geneva, 3-5 February 2003.

¹⁷ WHO, *Global Strategy for Infant and Young Child Feeding*, 2003.

¹⁸ PAHO, *Guiding principles for complementary feeding of the breastfed child*, 2003.

¹⁹ WHO, *Guiding principles for feeding non-breastfed children 6-24 months of age*, 2005.

²⁰ WHO, *Indicators for assessing infant and young child feeding practices, Part 1: Definitions*, 2008.

Guiding Principle (age 6-23 months)	Proximate measures	Table
Continue frequent, on-demand breastfeeding for two years and beyond	Breastfed in the last 24 hours	NU.4
Appropriate frequency and energy density of meals	<p>Breastfed children Depending on age, two or three meals/snacks provided in the last 24 hours</p> <p>Non-breastfed children Four meals/snacks <u>and/or milk feeds</u> provided in the last 24 hours</p>	NU.6
Appropriate nutrient content of food	Four food groups ²¹ eaten in the last 24 hours	NU.6
Appropriate amount of food	No standard indicator exists	na
Appropriate consistency of food	No standard indicator exists	na
Use of vitamin-mineral supplements or fortified products for infant and mother	No standard indicator exists	na
Practice good hygiene and proper food handling	While it was not possible to develop indicators to fully capture programme guidance, one standard indicator does cover part of the principle: Not feeding with a bottle with a nipple	NU.9
Practice responsive feeding, applying the principles of psychosocial care	No standard indicator exists	na

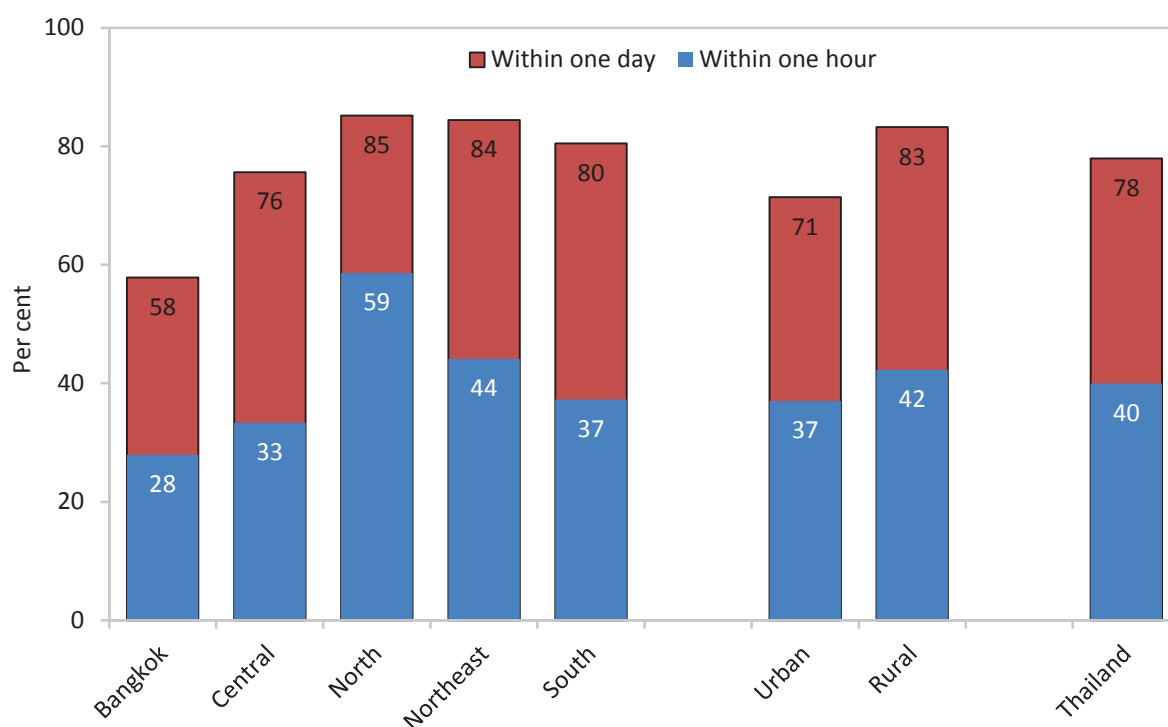
²¹ Food groups used for assessment of this indicator are 1) grains, roots and tubers, 2) legumes and nuts, 3) dairy products (milk, yogurt, cheese), 4) flesh foods (meat, fish, poultry and liver/organ meats), 5) eggs, 6) vitamin-A rich fruits and vegetables, and 7) other fruits and vegetables.

Table NU.3: Initial breastfeeding					
Percentage of last live-born children in the last two years who were ever breastfed, breastfed within one hour of birth, and within one day of birth, and percentage who received a prelacteal feed, Thailand MICS, 2015-2016					
	Percentage who were ever breastfed ¹	Percentage who were first breastfed:		Percentage who received a prelacteal feed	Number of last live-born children in the last two years
		Within one hour of birth ²	Within one day of birth		
Total	97.4	39.9	77.9	24.0	2,092
Region					
Bangkok	93.0	27.9	57.8	31.0	231
Central	98.6	33.3	75.6	27.9	713
North	97.7	58.6	85.2	19.9	354
Northeast	98.7	44.1	84.4	17.2	437
South	96.0	37.3	80.5	24.0	359
Area					
Urban	96.3	37.0	71.4	28.0	932
Rural	98.3	42.3	83.2	20.8	1,160
Months since last birth					
0-11 months	97.6	38.2	76.0	27.1	974
12-23 months	97.2	41.5	79.7	21.3	1,118
Assistance at delivery					
Skilled attendant	97.6	40.2	78.4	23.8	2,074
Other	(100.0)	(14.8)	(34.5)	(73.4)	12
No one/Missing	(*)	(*)	(*)	(*)	7
Place of delivery					
Home	(85.5)	(15.8)	(42.7)	(47.9)	18
Health facility	97.6	40.3	78.3	23.6	2,063
Public	97.6	42.0	80.9	21.9	1,856
Private	97.7	24.8	54.7	38.5	207
Other/DK/Missing	(*)	(*)	(*)	(*)	11
Mother's education					
None	99.2	37.1	87.3	30.4	103
Primary	95.3	43.6	81.4	30.9	300
Secondary	97.9	44.2	79.7	22.1	1,173
Higher	97.2	28.7	70.0	23.0	514
Missing/DK	(*)	(*)	(*)	(*)	1
Wealth index quintile					
Poorest	98.2	53.0	87.9	12.9	305
Second	98.7	43.1	80.7	19.6	491
Middle	95.1	41.7	80.2	26.5	425
Fourth	97.7	36.0	74.0	33.9	540
Richest	97.2	27.2	68.2	21.4	331
Language of household head					
Thai	97.3	37.8	77.3	23.1	1,881
Non-Thai	98.6	59.4	84.0	31.5	211
¹ MICS indicator 2.5 - Children ever breastfed					
² MICS indicator 2.6 - Early initiation of breastfeeding					
() Figures that are based on 25-49 unweighted cases					
(*) Figures that are based on fewer than 25 unweighted cases					

Table NU.3 is based on mothers' reports of what their last-born child, born in the last two years, was fed in the first few days of life. It indicates the proportion who were ever breastfed, those who were first breastfed within one hour and one day of birth, and those who received a prelacteal feed.²² Although it is a very important step in management of lactation and establishment of a physical and emotional relationship between the baby and the mother, 39.9 per cent of babies are breastfed for the first time within one hour of birth, while 77.9 per cent of newborns in Thailand start breastfeeding within one day of birth. Children born in the North region are more likely to be breastfed within one hour of birth compared to children in other regions. Almost 6 out of 10 (58.6 per cent) children born in the North are breastfed within one hour compared to 3 in 10 (27.9 per cent) in Bangkok.

Children delivered with the assistance of a skilled attendant are more likely (40.2 per cent) to be breastfed within one hour of birth compared to children delivered with the assistance of other birth attendant (14.8 per cent). However, only 12 weighted cases were reported to be delivered by other birth attendant. Breastfeeding within one hour of birth has an inverse relation to household wealth quintile. More than half (53.0 per cent) of children born in the poorest households were breastfed within one hour of birth compared to 27.2 per cent in the richest households. Children in households headed by a non-Thai speaker are more likely (59.4 per cent) to be breastfed within one hour compared to other children (37.8 per cent). The findings are presented in Figure NU.2 by region and area.

Figure NU.2: Initiation of breastfeeding, Thailand MICS, 2015-2016



The set of Infant and Young Child Feeding indicators reported in tables NU.4 through NU.8 are based on the mother's report of consumption of food and fluids during the day or night prior to being interviewed. Data are subject to a number of limitations, some related to the respondent's ability to provide a full report on the child's liquid and food intake due to recall errors as well as a lack of knowledge in cases where the child was fed by other individuals.

²² Prelacteal feed refers to the provision of any liquid or food, other than breastmilk, to a newborn during the period when breastmilk flow is generally being established (estimated here as the first three days of life).

In Table NU.4, breastfeeding status is presented for both *exclusively breastfed* and *predominantly breastfed*, referring to infants less than 6 months old who are breastfed; the former only allows vitamins, mineral supplements and medicine and the latter allows also plain water and non-milk liquids. The table also shows continued breastfeeding of children at 12-15 and 20-23 months of age.

Approximately 23.1 per cent of children less than 6 months old are exclusively breastfed and 42.1 per cent are predominantly breastfed. By age 12-15 months, 33.3 per cent of children are breastfed and by age 20-23 months, 15.6 per cent are breastfed. Female children are more likely (25.9 per cent) to be exclusively breastfed compared to their male counterparts (20.7 per cent). The percentage of children exclusively breastfed varies widely across regions, with 36.7 per cent of children under 6 months exclusively breastfed in the North compared to only 6.4* per cent in Bangkok. Table NU.4 further shows that almost none (0.2* per cent) of the children under 6 months of age born to mothers with no education are exclusively breastfed compared to 28.6 per cent of children born to mothers with secondary education. However, continued breastfeeding at one year is highest among children born to mothers with no education (79.5* per cent) and children born in households headed by non-Thai speakers (54.0 per cent). Children under 6 months of age in the richest households are more likely (36.4 per cent) to be breastfed.

The percentage of children continuing to be breastfed at 2 years is high among female children (20.0 per cent), children living in the South (30.4 per cent), children in rural areas (19.7 per cent) and children in households headed by non-Thai speakers (33.9 per cent).

* Figures that are based on 25-49 unweighted cases

Table NU.4: Breastfeeding							
Percentage of living children according to breastfeeding status at selected age groups, Thailand MICS, 2015-2016							
	Children age 0-5 months			Children age 12-15 months		Children age 20-23 months	
	Per cent exclusively breastfed ¹	Per cent predominantly breastfed ²	Number of children	Per cent breastfed (Continued breastfeeding at 1 year) ³	Number of Children	Per cent breastfed (Continued breastfeeding at 2 years) ⁴	Number of children
Total	23.1	42.1	1,138	33.3	914	15.6	760
Sex							
Male	20.7	43.3	605	32.3	461	12.0	423
Female	25.9	40.8	533	34.2	453	20.0	337
Region							
Bangkok	(6.4)	(17.2)	133	19.5	62	(14.5)	47
Central	27.4	51.4	321	38.1	226	12.2	207
North	36.7	52.6	205	32.0	181	10.8	140
Northeast	17.5	35.6	300	31.9	313	11.5	212
South	21.6	43.0	179	36.6	131	30.4	153
Area							
Urban	18.8	37.4	476	36.1	287	10.6	348
Rural	26.3	45.6	662	32.0	627	19.7	412
Mother's education							
None	(0.2)	(82.4)	54	(79.5)	35	(26.9)	11
Primary	16.9	28.9	229	28.1	297	18.2	210
Secondary	28.6	45.3	585	36.9	430	14.5	386
Higher	21.0	38.6	269	22.0	152	13.8	152
Missing/DK	(*)	(*)	1	(*)	0	(*)	0
Wealth index quintile							
Poorest	24.0	32.4	170	46.6	243	18.9	138
Second	18.2	45.7	270	35.3	225	19.5	192
Middle	24.7	50.0	240	34.1	173	17.4	153
Fourth	18.5	29.6	293	22.1	166	10.7	182
Richest	36.4	57.3	165	14.9	108	8.9	95
Language of household head							
Thai	23.0	40.2	1,022	31.0	824	14.1	703
Non-Thai	24.7	58.9	115	54.0	90	33.9	57
	¹ MICS indicator 2.7 - Exclusive breastfeeding under 6 months						
	² MICS indicator 2.8 - Predominant breastfeeding under 6 months						
	³ MICS indicator 2.9 - Continued breastfeeding at 1 year						
	⁴ MICS indicator 2.10 - Continued breastfeeding at 2 years						
	() Figures that are based on 25-49 unweighted cases (*) Figures that are based on fewer than 25 unweighted cases						

Figure NU.3 shows the detailed pattern of breastfeeding by the child's age in months. Even at 0-1 month of age, barely 33.5 per cent of children are exclusively breastfed and 13.1 per cent of children are already weaned at this stage. Almost one fifth of children 2-3 months old are breastfed and given plain water. However, 8.9 per cent of children aged 4-5 months are exclusively breastfed. Only about 13 per cent of children are receiving breast milk at 2 years of age.

Figure NU.3: Infant feeding patterns by age, Thailand MICS, 2015-2016

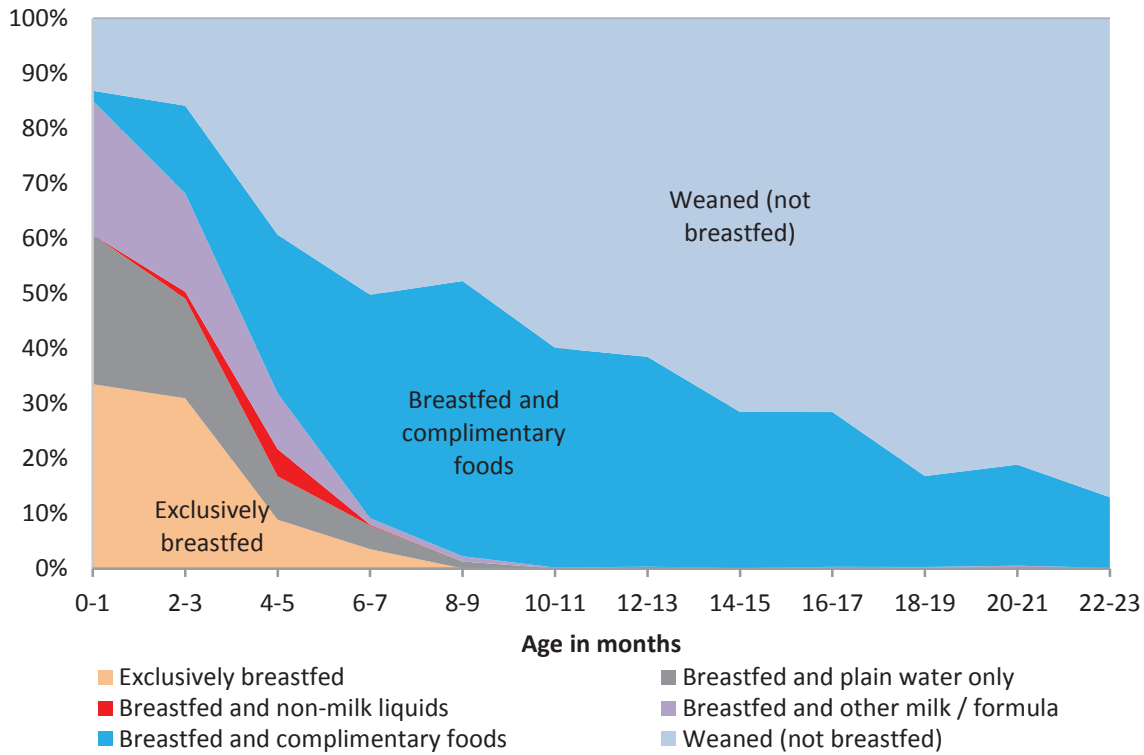


Table NU.5 shows the median duration of breastfeeding by selected background characteristics. Among children under age 3, the median duration is 7.9 months for any breastfeeding, 0.6 months for exclusive breastfeeding and 1.8 months for predominant breastfeeding. Some variations are observed in median duration of breastfeeding across regions. Children under 3 years of age are breastfed for 11.1 median months in the Central region compared to 6.1 median months in Bangkok.

Interestingly, mothers with no education breastfeed children for the longest duration (16.2 median months) but barely provide 0.4 months of exclusive breastfeeding. The longest duration of exclusive breastfeeding is observed among children in the richest households (1.2 median months) and children in the North region (1.0 median months). However, the mean duration of breastfeeding in Thailand is 10.8 months; it is 1.4 months for exclusive breastfeeding and 2.6 months for predominant breastfeeding. Higher mean values indicate that some children in Thailand are breastfed for a longer duration than most children.

Table NU.5: Duration of breastfeeding				
Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children age 0-35 months, Thailand MICS, 2015-2016				
	Median duration (in months) of:			Number of children age 0-35 months
	Any breastfeeding ¹	Exclusive breastfeeding	Predominant breastfeeding	
Median	7.9	0.6	1.8	7,171
Sex				
Male	6.5	0.6	2.1	3,813
Female	9.7	0.5	0.7	3,358
Region				
Bangkok	6.1	0.4	0.5	646
Central	11.1	0.4	2.7	2,107
North	7.6	1.0	2.8	1,291
Northeast	7.1	0.6	0.8	1,980
South	10.1	0.7	2.1	1,147
Area				
Urban	7.3	0.6	1.1	2,895
Rural	8.5	0.6	2.1	4,276
Mother's education				
None	16.2	0.4	4.1	372
Primary	3.3	0.5	0.7	1,867
Secondary	9.4	0.7	2.2	3,441
Higher	8.2	0.6	0.7	1,487
Wealth index quintile				
Poorest	10.1	0.7	1.2	1,369
Second	9.0	0.7	2.2	1,644
Middle	9.2	0.5	2.5	1,447
Fourth	4.4	0.5	0.6	1,642
Richest	9.4	1.2	4.5	1,069
Language of household head				
Thai	7.4	0.6	1.4	6,487
Non-Thai	18.6	0.5	3.2	684
Mean	10.8	1.4	2.6	7,171

¹ MICS indicator 2.11 - Duration of breastfeeding

The age-appropriateness of breastfeeding of children under 24 months of age is provided in Table NU.6. Different criteria of feeding are used depending on the age of the child. For infants aged 0-5 months, exclusive breastfeeding is considered age-appropriate feeding, while children aged 6-23 months are considered to be appropriately fed if they are receiving breast milk and solid, semi-solid or soft food. As a result of feeding patterns, only 29.6 per cent of children aged 6-23 months are being appropriately breastfed and receiving solid, semi-solid or soft foods. A total of 28.0 per cent of children aged 0-23 months are being appropriately breastfed. Girls aged 6-23 months are more likely (31.7 per cent) to be appropriately breastfed and given solids, semi-solid or soft foods compared to boys (28.0 per cent). Similarly, children (6-23 months) born in the South, (36.1 per cent), from rural areas (30.6 per cent), born to mothers with no education (54.5 per cent), living in the poorest households (37.2 per cent) and born to households headed by a non-Thai speaker (50.1 per cent) are more likely to be appropriately breastfed and given solid, semi-solid or soft foods. Similar trends are also observed for appropriate breastfeeding at age 0-23 months.

Table NU.6: Age-appropriate breastfeeding						
Percentage of children age 0-23 months who were appropriately breastfed during the previous day, Thailand MICS, 2015-2016						
	Children age 0-5 months		Children age 6-23 months		Children age 0-23 months	
	Per cent exclusively breastfed ¹	Number of children	Per cent currently breastfeeding and receiving solid, semi-solid or soft foods	Number of children	Per cent appropriately breastfed ²	Number of children
Total	23.1	1,138	29.6	3,484	28.0	4,622
Sex						
Male	20.7	605	28.0	1,944	26.2	2,548
Female	25.9	533	31.7	1,540	30.2	2,073
Region						
Bangkok	(6.4)	133	27.2	292	20.6	425
Central	27.4	321	32.3	1,062	31.2	1,382
North	36.7	205	24.7	650	27.6	855
Northeast	17.5	300	26.8	917	24.5	1,217
South	21.6	179	36.1	563	32.6	742
Area						
Urban	18.8	476	28.2	1,413	25.8	1,889
Rural	26.3	662	30.6	2,070	29.5	2,732
Mother's education						
None	(0.2)	54	54.5	194	42.7	248
Primary	16.9	229	23.3	942	22.1	1,172
Secondary	28.6	585	30.6	1,657	30.0	2,242
Higher	21.0	269	29.0	688	26.7	957
Missing/DK	(*)	1	(*)	2	(*)	3
Wealth index quintile						
Poorest	24.0	170	37.2	656	34.5	826
Second	18.2	270	31.7	852	28.4	1,122
Middle	24.7	240	30.2	687	28.8	926
Fourth	18.5	293	24.2	824	22.7	1,117
Richest	36.4	165	24.0	465	27.3	631
Language of household head						
Thai	23.0	1,022	27.4	3,147	26.3	4,170
Non-Thai	24.7	115	50.1	336	43.6	452
¹ MICS indicator 2.7 - Exclusive breastfeeding under 6 months						
² MICS indicator 2.12 - Age-appropriate breastfeeding						
() Figures that are based on 25-49 unweighted cases						
(*) Figures that are based on fewer than 25 unweighted cases						

Overall, 84.6 per cent of infants 6-8 months old received solid, semi-solid or soft foods at least once during the previous day (Table NU.7). Among currently breastfeeding infants the percentage is 87.0 per cent while it is 82.1 per cent among infants currently not breastfeeding. The percentage of girls aged 6-8 months receiving solid, semi-solid or soft foods is slightly higher (85.7 per cent) than for boys (83.8 per cent). However, more boys (93.5 per cent) currently breastfeeding are likely to receive solid, semi-solid or soft foods compared to girls (79.7 per cent) in the same age group. Among children 6-8 months old who are currently not breastfed, 93.8 per cent of girls received solid, semi-solid or soft foods compared to 75.5 per cent of boys.

Table NU.7: 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, Thailand MICS, 2015-2016						
	Currently breastfeeding		Currently not breastfeeding		All	
	Per cent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Per cent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Per cent receiving solid, semi-solid or soft foods ¹	Number of children age 6-8 months
Total	87.0	300	82.1	288	84.6	588
Sex						
Male	93.5	158	75.5	185	83.8	343
Female	79.7	142	93.8	104	85.7	245
Area						
Urban	86.6	138	80.2	137	83.4	274
Rural	87.3	162	83.8	152	85.6	314

¹ MICS indicator 2.13 - Introduction of solid, semi-solid or soft foods

Table NU.8 shows that overall, more than 8 out of 10 children aged 6-23 months (84.6 per cent) were receiving solid, semi-solid or soft foods the minimum number of times. The proportion of children receiving the minimum dietary diversity, or foods from at least four food groups, was lower (75.0 per cent) than that for minimum meal frequency (84.6 per cent), indicating the need to focus on improving diet quality and nutrient intake among this vulnerable group. A slightly higher proportion of older (18-23-month-old) children (86.0 per cent) were achieving the minimum dietary diversity compared to younger (6-8-month-old) children (33.4 per cent). The overall assessment using the indicator of minimum acceptable diet revealed that only 55.6 per cent were benefitting from a diet sufficient in both diversity and frequency. Children in the 6-8 months age group are three times (22.7 per cent) less likely to receive a minimum acceptable diet compared to children in the 18-23 months age group (67.8 per cent). Similarly, one in four children born to mothers with no education are likely to receive the minimum acceptable diet compared to 59.0 per cent born to higher educated mothers. Almost 6 out of 10 children born to Thai-speaking household heads receive the minimum acceptable diet compared to fewer than 4 out of 10 children in households headed by a non-Thai speaker.

Table NU.8: Infant and young child feeding (IYCF) practices

Percentage of children age 6-23 months who received appropriate liquids and solid, semi-solid or soft foods the minimum number of times or more during the previous day, by breastfeeding status, Thailand MICS, 2015-2016

	Currently breastfeeding						Currently not breastfeeding						All		
	Per cent of children who received:			Number of children age 6-23 months	Per cent of children who received:			Number of children age 6-23 months	Per cent of children who received:			Number of children age 6-23 months			
	Minimum dietary diversity ^a	Minimum meal frequency ^b	Minimum acceptable diet ^{1,c}		Minimum dietary diversity ^d	Minimum meal frequency ^b	Minimum acceptable diet ^{2,c}		At least 2 milk feeds ³	Minimum dietary diversity ^{4,a}	Minimum meal frequency ^{5,b}		Minimum acceptable diet ^c		
Total	66.4	67.5	49.6	1,082	79.7	92.9	58.5	92.0	75.0	84.6	55.6	3,484			
Sex															
Male	66.0	65.7	49.4	557	78.7	92.3	55.6	90.3	73.7	84.1	53.7	1,944			
Female	66.8	69.4	49.9	525	81.1	93.7	62.3	94.2	76.5	85.1	57.9	1,540			
Age															
6-8 months	21.8	65.0	19.9	300	43.1	89.7	25.8	90.4	33.4	76.7	22.7	588			
9-11 months	72.2	61.8	50.9	168	88.3	96.3	57.8	88.0	79.8	79.7	54.5	385			
12-17 months	85.3	69.0	62.8	430	84.0	91.0	58.8	90.3	82.3	83.6	60.1	1,356			
18-23 months	89.4	73.0	66.1	185	84.9	94.9	68.1	94.7	86.0	91.2	67.8	1,154			
Region															
Bangkok	(64.2)	(83.5)	(53.4)	81	87.6	94.4	68.5	97.5	81.2	91.2	64.1	292			
Central	70.6	60.7	50.9	358	71.0	94.1	54.3	95.6	69.1	82.1	53.1	1,062			
North	61.4	71.3	53.2	174	79.0	97.5	54.6	95.0	73.5	90.1	54.3	650			
Northeast	72.0	71.6	51.5	249	83.1	87.3	59.4	84.6	80.4	82.8	57.2	917			
South	58.0	64.6	41.2	220	86.5	94.2	64.6	91.3	75.6	82.1	55.0	563			
Area															
Urban	62.9	69.0	49.8	420	83.1	92.9	63.3	93.9	76.6	85.5	59.1	1,413			
Rural	68.6	66.5	49.5	661	77.3	92.8	55.1	90.6	73.8	83.9	53.2	2,070			
Mother's education															
None	66.6	43.4	31.8	107	(66.9)	(90.6)	(20.7)	(88.8)	66.8	64.6	26.9	194			
Primary	84.1	75.6	68.6	228	76.2	92.9	55.4	92.6	77.4	88.5	58.8	942			
Secondary	60.1	65.8	44.6	539	84.5	93.3	62.0	92.2	75.8	83.8	56.0	1,657			
Higher	63.4	75.2	51.1	207	76.4	92.3	62.5	91.4	72.0	87.0	59.0	688			
Missing/DK	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2			

Table NU.8: Infant and young child feeding (IYCF) practices (continued)

Percentage of children age 6-23 months who received appropriate liquids and solid, semi-solid or soft foods the minimum number of times or more during the previous day, by breastfeeding status, Thailand MICS, 2015-2016

	Currently breastfeeding						Currently not breastfeeding						All		
	Per cent of children who received:			Per cent of children who received:			Per cent of children who received:			Per cent of children who received:			Number of children age 6-23 months	Number of children age 6-23 months	
	Minimum dietary diversity ^a	Minimum meal frequency ^b	Minimum acceptable diet ^{1,c}	Minimum dietary diversity ^a	Minimum meal frequency ^b	Minimum acceptable diet ^{2,c}	Minimum dietary diversity ^{4,a}	Minimum meal frequency ^{5,b}	Minimum acceptable diet ^c	Minimum dietary diversity ^{4,a}	Minimum meal frequency ^{5,b}	Minimum acceptable diet ^c			
		Number of children age 6-23 months			Number of children age 6-23 months			Number of children age 6-23 months			Number of children age 6-23 months				
Wealth index quintile															
Poorest	73.0	72.3	59.8	87.9	49.8	83.9	76.5	81.5	53.9	76.5	81.5	53.9	656		
Second	66.9	58.5	40.7	95.5	57.3	94.4	76.2	82.6	51.5	76.2	82.6	51.5	852		
Middle	81.5	80.6	66.5	93.8	62.9	91.2	85.0	89.5	64.1	85.0	89.5	64.1	687		
Fourth	54.1	60.0	41.8	93.4	58.4	92.7	69.9	84.7	54.1	69.9	84.7	54.1	824		
Richest	46.8	68.5	34.4	92.1	65.5	97.2	64.8	85.1	56.3	64.8	85.1	56.3	465		
Language of household head															
Thai	67.6	70.8	53.1	92.8	59.2	91.9	75.6	86.2	57.4	75.6	86.2	57.4	3,147		
Non-Thai	60.6	50.9	32.6	94.2	48.1	93.1	69.0	69.8	39.4	69.0	69.8	39.4	336		

¹ MICS indicator 2.17a - Minimum acceptable diet (breastfed)

² MICS indicator 2.17b - Minimum acceptable diet (non-breastfed)

³ MICS indicator 2.14 - Milk feeding frequency for non-breastfed children

⁴ MICS indicator 2.16 - Minimum dietary diversity

⁵ MICS indicator 2.15 - Minimum meal frequency

^a Minimum dietary diversity is defined as receiving foods from at least 4 of 7 food groups: 1) Grains, roots and tubers, 2) legumes and nuts, 3) dairy products (milk, yogurt, cheese), 4) flesh foods (meat, fish, poultry and liver/organ meats), 5) eggs, 6) vitamin-A rich fruits and vegetables, and 7) other fruits and vegetables.

^b Minimum meal frequency among currently breastfeeding children is defined as children who also received solid, semi-solid or soft foods 2 times or more daily for children age 6-8 months and 3 times or more daily for children age 9-23 months. For non-breastfeeding children age 6-23 months it is defined as receiving solid, semi-solid or soft foods or milk feeds, at least 4 times.

^c The minimum acceptable diet for breastfed children age 6-23 months is defined as receiving the minimum dietary diversity and the minimum meal frequency, while for non-breastfed children it further requires at least 2 milk feedings and that the minimum dietary diversity is achieved without counting milk feeds.

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

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

Table NU.9: Bottle feeding		
Percentage of children age 0-23 months who were fed with a bottle with a nipple during the previous day, Thailand MICS, 2015-2016		
	Percentage of children age 0-23 months fed with a bottle with a nipple ¹	Number of children age 0-23 months
Total	79.3	4,622
Sex		
Male	78.7	2,548
Female	80.0	2,073
Age		
0-5 months	63.8	1,138
6-11 months	84.1	973
12-23 months	84.4	2,510
Region		
Bangkok	88.0	425
Central	83.2	1,382
North	71.7	855
Northeast	80.9	1,217
South	73.2	742
Area		
Urban	83.4	1,889
Rural	76.5	2,732
Mother's education		
None	72.9	248
Primary	82.4	1,172
Secondary	77.2	2,242
Higher	82.2	957
Missing/DK	(*)	3
Wealth index quintile		
Poorest	74.3	826
Second	79.9	1,122
Middle	76.6	926
Fourth	83.4	1,117
Richest	81.4	631
Language of household head		
Thai	79.8	4,170
Non-Thai	74.6	452
¹ MICS indicator 2.18 - Bottle feeding		
(*) Figures that are based on fewer than 25 unweighted cases		

The continued practice of bottle-feeding is a concern because of possible contamination due to unsafe water and lack of hygiene in preparation. Table NU.9 shows that bottle-feeding is prevalent in Thailand. Overall, 79.3 per cent of children under 24 months of age are fed using a bottle with a nipple. There is no visible difference in bottle-feeding for male and female children. Older children are more likely to be bottle-fed compared to children under 6 months of age. Children in Bangkok are also more likely (88.0 per cent) to be bottle-fed while 83.4 per cent of children in urban areas are bottle-fed compared to 76.5 per cent in rural areas. Interestingly, children living in households in the fourth wealth quintile are more likely to be bottle-fed compared to children in all other households. Children living in households headed by Thai speakers are also more likely to receive feed using a bottle with a nipple.

Salt Iodization

Iodine Deficiency Disorders (IDD) is the world's leading cause of preventable mental retardation and impaired psychomotor development in young children. In its most extreme form, iodine deficiency causes cretinism. It also increases the risks of stillbirth and miscarriage in pregnant women. Iodine deficiency is most commonly and visibly associated with goitre. IDD takes its greatest toll in impaired mental growth and development, contributing in turn to poor school performance, reduced intellectual ability, and impaired work performance. The indicator is the percentage of households consuming adequately iodized salt (≥ 15 parts per million).

Table NU.10: Iodized salt consumption								
Per cent distribution of households by consumption of iodized salt, Thailand MICS, 2015-2016								
	Percentage of households in which salt was tested	Number of households	Percent of households with:				Total	Number of households in which salt was tested or with no salt
			No salt	Salt test result				
				Not iodized 0 PPM	>0 and <15 PPM	15+ PPM ¹		
Total	90.6	28,652	8.2	7.1	11.4	73.3	100.0	28,273
Region								
Bangkok	74.5	3,932	20.8	1.3	7.7	70.2	100.0	3,701
Central	88.7	8,747	10.0	3.4	5.5	81.1	100.0	8,618
North	95.5	5,103	4.5	8.3	8.2	78.9	100.0	5,102
Northeast	95.4	7,161	4.4	16.0	23.1	56.5	100.0	7,147
South	95.9	3,708	4.0	2.8	10.6	82.5	100.0	3,706
Area								
Urban	85.8	13,638	12.2	4.7	8.3	74.8	100.0	13,328
Rural	94.9	15,014	4.7	9.3	14.2	71.9	100.0	14,946
Wealth index quintile								
Poorest	92.3	6,393	7.4	15.7	20.2	56.7	100.0	6,372
Second	90.7	5,952	8.7	7.9	11.7	71.7	100.0	5,915
Middle	89.8	5,728	9.5	5.4	9.7	75.4	100.0	5,685
Fourth	89.4	5,491	9.2	3.0	7.3	80.5	100.0	5,408
Richest	90.2	5,089	6.2	1.6	6.0	86.3	100.0	4,893

¹ MICS indicator 2.19 - Iodized salt consumption

In 90.6 per cent of households, salt used for cooking was tested for iodine content by using salt test kits and testing for the presence of potassium iodide and potassium iodate. Table NU.10 shows that in 8.2 per cent of households, there was no salt available. Moreover, one in five households in Bangkok (20.8 per cent) had no salt for testing. These households are included in the denominator of the indicator. In 73.3 per cent of households, salt was found to contain 15 parts per million (PPM) or more of iodine. Use of iodized salt was lowest in the Northeast (56.5 per cent) followed by Bangkok (70.2 per cent) and highest in the South (82.5 per cent). Almost three quarters (74.8 per cent) of urban households were found to be using adequately iodized salt as compared to 71.9 per cent in rural areas. Interestingly, iodized salt consumption has a positive correlation with household wealth: 56.7 per cent of the poorest households use iodized salt compared to 86.3 per cent of the richest households.

The consumption of adequately iodized salt is graphically presented in Figure NU.4 together with the percentage of salt containing less than 15 PPM.

Figure NU.4: Consumption of iodized salt, Thailand MICS, 2015-2016

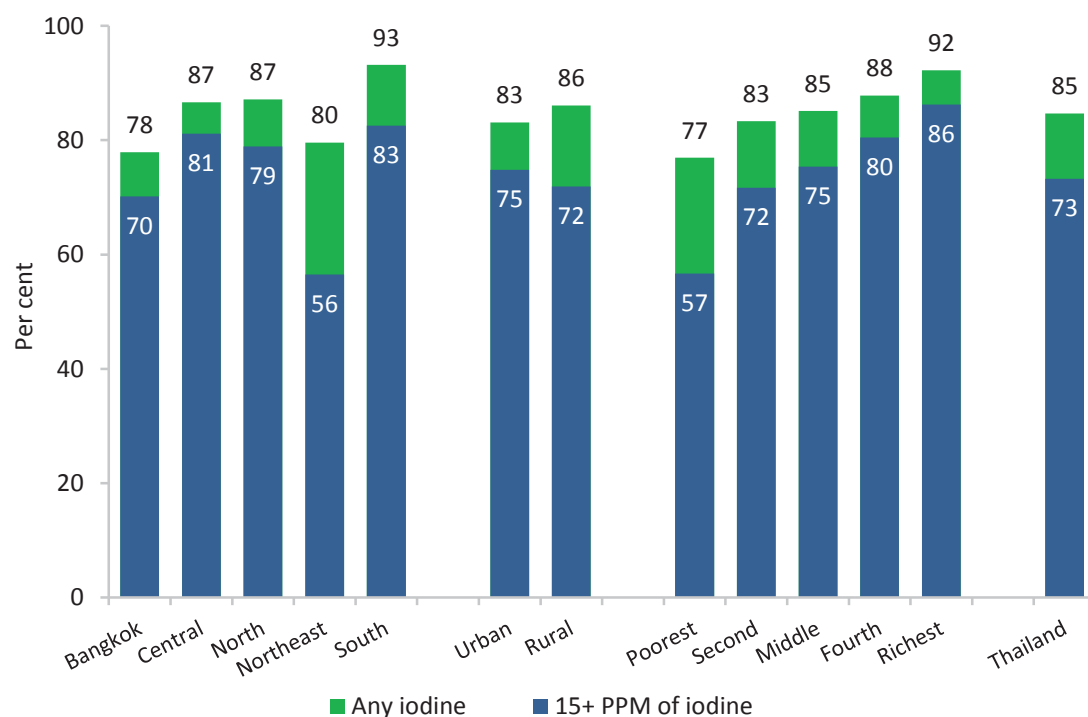


Table NU.S2 presents the percentage of households where salt was actually tested. Households with no salt or households where salt was not tested due to other reasons were excluded from the denominator. Overall, in 79.8 per cent of households in Thailand where salt was tested, salt used for cooking was found to be adequately iodized (15+ PPM). Across regions, the Northeast has the lowest percentage of households (59.1 per cent) using adequately iodized salt for cooking. Almost one in five (16.7 per cent) households in the Northeast region use salt that is not iodized (0 PPM). Similarly, 24.1 per cent of households in the Northeast use salt for cooking that is inadequately iodized (>0 and <15 PPM), followed by 11.1 per cent in the South. Urban households are more likely (85.2 per cent) to use adequately iodized salt for cooking compared to households in rural areas (75.4 per cent). Household wealth background also shows a strong positive correlation with the percentage of households using adequately iodized salt.

Table NU.S2: Iodized salt consumption							
Percent distribution of households in which salt was tested by consumption of iodized salt, Thailand, 2015-2016							
	Percentage of households in which salt was tested	Number of households	Percent of households with:			Total	Number of households in which salt was Tested
			Salt test result				
			Not iodized 0 PPM	>0 and <15 PPM	15+ PPM		
Total	90.6	28,652	7.7	12.4	79.8	100.0	25,945
Region							
Bangkok	74.5	3,932	1.6	9.7	88.6	100.0	2,930
Central	88.7	8,747	3.7	6.1	90.1	100.0	7,757
North	95.5	5,103	8.7	8.6	82.6	100.0	4,872
Northeast	95.4	7,161	16.7	24.1	59.1	100.0	6,829
South	95.9	3,708	2.9	11.1	86.0	100.0	3,557
Area							
Urban	85.8	13,638	5.4	9.4	85.2	100.0	11,700
Rural	94.9	15,014	9.7	14.9	75.4	100.0	14,244
Wealth index quintile							
Poorest	92.3	6,393	16.9	21.8	61.2	100.0	5,900
Second	90.7	5,952	8.7	12.8	78.5	100.0	5,398
Middle	89.8	5,728	5.9	10.8	83.3	100.0	5,145
Fourth	89.4	5,491	3.3	8.1	88.6	100.0	4,911
Richest	90.2	5,089	1.7	6.4	92.0	100.0	4,590

V. CHILD HEALTH



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. In addition, the Global Vaccine Action Plan (GVAP) was endorsed by the 194 Member States of the World Health Assembly in May 2012 to achieve the Decade of Vaccines vision by delivering universal access to immunization. Immunization has saved the lives of millions of children in the four decades since the launch of the Expanded Programme on Immunization (EPI) in 1974. Worldwide there are still millions of children not reached by routine immunization and as a result, vaccine-preventable diseases cause more than 2 million deaths every year.

The WHO Recommended Routine Immunizations for Children²³ advises that all children should be vaccinated against tuberculosis, diphtheria, pertussis, tetanus, polio, measles, hepatitis B, haemophilus influenzae type b, pneumonia/meningitis, rotavirus and rubella.

It is recommended that all doses in the primary series be completed before the child's first birthday, although depending on the epidemiology of disease in a country, the first dose of the measles and rubella-containing vaccines may be recommended at 12 months or later. The recommended number and timing of most other doses also varies slightly with local epidemiology and may include booster doses later in childhood.

The vaccination schedule followed by the Thailand National Immunization Programme provides most of the above-mentioned vaccinations as well as three doses of vaccine against Japanese encephalitis. All vaccinations should be received during the first year of life except the doses of Japanese encephalitis. Taking into consideration this vaccination schedule, the estimates for full immunization coverage from the Thailand MICS are based on children aged 12-23 months. Information on vaccination coverage was collected for all children under 5 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 in the Tablet PC. 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.

²³ <http://www.who.int/immunization/diseases/en>. Table 2 includes recommendations for all children and additional antigens recommended only for children residing in certain regions of the world or living in certain high-risk population groups.

Table CH.1: Vaccinations in the first years of life								
Percentage of children age 12-23 months and 24-35 months vaccinated against vaccine-preventable childhood diseases at any time before the survey and by their first birthday, Thailand MICS, 2015-2016								
	Children age 12-23 months:				Children age 24-35 months:			
	Vaccinated at any time before the survey according to:			Vaccinated by 12 months of age ^a	Vaccinated at any time before the survey according to:			Vaccinated by 12 Months of age
	Vaccination card	Mother's report	Either		Vaccination card	Mother's report	Either	
Antigen								
BCG ¹	85.9	10.6	96.4	96.2	85.1	11.2	96.3	96.1
Polio								
1	85.6	10.2	95.8	95.5	85.5	10.7	96.2	95.1
2	85.1	9.8	94.9	94.5	84.9	9.2	94.1	91.4
3 ²	82.4	4.5	86.9	85.8	83.5	7.1	90.6	86.2
DPT								
1	83.7	10.4	94.2	93.0	85.5	10.9	96.3	94.2
2	82.4	9.6	92.0	91.6	83.5	9.9	93.4	91.1
3 ³	80.1	8.9	89.0	87.6	81.9	8.5	90.4	86.6
HepB								
At birth	85.6	8.6	94.2	93.1	85.5	8.6	94.0	93.7
1	85.8	8.3	94.1	93.8	85.8	7.6	93.4	92.5
2	85.3	7.5	92.9	92.1	85.1	4.5	89.6	87.1
3 ⁴	83.0	3.6	86.6	84.3	83.7	2.2	85.9	80.2
Measles (MMR1) ⁷	82.6	10.3	92.9	89.0	83.5	10.4	93.9	85.1
Fully vaccinated ^{8, b}	77.5	1.6	79.1	71.6	79.8	1.8	81.6	67.8
No vaccinations	0.0	3.3	3.3	3.3	0.0	3.3	3.3	3.3
Number of children	2,510	2,510	2,510	2,510	2,550	2,550	2,550	2,550
¹ MICS indicator 3.1 - Tuberculosis immunization coverage ² MICS indicator 3.2 - Polio immunization coverage ³ MICS indicator 3.3 - Diphtheria, pertussis and tetanus (DPT) immunization coverage ⁴ MICS indicator 3.5 - Hepatitis B immunization coverage ⁷ MICS indicator 3.4; MDG indicator 4.3 - Measles immunization coverage ⁸ MICS indicator 3.8 - Full immunization coverage								
^a All MICS indicators refer to results in this column ^b Includes: BCG, Polio3, DPT3, HepB3, and Measles (MMR1) as per the vaccination schedule in Thailand								

The percentage of children aged 12-23 months and 24-35 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 and Figure CH.1. The denominators for the table are comprised of children aged 12-23 months and 24-35 months so that only children who are old enough to be fully vaccinated are counted. In the first three columns in each panel 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 in each panel, 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.

Approximately 96.2 per cent of children aged 12-23 months received a BCG vaccination by the age of 12 months and 93.0 per cent the first dose of DPT. The percentage declined to 91.6 per cent for the second dose of DPT, and 87.6 per cent for the third dose. HepB at birth was given to 93.1 per cent of children aged 12-23 months before their first birthday and the second dose to 92.1 per cent. The percentage of children receiving the third dose, however, dropped to 84.3 per cent. Similarly, 95.5 per cent of children received Polio 1 by 12 months of age, and this declined to 85.8 per cent for the third dose. Coverage for

the first dose of measles vaccine by 12 months, at 89.0 per cent, is lower than for the first dose of other vaccines. Although 92.9 per cent of children aged 12-23 months received the measles vaccine at any time before the survey, only 89.0 per cent had received it by their first birthday. As a result, the percentage of children who had all the recommended vaccinations by their first birthday is low at only 71.6 per cent. A total of 79.1 per cent of children aged 12-23 months received all the recommended vaccinations at any time before the survey. The individual coverage figures for children aged 24-35 months are mostly similar to those for children aged 12-23 months, suggesting that immunization coverage was on average stable in Thailand between 2014 and 2015.

Figure CH.1: Vaccinations by age 12 months, Thailand MICS, 2015-2016

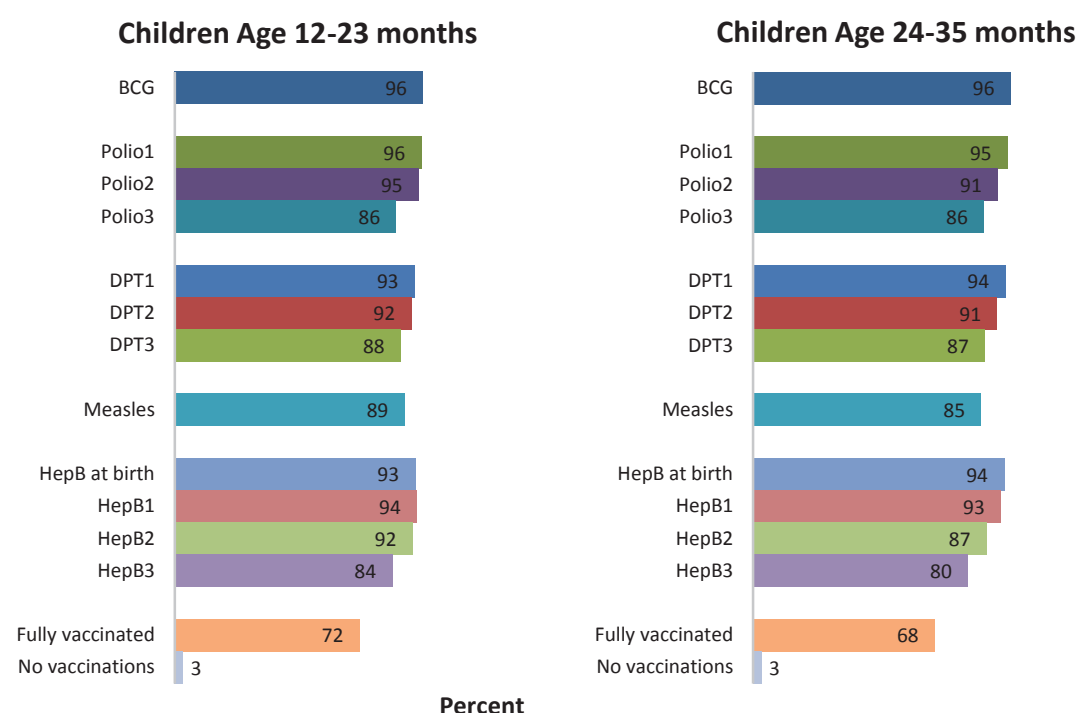


Table CH.2 presents vaccination coverage estimates for children aged 12-23 months by background characteristics. The figures indicate children receiving the vaccinations at any time up to the date of the survey, and are based on information from both the vaccination cards and mothers'/caretakers' reports. Overall, 86.0 per cent of children aged 12-23 months had vaccination cards.

BCG coverage appears to be high across all background characteristics, with the highest coverage (99.6 per cent) among children in Bangkok and the lowest (82.2 per cent) among children born to women with no education. At national level, 96.4 per cent of children aged 12-23 months received the BCG vaccine. Similar percentages of children were also vaccinated for Polio 1 (95.8 per cent), DPT 1 (94.2 per cent) and HepB at birth (94.2 per cent). Measles coverage was also high across most of the background characteristics, with 92.9 per cent of children receiving the first dose of measles vaccine at national level compared to 72.8 per cent of children born in households headed by a non-Thai speaker. It is also interesting to note that 17.5 per cent of children born to mothers with no education received no vaccination followed by 13.8 per cent of children born in households headed by a non-Thai speaker.

Table CH.2: Vaccinations by background characteristics

Percentage of children age 12-23 months currently vaccinated against vaccine-preventable childhood diseases, Thailand MICS, 2015-2016

	Percentage of children who received:												Percentage with vaccination card seen	Number of children age 12-23 months			
	BCG			Polio			DPT			HepB					Measles1	Full ^a	None
	1	2	3	1	2	3	1	2	3	At birth	1	2					
Total	96.4	95.8	94.9	86.9	94.2	92.0	89.0	94.2	94.1	92.9	86.6	92.9	79.1	3.3	86.0	2,510	
Sex																	
Male	96.3	95.6	94.7	87.8	95.1	92.0	90.2	94.5	93.2	92.2	86.2	92.5	80.3	3.6	85.1	1,383	
Female	96.6	96.1	95.0	85.8	93.0	92.0	87.5	93.8	95.3	93.7	87.2	93.4	77.7	3.0	87.1	1,127	
Region																	
Bangkok	99.6	99.1	97.2	90.6	97.8	95.3	92.7	96.6	97.1	94.1	90.5	96.7	83.1	0.4	91.2	178	
Central	94.5	93.8	92.9	82.2	90.2	85.3	84.8	90.6	88.9	87.2	79.3	91.2	66.5	5.5	72.8	743	
North	96.1	96.2	95.9	91.1	96.7	96.5	94.1	95.3	96.5	96.1	90.8	91.8	86.1	3.3	91.3	485	
Northeast	98.9	97.9	97.5	88.7	96.5	95.6	90.4	97.3	97.5	97.3	90.6	96.8	85.5	1.1	92.1	708	
South	94.6	93.9	91.5	86.0	92.7	91.0	86.3	93.2	93.7	91.1	86.3	88.8	81.1	4.6	91.1	398	
Area																	
Urban	94.2	93.9	92.6	88.0	93.3	92.1	90.3	91.1	90.6	89.0	85.3	90.9	78.1	5.6	80.7	977	
Rural	97.8	97.1	96.3	86.2	94.7	91.9	88.1	96.2	96.4	95.4	87.5	94.1	79.8	1.8	89.4	1,533	
Mother's education																	
None	82.2	82.5	81.9	77.7	81.1	80.3	80.0	81.3	82.3	81.6	80.2	78.9	71.5	17.5	74.7	146	
Primary	97.0	95.7	94.9	88.4	91.1	90.4	85.8	95.7	95.4	95.0	89.9	93.0	80.7	2.6	92.0	719	
Secondary	99.2	98.7	97.6	88.2	98.4	95.5	92.6	97.1	95.8	94.4	86.3	95.6	79.3	.6	85.4	1,199	
Higher	92.8	92.7	91.8	84.1	92.0	88.9	87.4	88.4	91.6	89.1	84.3	90.0	78.8	7.1	81.6	445	
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2	
Wealth index quintile																	
Poorest	97.0	96.6	94.9	90.3	95.5	91.0	89.5	95.8	96.2	94.5	92.1	92.2	81.5	2.4	90.6	513	
Second	96.0	94.6	93.6	86.4	93.3	91.7	86.7	94.3	95.0	93.1	87.1	91.8	83.1	4.0	91.1	654	
Middle	97.2	97.1	96.6	86.4	91.7	91.5	87.5	95.7	95.6	95.2	86.9	92.5	77.2	2.5	89.9	492	
Fourth	98.9	98.4	98.0	91.1	98.5	95.6	93.9	94.5	97.5	97.3	91.3	97.3	82.9	0.7	83.9	543	
Richest	90.7	90.5	89.3	75.9	90.2	88.9	86.5	88.7	80.8	78.4	68.0	89.2	63.4	9.3	65.0	308	
Language of household head																	
Thai	97.7	97.1	96.4	88.8	95.6	93.4	90.7	95.5	95.3	94.2	88.3	95.1	81.1	2.1	87.0	2,258	
Non-Thai	85.3	84.2	81.3	70.1	81.4	79.3	73.5	82.9	84.0	80.8	71.8	72.8	61.1	13.8	77.2	252	

(*) Figures that are based on fewer than 25 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. Following the 42nd and 44th World Health Assembly calls for elimination of neonatal tetanus, the global community continues to work to reduce the incidence of neonatal tetanus to less than 1 case of neonatal tetanus per 1,000 live births in every district by 2015.

The strategy for preventing maternal and neonatal tetanus is to ensure that 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) are also considered to be protected against tetanus if the woman:

- Received at least two doses of tetanus toxoid vaccine, the last within the previous three years;
- Received at least 3 doses, the last within the previous five 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 had a live 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 recent pregnancy were then asked about tetanus toxoid vaccinations they may have previously received. 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 had a live birth within the last two years. Overall, 51.6 per cent of women received at least two doses of tetanus vaccine during their last pregnancy. Women in Bangkok were more likely (60.3 per cent) to receive at least two doses compared to women in the North (41.4 per cent). Interestingly, women with no education were more likely (63.0 per cent) to receive at least two doses of tetanus during their last pregnancy than educated women.

Overall, protection against tetanus was 73.9 per cent at national level. Women in the North region are somewhat less likely (67.1 per cent) to receive tetanus protection than women from other regions. There are no major differentials between urban and rural areas. In total, 78.7 per cent of primary educated women were protected against tetanus compared to 70.3 per cent of women with no education. Women in the poorest household are also less likely (63.8 per cent) to be protected against tetanus compared to women from other wealth index quintiles.

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, Thailand MICS, 2015-2016							
	Percentage of women who received at least 2 doses during last pregnancy	Percentage of women who did not receive two or more doses during last pregnancy but received:				Protected Against tetanus ¹	Number of women with a live birth in the last 2 years
		2 doses, the last within prior 3 years	3 doses, the last within prior 5 years	4 doses, the last within prior 10 years	5 or more doses during lifetime		
Total	51.6	19.2	2.5	0.7	0.0	73.9	2,092
Region							
Bangkok	60.3	17.0	0.1	0.0	0.0	77.3	231
Central	58.6	13.2	4.1	0.8	0.0	76.7	713
North	41.4	23.3	0.6	1.8	0.0	67.1	354
Northeast	45.6	24.0	1.5	0.1	0.0	71.2	437
South	49.4	22.6	3.8	0.5	0.0	76.2	359
Area							
Urban	53.1	17.5	3.7	0.3	0.0	74.6	932
Rural	50.4	20.5	1.5	0.9	0.0	73.4	1,160
Education							
None	63.0	4.7	2.5	0.0	0.0	70.3	103
Primary	59.9	16.7	1.3	0.8	0.0	78.7	300
Secondary	47.3	20.2	2.9	1.0	0.0	71.4	1,173
Higher	54.2	21.1	2.3	0.0	0.0	77.6	514
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	1
Wealth index quintile							
Poorest	39.5	22.8	1.3	0.2	0.0	63.8	305
Second	46.4	17.0	1.4	2.6	0.0	67.3	491
Middle	56.2	22.0	2.1	0.2	0.0	80.5	425
Fourth	56.4	15.8	5.2	0.0	0.0	77.5	540
Richest	56.7	21.1	1.1	0.0	0.0	78.9	331
Language of household head							
Thai	51.7	20.0	2.5	0.7	0.0	74.9	1,881
Non-Thai	50.9	11.6	2.4	0.7	0.0	65.6	211
¹ MICS indicator 3.9 - Neonatal tetanus protection							
(*) Figures that are based on fewer than 25 unweighted cases							

Care of Illness

A key strategy for accelerating progress towards MDG 4 is to tackle the diseases that are the leading killers of children under 5. Diarrhoea and pneumonia are two such diseases. The Global Action Plan for the Prevention and Control of Pneumonia and Diarrhoea (GAPPD) aims to end preventable pneumonia and diarrhoea deaths by reducing mortality from pneumonia to 3 deaths per 1,000 live births and mortality from diarrhoea to 1 death per 1,000 live births by 2025.

Table CH.4 presents the percentage of children under 5 years of age who were reported to have had an episode of diarrhoea, symptoms of acute respiratory infection (ARI), or fever during the two weeks preceding the survey. These results are not measures of true prevalence, and should not be used as such, but rather the period-prevalence of those illnesses over a two-week time window.

Table CH.4: Reported disease episodes				
Percentage of children age 0-59 months for whom the mother/caretaker reported an episode of diarrhoea, symptoms of acute respiratory infection (ARI) and/or fever in the last two weeks, Thailand MICS, 2015-2016				
	Percentage of children who in the last two weeks had:			Number of children age 0-59 months
	An episode of diarrhoea	Symptoms of ARI	An episode of fever	
Total	4.9	1.4	18.9	12,250
Sex				
Male	4.9	1.5	18.7	6,392
Female	4.8	1.3	19.3	5,858
Region				
Bangkok	3.8	1.3	18.6	1,146
Central	3.5	1.9	13.7	3,546
North	6.6	1.2	20.4	2,084
Northeast	5.3	1.4	21.1	3,545
South	5.6	1.0	23.2	1,929
Area				
Urban	4.0	1.3	17.1	4,988
Rural	5.5	1.5	20.2	7,262
Age				
0-11 months	4.2	.8	13.5	2,111
12-23 months	7.5	1.3	22.0	2,510
24-35 months	6.4	1.6	21.9	2,550
36-47 months	4.3	2.3	19.9	2,560
48-59 months	1.9	1.0	16.4	2,519
Mother's education				
None	3.6	0.3	11.5	587
Primary	6.2	1.6	20.8	3,557
Secondary	4.5	1.5	18.2	5,562
Higher	4.1	1.4	19.7	2,537
Missing/DK	(8.2)	(0.0)	(13.6)	6
Wealth index quintile				
Poorest	6.0	1.5	22.9	2,565
Second	6.2	1.4	18.8	2,675
Middle	3.9	1.3	17.9	2,366
Fourth	4.2	1.8	19.8	2,727
Richest	3.8	1.1	13.9	1,917
Language of household head				
Thai	4.9	1.4	19.3	11,112
Non-Thai	5.0	1.2	15.8	1,138

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

The definition of a case of diarrhoea or fever, in this survey, was the mother's or caretaker's report that the child had such symptoms over the specified period; no other evidence was sought beside the opinion of the mother. A child was considered to have had an episode of ARI if the mother or caretaker reported that the child had, over the specified period, an illness with a cough with rapid or difficult breathing, and whose symptoms were perceived to be due to a problem in the chest or both a problem in the chest and a blocked nose. While this approach is reasonable in the context of a MICS survey, these basically simple case definitions must be kept in mind when interpreting the results, as well as the potential for reporting and recall biases. Further, diarrhoea, fever and ARI are not only seasonal but are also characterized by the often rapid spread of localized outbreaks from one area to another at different points in time. The timing of the survey and the location of the teams might thus considerably affect the results, which must consequently be interpreted with caution. For these reasons, although the period-

prevalence over a two-week time window is reported, these data should not be used to assess the epidemiological characteristics of these diseases but rather to obtain denominators for the indicators related to use of health services and treatment.

Overall, 4.9 per cent of children under 5 years of age were reported to have had diarrhoea in the two weeks preceding the survey, 1.4 per cent symptoms of ARI and 18.9 per cent an episode of fever (Table CH.4). No gender differences were observed for diarrhoea, ARI and fever. However, episodes of diarrhoea were reported to be highest in the North region (6.6 per cent), followed by the South (5.6 per cent) compared to the other regions. Almost one in four (23.2 per cent) children had an episode of fever in the South region. Children aged 12-35 months were more likely to experience an episode of diarrhoea or fever compared to children in other age groups. Similarly, children born to primary educated women (20.8 per cent), children in the poorest households (22.9 per cent) and children living in households headed by a Thai speaker (19.3 per cent) were more likely to experience an episode of fever in the two weeks preceding the survey.

Diarrhoea

Diarrhoea is a 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. In addition, provision of zinc supplements has been shown to reduce the duration and severity of the illness as well as the risk of future episodes within the following two or three months. Preventing dehydration and malnutrition by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhoea.

In the Thailand MICS, mothers or caretakers were asked whether their child under 5 years of age 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 been given to drink and eat during the episode and whether this was more or less than what was usually given to the child.

The overall period-prevalence of diarrhoea in children under 5 years of age is 4.9 per cent (Table CH.4) and ranges from 3.5 per cent in the Central region to 6.6 per cent in the North. The highest period-prevalence is seen among children aged 12-23 months, which largely corresponds with the weaning period.

Table CH.5: Care-seeking during diarrhoea							
Percentage of children age 0-59 months with diarrhoea in the last two weeks for whom advice or treatment was sought, by source of advice or treatment, Thailand MICS, 2015-2016							
	Percentage of children with diarrhoea for whom:						Number of children age 0-59 months with diarrhoea in the last two weeks
	Advice or treatment was sought from:					No advice or treatment sought	
	Health facilities or providers			Other source	A health facility or provider ^{1, b}		
Public	Private	Community health provider ^a					
Total	43.5	36.9	0.8	1.6	70.7	25.4	598
Sex							
Male	39.7	42.4	0.7	2.0	73.8	22.9	315
Female	47.7	30.9	0.8	1.3	67.1	28.2	283
Region							
Bangkok	(*)	(*)	(*)	(*)	(*)	(*)	44
Central	44.9	33.5	0.0	2.3	63.6	32.4	122
North	48.4	36.3	0.8	0.3	78.5	15.9	137
Northeast	52.7	39.2	1.3	2.2	77.5	18.8	187
South	33.4	27.6	1.1	2.3	56.3	39.9	109
Area							
Urban	32.8	41.7	0.4	0.7	64.8	32.7	200
Rural	48.9	34.5	0.9	2.1	73.6	21.8	398
Age							
0-11 months	38.6	42.9	0.0	.4	80.0	18.8	89
12-23 months	46.7	36.3	0.2	3.0	73.4	23.3	188
24-35 months	43.1	38.3	1.3	1.7	65.0	27.8	164
36-47 months	35.3	34.3	1.7	1.0	65.4	33.8	110
48-59 months	60.3	29.9	0.4	0.2	73.8	18.3	47
Mother's education							
None	(*)	(*)	(*)	(*)	(*)	(*)	21
Primary	55.3	27.3	0.9	2.8	74.3	21.9	222
Secondary	40.6	36.7	0.2	1.0	70.4	27.9	251
Higher	25.3	57.8	2.0	1.0	62.7	27.0	104
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	1
Wealth index quintile							
Poorest	47.9	30.9	0.7	3.5	75.3	20.6	154
Second	50.0	26.2	0.4	0.3	70.2	28.9	165
Middle	54.2	30.9	3.2	3.2	64.3	31.0	93
Fourth	30.5	38.4	0.0	0.7	66.2	31.7	114
Richest	26.1	79.7	0.0	0.1	76.9	10.6	72
Language of household head							
Thai	42.9	38.3	0.8	1.8	70.9	24.9	541
Non-Thai	48.9	24.3	0.4	0.3	68.0	30.2	57

¹ MICS indicator 3.10 - Care-seeking for diarrhoea

^a Community health providers includes both public (Community health worker and Mobile/Outreach clinic) and private (Mobile clinic) health facilities

^b Includes all public and private health facilities and providers, but excludes private pharmacy

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

Table CH.5 shows the percentage of children with diarrhoea in the two weeks preceding the survey for whom advice or treatment was sought and where. Overall, a health facility or provider was seen in 70.7 per cent of cases, predominantly in the public sector (43.5 per cent). Interestingly, for boys, treatment or advice was more likely to be sought in the private sector (42.4 per cent). For females, it was more likely to be sought from the public sector (47.7 per cent). Seeking treatment or advice from the private sector was highest (79.7 per cent) among children in the richest households. For almost three out of

four boys (73.8 per cent) who had an episode of diarrhoea, advice from a health facility or provider was sought. For girls, it was slightly more than two out of three (67.1 per cent). For 39.9 per cent of children having an episode of diarrhoea in the South, no treatment or advice was sought. As children grow, care-seeking behaviour for an episode of diarrhoea declines. For 18.8 per cent of children aged 0-11 months who had diarrhoea, no treatment or advice was sought. The percentage increased to 33.8 per cent for children aged 36-47 months. However, no advice or treatment was sought for only 18.3 per cent of children aged 48-59 months who had an episode of diarrhoea.

Table CH.6 provides statistics on drinking and feeding practices during diarrhoea. More than 9 in 10 (91.5 per cent) children aged under 5 with diarrhoea were given about the same as usual or less to drink and 7.4 per cent were given more. About 1.1 per cent was given nothing to drink. Similarly, 94.9 per cent of children were given the same as usual or less to eat, 3.6 per cent were given nothing and 1.6 per cent were given more than usual to eat during the episode of diarrhoea. The percentage of children who were given much less to drink ranged from 2.0 per cent in the North to 7.3 per cent in the Northeast. A total of 20.6 per cent of children in households headed by a non-Thai speaker and 15.1 per cent in the Northeast were given more than usual to drink, followed by 10.3 per cent of children in the second poorest households. Among children living in the North, 8.0 per cent were given nothing to eat during the episode of diarrhoea, followed by 6.5 per cent of children in the poorest households and those aged 0-11 months.

Table CH.6: Feeding practices during diarrhoea

Per cent 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, Thailand MICS, 2015-2016

	Drinking practices during diarrhoea					Eating practices during diarrhoea					Number of children age 0-59 months with diarrhoea in the last two weeks		
	Child was given to drink:					Child was given to eat:							
	Much less	Somewhat Less	About the same	More	Nothing	Total	Much less	Somewhat less	About the same	More		Nothing	Total
Total	4.5	41.9	45.1	7.4	1.1	100.0	3.4	46.6	44.9	1.6	3.6	100.0	598
Sex													
Male	4.0	51.1	36.9	7.1	0.9	100.0	3.1	54.7	38.8	1.2	2.2	100.0	315
Female	5.1	31.7	54.2	7.8	1.3	100.0	3.7	37.6	51.5	2.0	5.2	100.0	283
Region													
Bangkok	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	44
Central	3.6	26.4	61.7	6.3	2.1	100.0	3.5	25.3	69.0	0.1	2.1	100.0	122
North	2.0	45.9	46.6	4.4	1.0	100.0	0.8	49.6	40.7	0.9	8.0	100.0	137
Northeast	7.3	43.9	33.2	15.1	0.5	100.0	5.2	53.8	34.8	4.2	2.1	100.0	187
South	2.8	49.3	44.2	2.3	1.3	100.0	2.2	45.1	48.4	0.1	4.1	100.0	109
Area													
Urban	5.7	37.8	51.0	4.2	1.3	100.0	4.0	46.4	45.6	1.9	2.1	100.0	200
Rural	3.9	43.9	42.1	9.1	0.9	100.0	3.0	46.7	44.5	1.4	4.4	100.0	398
Age													
0-11 months	2.0	50.4	44.7	2.9	0.0	100.0	1.7	46.6	45.2	0.0	6.5	100.0	89
12-23 months	6.0	43.7	40.0	8.8	1.5	100.0	6.7	41.1	44.2	2.8	5.2	100.0	188
24-35 months	4.5	35.1	53.9	6.5	0.0	100.0	2.8	41.9	50.4	2.4	2.5	100.0	164
36-47 months	5.0	34.3	47.8	10.5	2.4	100.0	0.2	56.1	42.4	0.1	1.2	100.0	110
48-59 months	2.4	59.8	29.2	6.6	2.0	100.0	2.4	62.6	33.1	0.0	1.9	100.0	47
Mother's education													
None	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	21
Primary	6.3	42.0	43.0	7.7	1.1	100.0	4.5	40.1	53.3	0.0	2.0	100.0	222
Secondary	2.8	40.7	47.4	8.1	1.0	100.0	2.4	56.9	34.7	3.1	3.0	100.0	251
Higher	5.9	43.7	45.1	5.3	0.0	100.0	3.9	36.0	55.7	1.6	2.8	100.0	104
Missing/DK	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	1

Table CH.6: Feeding practices during diarrhoea (continued)

Per cent 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, Thailand MICS, 2015-2016

	Drinking practices during diarrhoea					Eating practices during diarrhoea					Number of children aged 0-59 months with diarrhoea in the last two weeks		
	Child was given to drink:					Child was given to eat:							
	Much less	Somewhat Less	About the same	More	Nothing	Total	Much less	Somewhat less	About The Same	More		Nothing	Total
Wealth index quintile													
Poorest	3.2	48.5	39.7	7.7	0.8	100.0	2.4	56.4	32.6	2.1	6.5	100.0	154
Second	6.9	31.5	49.8	10.3	1.4	100.0	4.2	35.1	54.2	2.8	3.6	100.0	165
Middle	5.6	43.2	38.2	10.1	2.8	100.0	7.0	40.8	47.9	0.1	4.2	100.0	93
Fourth	3.3	28.8	64.3	3.6	0.1	100.0	1.7	50.2	46.5	0.1	1.5	100.0	114
Richest	2.4	70.3	24.4	2.9	0.0	100.0	1.3	53.8	42.9	1.7	0.3	100.0	72
Language of household head													
Thai	5.0	42.0	45.8	6.0	1.2	100.0	3.7	45.9	45.1	1.2	4.0	100.0	541
Non-Thai	0.1	40.4	38.8	20.6	0.1	100.0	0.0	52.7	42.3	5.0	0.0	100.0	57

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

Table CH.7: Oral rehydration solutions, recommended homemade fluids				
Percentage of children age 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration salts (ORS), recommended homemade fluids, Thailand MICS, 2015-2016				
	Percentage of children with diarrhoea who received:			Number of children age 0-59 months with diarrhoea in the last two weeks
	Any ORS ¹	Recommended homemade fluid	ORS or health personnel recommended homemade fluid	
Total	72.5	58.5	74.1	598
Sex				
Male	70.7	54.6	71.2	315
Female	74.5	62.9	77.4	283
Region				
Bangkok	(*)	(*)	(*)	44
Central	62.9	60.2	63.7	122
North	69.6	57.6	70.7	137
Northeast	86.2	69.4	86.8	187
South	64.4	51.5	70.1	109
Area				
Urban	67.5	45.0	68.2	200
Rural	75.0	65.4	77.1	398
Age				
0-11 months	78.5	59.6	84.7	89
12-23 months	80.8	65.8	81.2	188
24-35 months	61.0	49.2	62.0	164
36-47 months	66.3	57.6	67.3	110
48-59 months	82.7	62.2	83.8	47
Mother's education				
None	(*)	(*)	(*)	21
Primary	71.5	55.9	72.3	222
Secondary	73.0	65.3	76.1	251
Higher	72.0	49.0	72.0	104
Missing/DK	(*)	(*)	(*)	1
Wealth index quintile				
Poorest	77.6	66.1	81.3	154
Second	62.3	47.4	63.2	165
Middle	74.8	65.4	75.6	93
Fourth	73.1	55.3	74.6	114
Richest	81.0	64.2	81.1	72
Language of household head				
Thai	73.0	58.5	74.7	541
Non-Thai	67.4	58.9	69.0	57

¹Country specific indicator 3.S11 - Diarrhoea treatment with oral rehydration salts (ORS)

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

Table CH.7 shows the percentage of children receiving ORS, and recommended homemade fluids during the episode of diarrhoea. Since children may have been given more than one type of liquid, the percentages do not necessarily add up to 100. About 74.1 per cent received ORS or health personnel recommended homemade fluid. A total of 72.5 per cent were given any type of ORS and 58.5 per cent received recommended homemade fluid. Girls with an episode of diarrhoea were more likely to receive ORS or health recommended homemade fluid (77.4 per cent) compared to boys (71.2 per cent). Children in the Central region (63.7 per cent), in the second poorest households (63.2 per cent) and living in households headed by a non-Thai speaker (69.0 per cent) were less likely to receive ORS or

health personnel recommended homemade fluid during an episode of diarrhoea compared to children with other background characteristics.

Figure CH.2: Children under 5 with diarrhoea who received ORS or recommended homemade liquids, Thailand MICS, 2015-2016

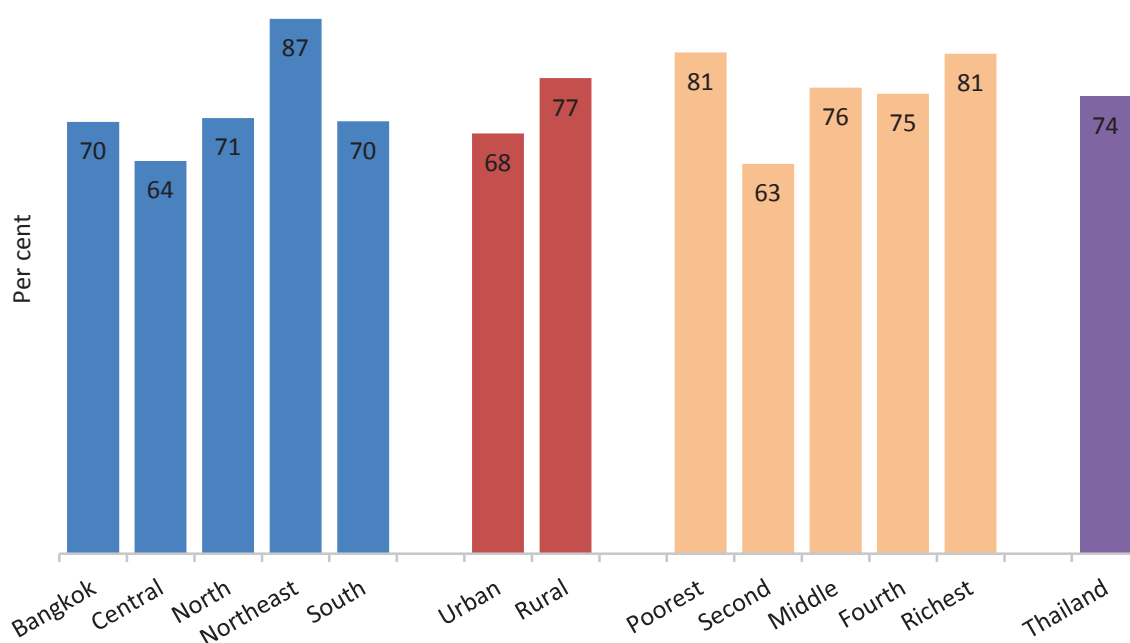


Table CH.8 provides the proportion of children aged 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and the percentage of children with diarrhoea who received other treatments. Overall, 73.9 per cent of children with diarrhoea received ORS or increased fluids and 75.6 per cent received ORT (ORS or recommended homemade fluids or increased fluids). Combining the information in Table CH.6 and Table CH.7 on oral rehydration therapy, it is observed that 70.5 per cent of children received ORT and, at the same time, feeding was continued, as is the recommendation. There are notable differences in the home management of diarrhoea by background characteristics. The percentages for ORT and continued feeding range from 60.7 per cent in the Central region to 84.0 per cent in the Northeast. Children aged 24-35 months are least likely (61.9 per cent) to receive ORT and continued feeding compared to children in other age groups. This practice is least common for children in the second poorest households (56.1 per cent) and most common for children in the richest households (82.3 per cent). Table CH.8 also shows the percentage of children having had diarrhoea in the two weeks preceding the survey who were given various forms of treatment, with 16.0 per cent of them not receiving any treatment or drug. The percentage of children who were not given a treatment or drug was highest in the Central region (29.8 per cent) compared to children with other background characteristics.

Table CH.8: Oral rehydration therapy with continued feeding and other treatments

Percentage of children age 0-59 months with diarrhoea in the last two weeks who were given oral rehydration therapy with continued feeding and percentage who were given other treatments, Thailand MICS, 2015-2016

	Children with diarrhoea who were given:											Not given any treatment or drug	Number of children age 0-59 months with diarrhoea in the last two weeks		
	ORS or increased fluids		ORT with continued feeding ¹		Pill or syrup			Injection			Other				
	ORS or increased fluids (ORS or recommended homemade fluids or increased fluids)	ORT with continued feeding ¹	Anti-biotic	Other motility	Unknown	Anti-biotic	Anti-motility	Unknown	Intra-venous	Home remedy, herbal medicine	Other				
Total	73.9	75.6	70.5	19.0	46.6	7.3	2.8	1.9	0.1	1.9	1.2	0.5	2.0	16.0	598
Sex															
Male	73.1	73.5	69.2	24.1	48.1	9.5	3.0	3.1	0.2	0.9	0.2	0.4	0.7	16.9	315
Female	74.9	77.9	71.8	13.3	45.0	4.9	2.6	0.5	0.0	3.0	2.4	0.7	3.4	15.0	283
Region															
Bangkok	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	44
Central	65.4	66.2	60.7	23.3	39.3	4.4	0.1	0.0	0.0	0.1	0.1	0.1	0.0	29.8	122
North	71.2	72.3	63.8	18.0	51.1	2.2	3.5	7.6	0.4	5.9	0.0	1.3	0.9	11.7	137
Northeast	87.3	87.9	84.0	17.4	54.7	17.0	4.2	0.2	0.0	1.5	1.5	0.0	5.4	6.1	187
South	65.3	71.1	67.4	23.1	40.4	3.4	3.4	0.4	0.0	0.4	4.2	1.2	0.5	17.1	109
Area															
Urban	68.7	69.4	65.6	12.0	39.1	4.3	2.6	0.5	0.2	0.8	1.8	0.9	0.6	20.2	200
Rural	76.5	78.7	72.9	22.6	50.4	8.9	2.9	2.6	0.0	2.5	1.0	0.4	2.7	13.9	398
Age															
0-11 months	80.9	87.0	81.2	28.2	72.5	12.1	0.0	0.3	0.0	0.0	0.0	0.0	0.7	5.8	89
12-23 months	81.1	81.6	72.7	16.4	41.4	7.2	4.6	5.5	0.3	3.8	1.9	0.8	2.0	10.4	188
24-35 months	63.9	64.9	61.9	14.4	46.7	6.9	1.7	0.0	0.0	2.6	0.4	0.0	1.6	21.6	164
36-47 months	67.1	68.1	66.8	19.8	40.8	6.0	1.6	0.3	0.0	0.1	2.5	1.6	1.2	28.6	110
48-59 months	82.7	83.8	79.6	26.2	32.1	3.2	7.5	0.6	0.0	0.0	0.6	0.0	7.3	9.0	47
Mother's education															
None	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	21
Primary	74.1	74.9	71.2	10.3	55.7	6.9	3.3	0.4	0.0	0.2	0.4	1.4	1.3	12.7	222
Secondary	73.2	76.4	72.6	30.6	42.5	7.0	1.2	4.1	0.0	3.3	0.2	0.0	3.1	18.2	251
Higher	74.0	74.0	68.5	13.5	36.6	9.2	5.6	0.0	0.5	2.4	5.9	0.1	1.1	18.2	104
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1

Table CH.8: Oral rehydration therapy with continued feeding and other treatments (continued)

Percentage of children age 0-59 months with diarrhoea in the last two weeks who were given oral rehydration therapy with continued feeding and percentage who were given other treatments, Thailand MICS, 2015-2016																	
	Children with diarrhoea who were given:																
	ORS or increased fluids		ORT (ORS or recommended homemade fluids or increased fluids)		ORT with continued feeding ¹		Pill or syrup			Injection			Home remedy, herbal medicine		Other	Not given any treatment or drug	Number of children age 0-59 months with diarrhoea in the last two weeks
	ORS or increased fluids	ORT (ORS or recommended homemade fluids or increased fluids)	ORT with continued feeding ¹	Anti-biotic motility	Other motility	Unknown	Anti-biotic motility	Anti-biotic motility	Unknown	Intra-venous	Home remedy, herbal medicine	Other	Not given any treatment or drug	Number of children age 0-59 months with diarrhoea in the last two weeks			
Wealth index quintile																	
Poorest	79.4	83.1	76.7	18.3	37.2	10.7	3.4	0.0	0.0	5.4	0.5	0.8	3.8	9.7	154		
Second	62.8	63.7	56.1	9.8	49.4	13.5	2.0	0.5	0.0	0.0	1.7	1.1	1.9	23.3	165		
Middle	77.8	78.6	73.5	23.3	48.6	4.8	5.4	0.6	0.0	3.1	4.1	0.2	2.0	18.1	93		
Fourth	73.4	74.8	72.9	17.7	44.9	0.4	2.5	0.1	0.0	0.3	0.1	0.0	0.5	18.7	114		
Richest	83.7	83.8	82.3	38.0	60.4	0.3	0.6	13.3	0.7	0.0	0.0	0.0	0.7	5.8	72		
Language of household head																	
Thai	74.6	76.2	70.6	19.7	48.4	7.9	2.9	2.1	0.1	1.7	1.4	0.6	2.2	15.5	541		
Non-Thai	67.7	69.3	69.3	12.5	29.6	1.7	1.5	0.0	0.0	3.8	0.0	0.0	0.0	20.5	57		

¹ MICS indicator 3.12 - Diarrhoea treatment with oral rehydration therapy (ORT), and continued feeding

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

Figure CH.3: Children under 5 with diarrhoea receiving oral rehydration therapy (ORT) and continued feeding, Thailand MICS, 2015-2016

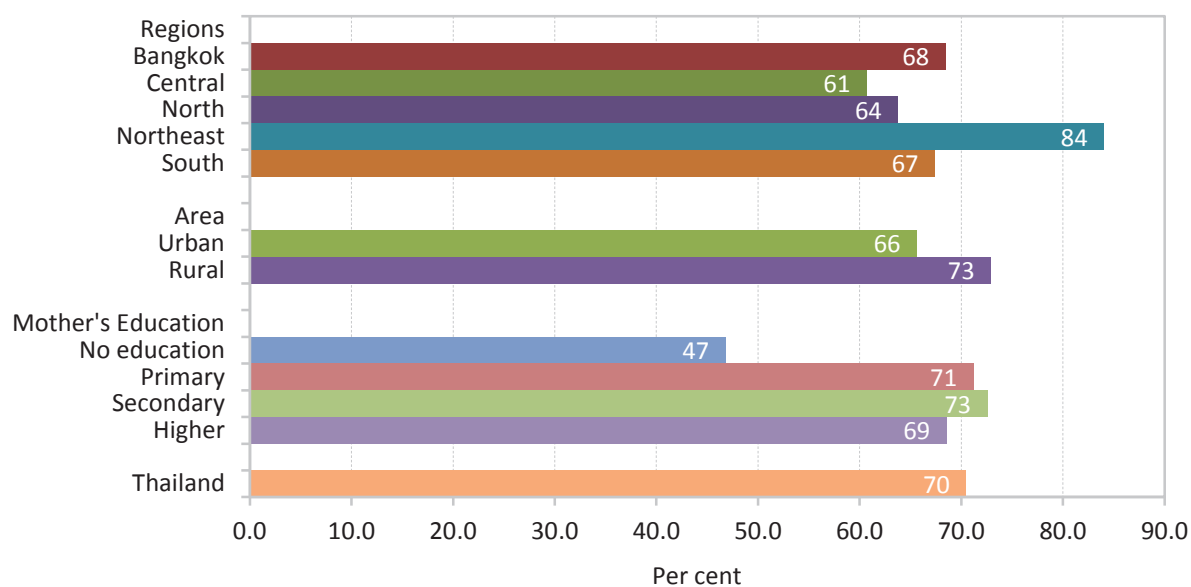


Table CH.9 provides information on the source of ORS for children who benefitted from these treatments. The main source of ORS is the public sector (55.4 per cent). For almost all cases (98.1 per cent), the source of ORS was a health facility or provider. In total, 70.8 per cent of children in the Central region used ORS from a public health facility while in the South almost half (47.8 per cent) relied on ORS from the private sector. The mother's education shows an inverse relationship with the use of ORS from a public facility, with 67.3 per cent of children born to primary educated mothers having ORS from a public health facility compared to 35.5 per cent born to higher educated mothers. In contrast, the use of ORS from a private facility tends to increase with the mother's education.

Table CH.9: Source of ORS								
Percentage of children age 0-59 months with diarrhoea in the last two weeks who were given ORS by the source of ORS, Thailand MICS, 2015-2016								
	Percentage of children who were given ORS as treatment for diarrhoea	Number of children age 0-59 months with diarrhoea in the last two weeks	Percentage of children for whom the source of ORS was:					Number of children age 0-59 months who were given ORS as treatment for diarrhoea in the last two weeks
			Health facilities or providers			Other source	A health facility or provider ^b	
			Public	Private	Community health provider ^a			
Total	72.5	598	55.4	42.7	1.6	1.9	98.1	434
Sex								
Male	70.7	315	54.6	43.4	0.4	2.0	98.0	223
Female	74.5	283	56.4	41.9	2.9	1.7	98.3	211
Region								
Bangkok	(*)	44	(*)	(*)	(*)	(*)	(*)	30
Central	62.9	122	70.8	25.9	0.0	3.3	96.7	77
North	69.6	137	50.1	48.8	1.9	1.1	98.9	95
Northeast	86.2	187	61.2	36.6	2.7	2.2	97.8	161
South	64.4	109	50.7	47.8	0.4	1.5	98.5	70
Area								
Urban	67.5	200	49.4	49.6	1.7	1.1	98.9	135
Rural	75.0	398	58.2	39.5	1.6	2.3	97.7	298
Age								
0-11 months	78.5	89	(48.2)	(51.7)	(0.0)	(0.1)	(99.9)	70
12-23 months	80.8	188	60.3	37.4	1.7	2.3	97.7	152
24-35 months	61.0	164	52.0	46.5	2.1	1.5	98.5	100
36-47 months	66.3	110	50.7	44.9	3.1	4.4	95.6	73
48-59 months	82.7	47	67.1	32.8	0.2	0.1	99.9	39
Mother's education								
None	(*)	21	(*)	(*)	(*)	(*)	(*)	17
Primary	71.5	222	67.3	31.2	0.4	1.5	98.5	159
Secondary	73.0	251	54.1	42.9	2.5	3.1	96.9	183
Higher	72.0	104	35.5	64.2	0.0	0.3	99.7	75
Missing/DK	(*)	1	(*)	(*)	(*)	(*)	(*)	1
Wealth index quintile								
Poorest	77.6	154	60.5	39.0	3.5	0.5	99.5	119
Second	62.3	165	69.5	30.5	1.9	0.0	100.0	103
Middle	74.8	93	72.3	21.4	1.3	6.3	93.7	70
Fourth	73.1	114	36.5	59.8	0.0	3.7	96.3	83
Richest	81.0	72	(27.4)	(72.4)	(0.0)	(0.2)	(99.8)	59
Language of household head								
Thai	73.0	541	55.6	43.1	1.3	1.3	98.7	395
Non-Thai	67.4	57	53.9	37.8	4.7	8.2	91.8	38

^a Community health provider includes both public (Community health worker and Mobile/Outreach clinic) and private (Mobile clinic) health facilities

^b Includes all public and private health facilities and providers

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

Acute Respiratory Infections

Symptoms of ARI were recorded during the Thailand MICS to capture the incidence of pneumonia, the leading cause of death in children under 5 years of age. Once diagnosed, pneumonia can be treated effectively with antibiotics. Studies have shown a limitation in the survey approach of measuring pneumonia because many of the suspected cases identified through surveys are in fact not true pneumonia.²⁴ While this limitation does not affect the level and patterns of care-seeking for suspected cases of pneumonia, it limits the validity of the level of treatment of pneumonia with antibiotics as reported through household surveys. The treatment indicator described in this report must therefore be considered with caution, keeping in mind that the true level is likely to be higher.

Table CH.10 presents the percentage of children with symptoms of ARI in the two weeks preceding the survey for whom care was sought, by source of care, and the percentage who received antibiotics. Due to low prevalence of symptoms for ARI in Thailand, overall sample for table CH.10 is very small and interpretation of findings should be dealt with caution. Overall, 79.5 per cent of children aged 0-59 months with symptoms of ARI were taken to a qualified health provider. Girls are more likely (84.2 per cent) to be taken to a health facility for treatment or care for ARI symptoms compared to boys (75.7 per cent). Girls are also more likely to be taken to a private health facility or provider. For 52.4 per cent of girls with ARI symptoms, health care was sought from a private health facility or provider and 41.5 per cent were taken to a public health facility or provider for treatment or advice. The table also shows that care-seeking for children with ARI symptoms is higher in urban areas at 85.0 per cent, with the majority (56.1 per cent) seeking treatment or advice from public sector facilities.

Table CH.10 also presents the use of antibiotics for the treatment of children under 5 with symptoms of ARI by sex, age, region, area, mothers' education and socioeconomic factors. In Thailand, 70.0 per cent of children under 5 with symptoms of ARI received antibiotics during the two weeks prior to the survey. The percentage was considerably higher in urban areas (74.7 per cent) than in rural areas (67.3 per cent). The table also shows that antibiotic treatment for ARI symptoms was lower for girls (63.1 per cent) than for boys (75.5 per cent).

Table CH.10 further shows the point of treatment among children with symptoms of ARI who were treated with antibiotics. The treatment was received mostly from private health facilities (52.2 per cent), with 57.9 per cent of boys receiving antibiotics from a private health facility or provider. However, 53.1 per cent of girls received antibiotics from a public sector facility. In urban areas, 6 out of 10 (57.0 per cent) children with ARI symptoms received antibiotics from a public source and a similar proportion (59.7 per cent) in rural areas received antibiotics from the private sector.

²⁴ Campbell, H., et al., 'Measuring Coverage in MNCH: Challenges in Monitoring the Proportion of Young Children with Pneumonia Who Receive Antibiotic Treatment, in *PLoS Med*, vol. 10, no. 5, 2013: e1001421. doi:10.1371/journal.pmed.1001421

Table CH.10: Care-seeking for and antibiotic treatment of symptoms of acute respiratory infection (ARI)

Percentage of children age 0-59 months with symptoms of ARI in the last two weeks for whom advice or treatment was sought, by source of advice or treatment, and percentage of children with symptoms who were given antibiotics, Thailand MICS, 2015-2016														
	Percentage of children with symptoms of ARI for whom:				Percentage of children with symptoms of ARI in the last two weeks who were given antibiotics ²	Number of children age 0-59 months with symptoms of ARI in the last two weeks	Percentage of children with symptoms of ARI for whom the source of antibiotics was:				Number of children with symptoms of ARI in the last two weeks who were given antibiotics			
	Advice or treatment was sought from:		Health facilities or providers				Public	Private	Community health provider ^a	Other source		A health facility or provider ^c		
	No advice or treatment sought	A health facility or provider ^{a,b}	Other source	A health facility or provider ^a										
Total	43.3	43.1	0.7	0.1	79.5	20.0	70.0	174	46.5	52.2	0.0	1.3	98.7	122
Sex														
Male	44.8	35.7	1.2	0.0	75.7	23.5	75.5	97	42.1	57.9	0.0	0.0	100.0	73
Female	41.5	52.4	0.0	0.2	84.2	15.5	63.1	77	53.1	43.5	0.0	3.4	96.6	49
Region														
Bangkok	(*)	(*)	(*)	(*)	(*)	(*)	(*)	15	(*)	(*)	(*)	(*)	(*)	10
Central	(39.5)	(33.7)	(0.0)	(0.2)	(72.6)	(27.0)	54.3	67	(40.3)	(59.7)	(0.0)	(0.0)	(100.0)	36
North	(*)	(*)	(*)	(*)	(*)	(*)	94.6	24	(*)	(*)	(*)	(*)	(*)	23
Northeast	(47.5)	(28.6)	(0.0)	(0.0)	(71.5)	(27.6)	(78.6)	48	(63.7)	(33.1)	(0.0)	(3.2)	(96.8)	38
South	(46.0)	(58.8)	(5.8)	(0.0)	(87.2)	(11.2)	(75.2)	20	(42.0)	(55.1)	(0.0)	(2.9)	(97.1)	15
Area														
Urban	56.1	41.6	1.8	0.2	85.0	13.5	74.7	64	57.0	40.5	0.0	2.5	97.5	48
Rural	35.8	43.9	0.0	0.0	76.2	23.7	67.3	110	39.7	59.7	0.0	0.6	99.4	74
Age														
0-11 months	(*)	(*)	(*)	(*)	(*)	(*)	(*)	17	(*)	(*)	(*)	(*)	(*)	11
12-23 months	(56.4)	(26.5)	(3.5)	(0.5)	(70.6)	(28.3)	(67.1)	34	(56.9)	(43.1)	(0.0)	(0.0)	(100.0)	23
24-35 months	(20.1)	(78.8)	(0.0)	(0.0)	(97.8)	(2.2)	(45.5)	41	(34.7)	(65.3)	(0.0)	(0.0)	(100.0)	19
36-47 months	(61.0)	(37.3)	(0.0)	(0.0)	(86.2)	(13.1)	(83.2)	58	(62.0)	(37.1)	(0.0)	(0.9)	(99.1)	48
48-59 months	(35.3)	(10.2)	(0.0)	(0.0)	(44.9)	(55.1)	(87.4)	24	(28.0)	(66.4)	(0.0)	(5.6)	(94.4)	21
Mother's education														
None	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2	(*)	(*)	(*)	(*)	(*)	2
Primary	(53.1)	(15.7)	(0.0)	(0.0)	(65.9)	(33.4)	(91.8)	55	(53.5)	(44.1)	(0.0)	(2.4)	(97.6)	51
Secondary	37.9	55.5	1.4	0.2	82.0	17.4	50.5	82	(44.8)	(55.2)	(0.0)	(0.0)	(100.0)	41
Higher	(37.8)	(58.7)	(0.0)	(0.0)	(93.6)	(6.0)	(79.9)	35	(33.2)	(65.3)	(0.0)	(1.5)	(98.5)	28

Table CH.10: Care-seeking for and antibiotic treatment of symptoms of acute respiratory infection (ARI) (continued)

		Percentage of children age 0-59 months with symptoms of ARI in the last two weeks for whom advice or treatment was sought, by source of advice or treatment, and percentage of children with symptoms who were given antibiotics, Thailand MICS, 2015-2016											
		Percentage of children with symptoms of ARI for whom:					Percentage of children with symptoms of ARI in the last two weeks who were given antibiotics ²		Percentage of children with symptoms of ARI for whom the source of antibiotics was:			Number of children with symptoms of ARI in the last two weeks who were given antibiotics	
		Advice or treatment was sought from:		No advice or treatment sought		Number of children age 0-59 months with symptoms of ARI in the last two weeks	Health facilities or providers		Other source		A health facility or provider ^c		
		Public	Private	Community health provider ^a	Other source		A health facility or provider ^{1,b}		Public	Private	Community health provider ^a	Other source	A health facility or provider ^c
Wealth index quintile													
Poorest	(49.6)	(13.7)	(0.0)	(0.4)	(60.9)	(37.6)	(61.9)	(*)	(*)	(*)	(*)	(*)	24
Second	(60.8)	(31.8)	(0.0)	(0.0)	(85.8)	(14.2)	(92.0)	(55.9)	(40.5)	(0.0)	(3.6)	(96.4)	33
Middle	(39.9)	(59.4)	(0.0)	(0.0)	(98.5)	(1.2)	(87.7)	(*)	(*)	(*)	(*)	(*)	27
Fourth	(31.9)	(77.8)	(2.4)	(0.0)	(94.1)	(5.1)	(49.6)	(38.2)	(61.8)	(0.0)	(0.0)	(100.0)	24
Richest	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	14
Language of household head													
Thai	43.9	44.4	0.7	0.1	82.1	17.3	71.0	44.5	54.1	0.0	1.4	98.6	114
Non-Thai	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	8
¹ MICS indicator 3.13 - Care-seeking for children with acute respiratory infection (ARI) symptoms													
² MICS indicator 3.14 - Antibiotic treatment for children with ARI symptoms													
^a Community health providers includes both public (Community health worker and Mobile/Outreach clinic) and private (Mobile clinic) health facilities													
^b Includes all public and private health facilities and providers, but excludes private pharmacy													
^c Includes all public and private health facilities and providers													
() Figures that are based on 25-49 unweighted cases (*) Figures that are based on fewer than 25 unweighted cases													

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 that 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 and cataracts, and may contribute to the 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, as shown in Table CH.11.

Table CH.11: Solid fuel use									
Per cent distribution of household members according to type of cooking fuel mainly used by the household, and percentage of household members living in households using solid fuels for cooking, Thailand MICS, 2015-2016									
	Percentage of household members in households mainly using:							Solid fuels for cooking ¹	Number of household members
	Electricity	Liquefied Petroleum Gas (LPG)	Solid fuels		Other fuel	No food cooked in the household	Total		
			Char-coal	Wood					
Total	3.4	73.3	12.1	9.1	0.0	2.1	100.0	21.1	92,073
Region									
Bangkok	6.0	87.5	0.3	0.2	0.0	5.9	100.0	0.5	12,517
Central	3.2	90.0	4.2	1.0	0.0	1.7	100.0	5.2	27,739
North	2.6	57.9	18.9	18.8	0.0	1.7	100.0	37.7	15,301
Northeast	2.3	47.7	28.0	20.7	0.0	1.3	100.0	48.7	24,242
South	4.6	90.6	1.8	1.5	0.0	1.5	100.0	3.3	12,273
Area									
Urban	4.1	80.4	6.6	5.4	0.0	3.4	100.0	12.0	42,713
Rural	2.8	67.1	16.8	12.3	0.0	1.0	100.0	29.0	49,360
Education of household head									
None	3.2	65.0	11.0	19.0	0.0	1.8	100.0	30.0	5,667
Primary	3.0	68.3	16.0	11.6	0.0	1.1	100.0	27.6	55,202
Secondary	4.0	81.2	7.5	3.7	0.0	3.6	100.0	11.2	19,728
Higher	5.0	87.6	1.4	1.5	0.0	4.6	100.0	2.8	11,414
Missing/DK	2.1	61.3	25.0	10.5	0.0	1.0	100.0	35.5	62
Wealth index quintile									
Poorest	3.7	25.7	37.5	30.9	0.0	2.3	100.0	68.4	18,415
Second	4.5	67.1	15.3	10.8	0.0	2.3	100.0	26.2	18,413
Middle	3.8	84.4	5.8	3.2	0.0	2.8	100.0	9.0	18,416
Fourth	3.2	92.5	1.5	0.5	0.0	2.3	100.0	2.0	18,413
Richest	2.0	96.7	0.2	0.0	0.0	1.1	100.0	0.2	18,415
Language of household head									
Thai	3.1	74.2	12.0	8.5	0.0	2.2	100.0	20.5	86,139
Non-Thai	8.3	60.3	12.9	16.9	0.0	1.6	100.0	29.8	5,934
¹ MICS indicator 3.15 - Use of solid fuels for cooking									

Overall, more than one fifth (21.1 per cent) of the household population in Thailand uses solid fuels for cooking, consisting mainly of charcoal (12.1 per cent). Use of solid fuels for cooking is very low in urban

areas (12.0 per cent), but very high in rural areas, where they are used by almost one third of household members (29.0 per cent). Regional differentials are very prominent. Almost half the household population (48.7 per cent) in the Northeast uses solid fuel for cooking followed by 37.7 per cent in the North compared to almost none (0.5 per cent) in Bangkok. Household wealth and the educational level of the household head are also important. The findings show that use of solid fuel ranges from 68.4 per cent in the poorest households to 0.2 per cent in the richest. The educational level of the household head is also inversely related to the percentage of the household population using solid fuel for cooking. It is also important to note that 5.9 per cent of the household population in Bangkok does not cook food at home, which is the highest percentage of all other background characteristics for this indicator.

Table CH.12: Solid fuel use by place of cooking							
Per cent distribution of household members in households using solid fuels by place of cooking, Thailand MICS, 2015-2016							
	In the house		Place of cooking:			Total	Number of household members in households using solid fuels for cooking
	In a separate room used as kitchen	Elsewhere in the house	In a separate building	Outdoors	Other place		
Total	41.0	20.0	30.9	8.1	0.0	100.0	19,468
Region							
Bangkok	38.3	6.4	9.0	46.3	0.0	100.0	64
Central	39.2	24.8	28.5	7.6	0.0	100.0	1,429
North	49.6	19.3	23.9	7.1	0.0	100.0	5,773
Northeast	37.0	19.7	35.2	8.0	0.0	100.0	11,801
South	38.7	24.6	15.3	20.9	0.5	100.0	401
Area							
Urban	40.1	19.3	32.0	8.5	0.0	100.0	5,130
Rural	41.3	20.2	30.5	8.0	0.0	100.0	14,337
Education of household head							
None	33.8	29.7	30.2	6.3	0.0	100.0	1,698
Primary	42.2	19.1	30.4	8.4	0.0	100.0	15,224
Secondary	37.0	20.6	34.3	8.0	0.0	100.0	2,203
Higher	48.9	8.0	36.0	7.0	0.0	100.0	321
Missing/DK	33.2	43.1	23.7	0.0	0.0	100.0	22
Wealth index quintile							
Poorest	39.9	22.3	30.0	7.8	0.0	100.0	12,590
Second	44.2	15.2	32.7	7.8	0.0	100.0	4,817
Middle	36.5	18.9	33.6	11.0	0.0	100.0	1,661
Fourth	50.8	11.2	26.3	11.7	0.0	100.0	367
Richest	63.9	2.0	34.0	0.0	0.0	100.0	33
Language of household head							
Thai	41.2	19.2	31.1	8.5	0.0	100.0	17,699
Non-Thai	38.1	28.1	28.8	4.9	0.0	100.0	1,769

Solid fuel use by place of cooking is depicted in Table CH.12. 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 Thailand MICS, 41.0 per cent of the population living in households using solid fuels for cooking, cooks food in a separate room that is used as a kitchen. The percentage who cook food within the dwelling unit is highest in the Central region (24.8 per cent) and South (24.6 per cent). No major urban-rural differentials are seen. It is interesting to note that almost half the household population (46.3 per cent) in Bangkok using solid fuel for cooking cooks food outdoors.

Table CH.13: Care-seeking during fever							
Percentage of children age 0-59 months with fever in the last two weeks for whom advice or treatment was sought, by source of advice or treatment, Thailand MICS, 2015-2016							
	Percentage of children for whom:						Number of children with fever in last two weeks
	Advice or treatment was sought from:					No advice or treatment sought	
	Health facilities or providers			Other Source	A health facility or provider ^{1, b}		
Public	Private	Community Health provider ^a					
Total	46.2	33.1	0.6	1.5	75.6	23.5	2,321
Sex							
Male	45.2	31.9	0.4	0.9	73.7	25.9	1,192
Female	47.3	34.3	0.8	2.1	77.6	21.0	1,129
Region							
Bangkok	24.4	50.2	0.0	5.7	70.6	23.7	213
Central	43.8	29.0	0.7	0.1	69.5	30.5	486
North	44.6	34.8	0.2	2.5	78.3	21.3	426
Northeast	56.5	30.5	0.4	1.0	81.9	17.5	748
South	43.7	32.0	1.6	0.8	71.7	27.9	448
Area							
Urban	34.9	35.9	0.4	2.1	68.0	30.4	854
Rural	52.8	31.5	0.8	1.1	80.1	19.5	1,466
Age							
0-11 months	33.9	39.1	0.5	4.3	72.9	22.9	285
12-23 months	46.7	33.9	0.4	1.0	76.1	23.6	553
24-35 months	40.1	39.5	0.7	0.3	74.6	25.2	560
36-47 months	51.9	31.3	0.6	0.4	78.4	21.5	510
48-59 months	55.4	21.4	0.8	3.3	75.0	24.0	414
Mother's education							
None	35.2	18.9	0.6	8.1	57.8	42.2	67
Primary	54.5	21.9	0.3	2.7	74.7	23.2	739
Secondary	45.4	36.7	0.7	0.6	77.4	22.4	1,013
Higher	37.2	44.2	0.8	0.7	75.8	23.6	501
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	1
Wealth index quintile							
Poorest	58.4	23.0	0.3	2.0	80.6	18.9	587
Second	57.3	27.3	0.5	0.1	79.6	20.3	503
Middle	43.7	32.1	0.8	0.5	71.8	27.7	424
Fourth	38.2	39.4	0.8	3.2	72.8	24.7	540
Richest	19.1	54.9	0.7	1.1	69.3	30.3	266
Language of household head							
Thai	44.9	33.8	0.6	1.4	75.5	23.7	2,141
Non-Thai	61.7	25.1	0.9	1.9	77.9	21.3	180

¹ MICS indicator 3.20 - Care-seeking for fever

^a Community health providers include both public (Community health worker and Mobile/Outreach clinic) and private (Mobile clinic) health facilities

^b Includes all public and private health facilities and providers as well as shops

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

Table CH.13 provides information on care-seeking behaviour during an episode of fever in the past two weeks. As shown in Table CH.13, advice was sought from a health facility or a qualified healthcare provider for 75.6 per cent of children with fever; these services were provided mainly by the public sector (46.2 per cent). However, no advice or treatment was sought in 23.5 per cent of the cases. Children born to mothers with no education are more likely (42.2 per cent) to receive no treatment or advice for fever. The mother's educational level and household wealth status show a positive correlation with care-seeking from a private health facility for children with fever.

Table CH.14: Treatment of children with fever								
Percentage of children age 0-59 months who had a fever in the last two weeks, by type of medicine given for the illness, Thailand MICS, 2015-2016								
	Children with a fever in the last two weeks who were given:							Number of children with fever in last two weeks
	Antibiotic pill or syrup	Antibiotic Injection	Paracetamol	Aspirin	Ibuprofen	Other	Missing/DK	
Total	57.5	1.1	52.5	2.5	3.8	7.4	2.7	2,321
Sex								
Male	57.8	0.8	52.1	2.6	3.5	8.4	1.8	1,192
Female	57.2	1.5	52.9	2.4	4.2	6.4	3.6	1,129
Region								
Bangkok	62.4	0.5	42.3	1.0	0.0	5.3	5.7	213
Central	54.1	0.1	45.6	0.8	1.4	7.7	4.6	486
North	66.8	1.1	46.8	2.3	4.7	4.0	2.8	426
Northeast	54.2	2.5	64.3	3.9	7.8	12.4	1.2	748
South	55.5	0.2	50.7	2.8	0.7	3.1	1.6	448
Area								
Urban	56.7	1.0	49.9	2.3	1.0	7.8	2.0	854
Rural	57.9	1.2	54.0	2.6	5.5	7.2	3.1	1,466
Age								
0-11 months	47.6	0.1	39.7	1.8	3.4	8.9	3.3	285
12-23 months	60.7	1.4	53.9	1.7	5.1	5.2	2.9	553
24-35 months	55.5	1.5	50.5	4.3	4.0	7.2	4.5	560
36-47 months	62.9	1.4	57.4	2.3	1.9	7.8	0.8	510
48-59 months	56.0	0.4	56.1	1.9	4.5	9.3	1.9	414
Mother's education								
None	42.9	0.8	49.3	2.1	0.0	3.4	6.5	67
Primary	54.5	1.9	58.1	1.4	4.2	7.7	2.3	739
Secondary	59.8	0.5	49.1	3.4	4.7	6.6	3.6	1,013
Higher	59.1	1.3	51.5	2.2	2.1	9.3	0.8	501
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Wealth index quintile								
Poorest	53.3	0.4	57.9	1.8	5.2	9.6	3.1	587
Second	55.8	1.5	59.6	4.4	8.3	9.3	0.7	503
Middle	62.0	2.1	49.8	2.4	1.1	10.6	3.6	424
Fourth	59.8	0.6	42.1	1.7	0.9	3.4	3.3	540
Richest	58.1	1.5	52.5	2.3	2.6	2.3	2.9	266
Language of household head								
Thai	57.3	1.0	51.9	1.9	3.1	7.7	2.9	2,141
Non-Thai	59.8	2.5	59.8	10.1	11.8	4.0	0.8	180

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

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, 57.5 per cent of children with fever in the last two weeks were treated with an antibiotic pill or syrup and 52.5 per cent received paracetamol. Ibuprofen was given to 3.8 per cent and 2.5 per cent received aspirin. Use of antibiotics as a medicine for children with fever ranges from 54.1 per cent in the Central region to 66.8 per cent in the North. Use of paracetamol for treatment of fever in children was highest in the Northeast (64.3 per cent) and lowest in Bangkok (42.3 per cent).

VI. WATER AND SANITATION



unicef 

VI. Water and Sanitation

Safe drinking water is a basic necessity for good health. Unsafe drinking water can be a significant determinant of diseases such as cholera, typhoid, and schistosomiasis. Drinking water can also be contaminated with chemical and physical contaminants with harmful effects on human health. In addition to preventing disease, improved 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.²⁵

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio and is an important determinant for stunting. Improved sanitation can reduce diarrhoeal disease by more than a third,²⁶ and can significantly lessen the adverse health impacts of other disorders responsible for death and disease among millions of children in developing countries.

The MDG target (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.

For more details on water and sanitation and to access some reference documents, please visit data.unicef.org²⁷ or the website of the WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation.²⁸

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 includes those using any of the following types of supply: piped water (into dwelling, compound, yard or plot, to neighbour, public tap/standpipe), tube well/borehole, protected well, protected spring and rainwater collection. Bottled water is considered an improved water source only if the household is using an improved water source for handwashing and cooking.

Overall, 98.0 per cent of the population uses an improved source of drinking water – 99.2 per cent in urban areas and 97.0 per cent in rural areas. Use of improved sources of drinking water in households headed by a non-Thai speaker (92.9 per cent) and in the South region (94.4 per cent) is lower than for other background characteristics.

²⁵ WHO/UNICEF, *Progress on Drinking water and Sanitation: 2012 update*.

²⁶ Cairncross, Sandy et al., 'Water, sanitation and hygiene for the prevention of diarrhoea', in *International Journal of Epidemiology*, vol. 39, 2010, pp. i193–i205.

²⁷ <http://data.unicef.org/water-sanitation>

²⁸ <http://www.wssinfo.org>

Table WS.1: Use of improved water sources

Per cent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Thailand MICS, 2015-2016

	Main source of drinking water												Total	Percentage using improved sources of drinking Water ¹	Number of households members								
	Improved sources						Unimproved sources																
	Piped water		Tube-well/bore-hole		Pro-protected well		Pro-protected spring		Rain-water collection		Bottled water ^a					Unprotected well		Unprotected truck		Surface water		Bottled water ^a	
Into dwelling	Into yard/plot	To neighbour	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe	Public tap/stand-pipe
Total	26.7	1.5	0.1	0.1	0.1	1.1	2.5	0.0	15.3	50.7	0.6	0.3	0.3	0.8	0.1	100.0	98.0	92,073					
Region																							
Bangkok	68.2	1.9	0.2	0.0	0.0	0.0	0.0	0.0	0.2	29.5	0.0	0.0	0.0	0.0	0.0	100.0	100.0	12,517					
Central	26.2	0.9	0.0	0.1	0.3	0.3	2.8	0.0	12.2	56.0	0.4	0.2	0.2	0.7	0.0	100.0	98.5	27,739					
North	29.3	1.9	0.1	0.3	0.8	0.8	3.7	0.0	11.4	51.3	0.1	0.2	0.2	0.6	0.1	100.0	98.8	15,301					
Northeast	11.0	0.8	0.1	0.1	1.4	1.4	0.6	0.0	33.3	50.5	0.5	0.7	0.7	0.2	0.1	100.0	97.7	24,242					
South	13.3	3.3	0.2	0.1	3.9	3.9	6.5	0.0	7.5	59.7	2.4	0.0	0.1	3.1	0.0	100.0	94.4	12,273					
Area																							
Urban	36.3	1.0	0.1	0.1	0.7	0.7	1.0	0.0	5.9	54.0	0.1	0.0	0.2	0.4	0.0	100.0	99.2	42,713					
Rural	18.4	1.8	0.1	0.1	1.5	1.5	3.7	0.0	23.5	47.7	1.0	0.5	0.3	1.1	0.1	100.0	97.0	49,360					
Education of household head																							
None	27.1	3.6	0.3	0.5	1.6	1.6	4.2	0.0	12.3	45.5	2.0	0.4	1.1	1.2	0.0	100.0	95.2	5,667					
Primary	23.0	1.3	0.0	0.2	1.2	1.2	2.7	0.0	20.8	48.8	0.6	0.3	0.3	0.8	0.0	100.0	97.9	55,202					
Secondary	28.3	1.5	0.1	0.0	1.0	1.0	2.2	0.0	8.7	56.3	0.5	0.3	0.1	1.0	0.1	100.0	98.1	19,728					
Higher	42.1	1.4	0.1	0.0	0.4	0.4	1.2	0.0	2.1	52.5	0.1	0.0	0.0	0.2	0.0	100.0	99.8	11,414					
DK/Missing	19.2	0.3	0.0	0.6	0.0	0.0	0.7	0.0	7.6	57.1	1.3	9.3	0.0	3.8	0.0	100.0	85.6	62					
Wealth index quintile																							
Poorest	15.0	2.1	0.2	0.3	1.7	1.7	3.3	0.0	40.0	33.1	1.3	0.9	1.1	0.8	0.1	100.0	95.7	18,415					
Second	18.6	1.9	0.1	0.3	1.3	1.3	3.1	0.0	19.9	52.9	0.7	0.3	0.1	0.9	0.1	100.0	97.9	18,415					
Middle	20.2	1.1	0.1	0.1	1.3	1.3	3.8	0.0	10.1	61.2	0.6	0.1	0.0	1.2	0.0	100.0	98.0	18,416					
Fourth	28.3	1.1	0.0	0.0	1.0	1.0	1.8	0.0	5.9	60.3	0.3	0.1	0.0	1.0	0.0	100.0	98.6	18,412					
Richest	51.6	1.1	0.0	0.0	0.2	0.2	0.5	0.0	0.7	45.8	0.0	0.0	0.0	0.1	0.0	100.0	99.9	18,415					
Language of household head																							
Thai	27.3	1.2	0.1	0.1	1.0	1.0	2.2	0.0	15.3	51.2	0.4	0.2	0.2	0.7	0.1	100.0	98.4	86,139					
Non-Thai	18.2	5.1	0.4	0.0	2.9	2.9	6.8	0.0	16.2	43.1	3.3	0.9	0.6	2.3	0.0	100.0	92.9	5,934					

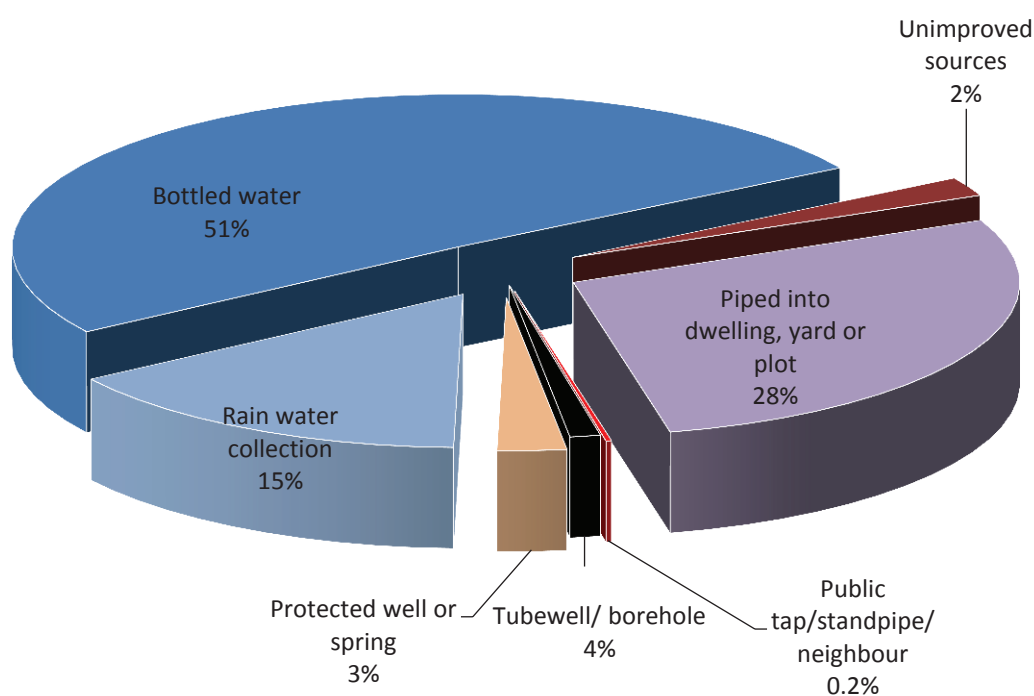
¹ MICS indicator 4.1; MDG indicator 7.8 - Use of improved drinking water sources

^a 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 handwashing.

^b Including unprotected spring and cart with tank/ drum

The source of drinking water varies strongly by region (Table WS.1). In Bangkok, 70.1 per cent of the population uses drinking water that is piped into their dwelling or into their yard or plot. In the Northeast and South, 12.0 per cent and 16.9 per cent, respectively, use piped water. In the South, Central, North and Northeast regions, more than half the population uses bottled water and has an improved source for other domestic purposes. In the South, 62.8 per cent of the population uses bottled water, in the Central region 56.7 per cent, in the North 51.9 per cent and in the Northeast 50.7 per cent. Rain-water collection is more common in the Northeast (33.3 per cent) compared to other regions.

Figure WS.1: Per cent distribution of household members by source of drinking water, Thailand MICS, 2015-2016



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

Almost two thirds (65.4 per cent) of the population is not using any method to treat drinking water. Use of a water filter is the most common method (22.1 per cent) used for water treatment followed by boiling (10.8 per cent) and letting water stand and settle (4.7 per cent). Adding bleach or chlorine is an uncommon method (0.1 per cent) of treating drinking water.

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, Thailand MICS, 2015-2016

	Water treatment method used in the household										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
	None	Boil	Add bleach/chlorine	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle	Other	Number of household members				
Total	65.4	10.8	0.1	2.6	22.1	1.0	4.7	0.0	0.0	92,073	21.6	1,828	
Region													
Bangkok	32.5	17.9	0.2	1.4	62.3	0.1	0.4	0.0	0.0	12,517	(*)	4	
Central	63.3	14.4	0.0	1.2	25.5	0.6	3.3	0.0	0.0	27,739	21.5	406	
North	67.9	3.3	0.0	2.4	15.1	3.4	11.6	0.0	0.0	15,301	7.6	180	
Northeast	79.9	5.6	0.0	4.5	7.8	0.8	4.7	0.0	0.0	24,242	25.3	550	
South	71.5	14.8	0.1	3.4	10.6	0.1	3.6	0.0	0.0	12,273	22.4	688	
Area													
Urban	60.0	11.5	0.1	1.6	31.9	0.2	2.2	0.0	0.0	42,713	21.1	335	
Rural	70.0	10.1	0.0	3.4	13.7	1.7	6.8	0.0	0.0	49,360	21.7	1,493	
Main source of drinking water													
Improved	65.2	10.7	0.1	2.6	22.4	1.0	4.7	0.0	0.0	90,245	na	na	
Unimproved	73.3	15.3	0.0	2.3	8.0	0.0	4.3	0.0	0.0	1,828	21.6	1,828	
Education of household head													
None	70.2	14.2	0.0	2.3	15.0	0.5	4.5	0.0	0.0	5,667	26.5	274	
Primary	68.0	9.7	0.1	3.3	17.1	1.4	6.2	0.0	0.0	55,202	23.3	1,145	
Secondary	64.6	10.5	0.0	1.9	26.2	0.7	2.9	0.0	0.0	19,728	13.9	374	
Higher	51.4	14.8	0.1	0.8	42.8	0.0	0.7	0.0	0.0	11,414	11.7	27	
DK/Missing	80.7	12.9	0.0	4.8	10.9	0.0	0.0	0.0	0.0	62	(*)	9	
Wealth index quintile													
Poorest	72.8	8.6	0.0	5.4	4.7	2.4	9.6	0.0	0.0	18,415	27.4	789	
Second	74.7	8.3	0.0	3.9	10.5	1.3	6.6	0.0	0.0	18,415	28.2	381	
Middle	72.3	9.2	0.1	1.9	15.8	0.6	4.0	0.0	0.0	18,416	11.0	375	
Fourth	64.6	11.1	0.1	0.9	27.7	0.6	2.3	0.0	0.0	18,412	9.8	267	
Richest	42.4	16.7	0.1	0.9	51.9	0.0	1.0	0.0	0.0	18,415	20.3	16	
Language of household head													
Thai	64.9	10.0	0.1	2.7	23.3	1.1	4.9	0.0	0.0	86,139	17.9	1,406	
Non-Thai	71.8	22.2	0.1	1.6	5.5	0.2	2.0	0.0	0.0	5,934	33.8	422	

¹ MICS indicator 4.2 - Water treatment

na: not applicable

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

Variations were observed in the use of water treatment methods across different regions. In the Northeast, 79.9 per cent of the household population uses no method of water treatment, with the lowest percentage in the Bangkok region (32.5 per cent). Use of a water filter is highest in Bangkok (62.3 per cent) while fewer than 1 out of 10 in the Northeast (7.8 per cent) uses a water filter for water treatment. Use of a water filter was positively related to the household head's education level and wealth index quintile. Moreover, among the population using unimproved sources of drinking water, use of appropriate water treatment was negatively related to the household head's educational level. The population living in households with an uneducated household head is more likely (26.5 per cent) to use an appropriate method of water treatment compared to the population living in households with a higher educated household head (11.7 per cent).

The amount of time it takes to obtain water is presented in Table WS.3 and the person who usually collects the water in Table WS.4. Note that for Table WS.3, household members using water on premises are also shown and for others, the results refer to one round trip from home to drinking water source. Information on the number of trips made in one day was not collected.

Table WS.3 shows that for 98.9 per cent of the household population, the drinking water source is on premises. The availability of water on premises is associated with greater use, better family hygiene and better health outcomes. For a water collection round trip of 30 minutes or more it has been observed that households carry progressively less water and are likely to compromise on the minimal basic drinking water needs of the household.²⁹ For 0.2 per cent of the population, it takes the household more than 30 minutes to get to the water source and bring water and this is less likely (0.1 per cent) among households with an improved drinking water source. In urban areas, no households were found to spend 30 minutes or more collecting water compared to 0.3 per cent in rural areas.

²⁹ Cairncross, Sandy and J.L. Cliff, 'Water use and health in Mueda, Mozambique', in *Transactions of the Royal Society of Tropical Medicine and Hygiene*, vol. 81, 1987, pp. 51–54.

Table WS.3: Time to source of drinking water

Per cent 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, Thailand MICS, 2015-2016

	Time to source of drinking water										Number of household members	
	Users of improved drinking water sources					Users of unimproved drinking water sources						Total
	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	97.5	0.5	0.1	0.0	1.4	0.5	0.1	0.0	0.0	0.0	100.0	92,073
Region												
Bangkok	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	12,517
Central	98.2	0.2	0.1	0.0	1.1	0.2	0.1	0.0	0.0	0.0	100.0	27,739
North	97.8	1.0	0.1	0.0	0.6	0.3	0.2	0.0	0.0	0.0	100.0	15,301
Northeast	96.8	0.9	0.1	0.0	1.2	0.8	0.2	0.0	0.1	0.0	100.0	24,242
South	94.1	0.3	0.0	0.0	4.7	0.9	0.0	0.0	0.0	0.0	100.0	12,273
Area												
Urban	99.1	0.2	0.0	0.0	0.6	0.2	0.0	0.0	0.0	0.0	100.0	42,713
Rural	96.1	0.8	0.1	0.0	2.1	0.7	0.2	0.0	0.0	0.0	100.0	49,360
Education of household head												
None	94.2	0.9	0.0	0.0	3.8	0.9	0.0	0.0	0.0	0.0	100.0	5,667
Primary	97.3	0.6	0.1	0.0	1.4	0.5	0.2	0.0	0.0	0.0	100.0	55,202
Secondary	97.7	0.4	0.0	0.0	1.5	0.3	0.0	0.0	0.0	0.0	100.0	19,728
Higher	99.5	0.2	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	100.0	11,414
DK/Missing	82.7	2.2	0.7	0.0	3.5	11.0	0.0	0.0	0.0	0.0	100.0	62
Wealth index quintile												
Poorest	93.7	1.8	0.2	0.0	2.6	1.4	0.3	0.0	0.0	0.0	100.0	18,415
Second	97.3	0.5	0.1	0.0	1.6	0.3	0.1	0.0	0.0	0.0	100.0	18,413
Middle	97.8	0.1	0.0	0.0	1.6	0.2	0.2	0.0	0.1	0.0	100.0	18,416
Fourth	98.5	0.1	0.0	0.0	1.1	0.3	0.0	0.0	0.0	0.0	100.0	18,413
Richest	99.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	100.0	18,415
Language of household head												
Thai	97.9	0.4	0.0	0.0	1.0	0.5	0.1	0.0	0.0	0.0	100.0	86,139
Non-Thai	90.8	1.9	0.2	0.0	6.6	0.4	0.1	0.0	0.0	0.0	100.0	5,934

Table WS.4 shows that for the majority of households (60.5 per cent), an adult man usually collects drinking water when the source is not on premises. Adult women collect water in 38.9 per cent of cases, while for the rest of the households female or male children under age 15 collect water (0.4 per cent). Similar trends are seen across all background characteristics except in the Central region where the percentage of adult women collecting drinking water is slightly higher (50.4 per cent) compared to adult men (48.5 per cent).

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, Thailand MICS, 2015-2016									
	Percentage of households without drinking water on premises	Number of households	Person usually collecting drinking water					Total	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	1.1	28,652	38.9	60.5	0.3	0.1	0.2	100.0	327
Region									
Bangkok	0.0	3,932	(*)	(*)	(*)	(*)	(*)	100.0	1
Central	0.6	8,747	50.4	48.5	0.0	0.0	1.1	100.0	54
North	1.7	5,103	27.2	72.5	0.3	0.0	0.0	100.0	85
Northeast	2.0	7,161	41.5	58.0	0.4	0.1	0.0	100.0	144
South	1.2	3,708	39.5	59.9	0.0	0.1	0.5	100.0	44
Area									
Urban	0.3	13,638	42.8	56.7	0.3	0.0	0.2	100.0	41
Rural	1.9	15,014	38.4	61.1	0.3	0.1	0.3	100.0	286
Education of household head									
None	2.0	1,759	36.3	63.2	0.5	0.0	0.0	100.0	36
Primary	1.4	16,584	43.8	55.6	0.2	0.1	0.3	100.0	229
Secondary	0.7	6,282	17.4	82.4	0.0	0.2	0.0	100.0	46
Higher	0.4	4,008	(43.0)	(56.4)	(0.0)	(0.0)	(0.0)	100.0	14
Missing/DK	13.5	18	3.0	92.2	4.9	0.0	0.0	100.0	2
Wealth index quintile									
Poorest	3.3	6,494	38.0	61.5	0.4	0.1	0.0	100.0	217
Second	0.9	5,948	49.5	50.3	0.0	0.0	0.2	100.0	53
Middle	0.6	5,672	28.9	69.2	0.0	0.0	1.9	100.0	32
Fourth	0.4	5,459	(38.3)	(61.7)	(0.0)	(0.0)	(0.0)	100.0	24
Richest	0.0	5,079	(*)	(*)	(*)	(*)	(*)	100.0	1
Language of household head									
Thai	1.1	26,879	40.2	59.2	0.2	0.1	0.3	100.0	285
Non-Thai	2.4	1,773	30.1	69.3	0.7	0.0	0.0	100.0	43

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

Use of Improved Sanitation

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 Thailand are provided in Table WS.5.

Almost the entire population of Thailand (99.6 per cent) lives in households using improved sanitation facilities (Table WS.5). There is no major difference in use of improved sanitation facilities across all background characteristics. Open defecation was reported as slightly higher among the household members in the poorest wealth index quintile (0.9 per cent) and households with a household head with no education (0.7 per cent).

Table WS.5: Types of sanitation facilities

Per cent distribution of household population according to type of toilet facility used by the household, Thailand MICS, 2015-2016

	Type of toilet facility used by household										Total	Number of household members	
	Improved sanitation facility					Unimproved sanitation facility							
	Flush/Pour flush to:		Pit latrine	Flush/Pour flush to		Flush/Pour flush to somewhere else		Pit latrine without slab/ open pit					
	Piped Sewer System	Septic tank		Ventilated improved pit latrine,	Flush/Pour flush to unknown place,	Pit latrine with slab	Open defecation (no facility, bush, field)						
Total	7.8	88.2	3.5	0.1	0.2	0.2	0.2	0.2	0.2	0.2	100.0	92,073	
Region													
Bangkok	21.3	78.2	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	12,517	
Central	8.5	87.4	3.2	0.1	0.1	0.5	0.3	0.3	0.3	0.3	100.0	27,739	
North	1.7	89.3	8.0	0.7	0.7	0.2	0.2	0.2	0.2	0.2	100.0	15,301	
Northeast	5.7	92.9	1.2	0.0	0.0	0.0	0.2	0.2	0.2	0.2	100.0	24,242	
South	4.1	89.5	5.8	0.0	0.0	0.1	0.4	0.4	0.4	0.4	100.0	12,273	
Area													
Urban	10.8	86.6	2.1	0.1	0.1	0.3	0.1	0.1	0.1	0.1	100.0	42,713	
Rural	5.2	89.6	4.6	0.2	0.2	0.1	0.4	0.4	0.4	0.4	100.0	49,360	
Education of household head													
None	6.7	86.2	5.0	1.0	1.0	0.5	0.7	0.7	0.7	0.7	100.0	5,667	
Primary	5.5	90.2	3.8	0.1	0.1	0.2	0.3	0.3	0.3	0.3	100.0	55,202	
Secondary	9.1	87.8	2.7	0.2	0.2	0.1	0.1	0.1	0.1	0.1	100.0	19,728	
Higher	17.5	80.3	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	11,414	
DK/Missing	2.4	75.7	9.1	12.8	12.8	0.0	0.0	0.0	0.0	0.0	100.0	62	
Wealth index quintile													
Poorest	3.7	90.7	4.1	0.4	0.4	0.1	0.9	0.9	0.9	0.9	100.0	18,415	
Second	3.9	92.2	3.4	0.2	0.2	0.2	0.2	0.2	0.2	0.2	100.0	18,413	
Middle	5.3	90.5	4.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	100.0	18,416	
Fourth	7.3	88.4	3.8	0.0	0.0	0.5	0.0	0.0	0.0	0.0	100.0	18,413	
Richest	18.7	79.1	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	18,415	
Language of household head													
Thai	7.8	88.2	3.5	0.1	0.1	0.2	0.2	0.2	0.2	0.2	100.0	86,139	
Non-Thai	7.1	88.3	2.6	1.1	1.1	0.3	0.6	0.6	0.6	0.6	100.0	5,934	

The MDGs and the WHO/UNICEF JMP for Water Supply and Sanitation classify otherwise acceptable sanitation facilities which are public or shared between two or more households as unimproved. 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 that are not public or shared. Data on the use of improved sanitation are presented in Tables WS.6 and WS.7.

As shown in Table WS.6, 99.6 per cent of the household population is using an improved sanitation facility. Only 2.3 per cent of households use an improved toilet facility that is public or shared with other households. Urban households are slightly more likely than rural households to use a shared toilet facility of an improved type (2.8 per cent and 2.0 per cent respectively). Households in Bangkok (5.2 per cent), households headed by an uneducated household head (4.3 per cent), households in the poorest wealth quintile (5.9 per cent) and none-Thai-speaking households (7.1 per cent) are more likely to use a public facility or a shared toilet facility of an improved type.

Table WS 6: Use and sharing of sanitation facilities

Per cent 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, Thailand MICS, 2015-2016

	Users of improved sanitation facilities			Users of unimproved sanitation facilities			Total	Number of household members
	Not shared ¹	Public facility	Shared by 5 households or less	Shared by More than 5 households	Missing/DK	Not shared		
Total	97.2	0.3	1.7	0.3	0.0	0.2	100.0	92,073
Region								
Bangkok	94.7	0.1	3.7	1.4	0.1	0.0	100.0	12,517
Central	97.1	0.5	1.5	0.2	0.0	0.5	100.0	27,739
North	97.5	0.3	1.7	0.1	0.0	0.1	100.0	15,301
Northeast	98.7	0.3	0.9	0.0	0.0	0.0	100.0	24,242
South	97.0	0.1	1.7	0.7	0.0	0.1	100.0	12,273
Area								
Urban	96.8	0.3	1.8	0.7	0.0	0.3	100.0	42,713
Rural	97.6	0.3	1.6	0.1	0.0	0.1	100.0	49,360
Education of household head								
None	94.7	0.7	3.1	0.5	0.0	0.4	100.0	5,667
Primary	97.3	0.2	1.6	0.3	0.0	0.2	100.0	55,202
Secondary	96.7	0.4	2.0	0.6	0.0	0.1	100.0	19,728
Higher	99.2	0.1	0.6	0.1	0.0	0.0	100.0	11,414
DK/Missing	89.4	0.6	9.4	0.7	0.0	0.0	100.0	62
Wealth index quintile								
Poorest	93.1	0.8	4.3	0.8	0.0	0.1	100.0	18,415
Second	96.7	0.3	2.1	0.6	0.0	0.2	100.0	18,413
Middle	98.0	0.2	1.3	0.3	0.0	0.1	100.0	18,416
Fourth	98.7	0.2	0.7	0.0	0.0	0.5	100.0	18,413
Richest	99.8	0.0	0.2	0.0	0.0	0.0	100.0	18,415
Language of household head								
Thai	97.6	0.2	1.5	0.3	0.0	0.2	100.0	86,139
Non-Thai	92.0	1.2	4.5	1.4	0.0	0.3	100.0	5,934

¹ MICS indicator 4.3; MDG indicator 7.9 - Use of improved sanitation

Having access to both an improved drinking water source and an improved sanitation facility brings the largest public health benefits to a household.³⁰ In its 2008 report,³¹ the JMP developed a new way of presenting the access figures by disaggregating and refining the data on drinking water and sanitation and presenting 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 provides an understanding of the proportion of the population with no sanitation facilities at all – who revert to open defecation, 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.7 presents the percentage of the household population according to these drinking water and sanitation ladders. The table also shows the percentage of household members using both improved sources of drinking water³² and an improved sanitary means of excreta disposal. The percentage of household members using improved drinking water sources and improved sanitation facilities is 95.3 per cent. Household members in the South are less likely (91.5 per cent) to use an improved drinking water source and improved sanitation facilities compared to other regions. Similarly, household members living in a household headed by an uneducated head, in the poorest wealth index quintile and headed by a non-Thai speaker are less likely to use improved drinking water sources and improved sanitation. These results are presented by wealth quintiles in Figure WS.2.

³⁰ Wolf, J. et al., ‘Systematic review: Assessing the impact of drinking water and sanitation on diarrhoeal disease in low- and middle-income settings: systematic review and meta-regression’, in *Tropical Medicine and International Health*, vol. 19, August 2014, pp. 928–942; Department for International Development, ‘Water, Sanitation and Hygiene: Evidence Paper’, DfID, 2013: <http://r4d.dfid.gov.uk/pdf/outputs/sanitation/WASH-evidence-paper-april2013.pdf>

³¹ WHO/UNICEF JMP, *Progress on drinking water and sanitation: Special focus on Sanitation*, 2008: http://www.wssinfo.org/fileadmin/user_upload/resources/1251794333-JMP_08_en.pdf

³² Households indicating bottled water as the main source of drinking water are distributed according to the water source used for other purposes such as cooking and handwashing.

Table WS.7: Drinking water and sanitation ladders

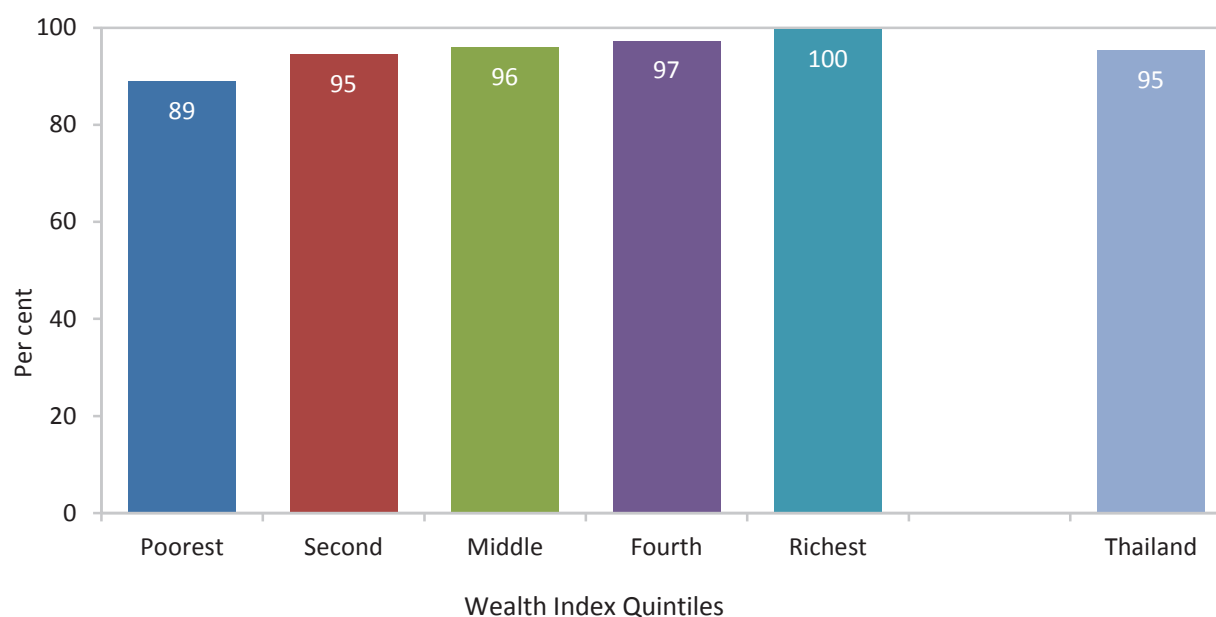
Percentage of household population by drinking water and sanitation ladders, Thailand MICS, 2015-2016											
Percentage of household population using:											
	Improved drinking water ^{1,a}		Unimproved drinking water	Total	Improved sanitation ²	Unimproved sanitation			Total	Improved drinking water sources and improved sanitation	Number of household members
	Piped into dwelling, plot or yard	Other improved				Shared improved facilities	Unimproved facilities	Open defecation			
Total	74.4	23.6	2.0	100.0	97.2	2.3	0.2	0.2	100.0	95.3	92,073
Region											
Bangkok	99.5	0.5	0.0	100.0	94.7	5.3	0.0	0.0	100.0	94.6	12,517
Central	78.0	20.5	1.5	100.0	97.1	2.1	0.5	0.3	100.0	95.7	27,739
North	78.7	20.1	1.2	100.0	97.5	2.2	0.2	0.2	100.0	96.4	15,301
Northeast	58.0	39.7	2.3	100.0	98.7	1.1	0.0	0.2	100.0	96.4	24,242
South	67.8	26.6	5.6	100.0	97.0	2.5	0.1	0.4	100.0	91.5	12,273
Area											
Urban	88.3	11.0	0.8	100.0	96.8	2.8	0.3	0.1	100.0	96.0	42,713
Rural	62.5	34.5	3.0	100.0	97.6	1.9	0.1	0.4	100.0	94.7	49,360
Education of household head											
None	72.9	22.3	4.8	100.0	94.7	4.2	0.5	0.7	100.0	90.0	5,667
Primary	68.2	29.8	2.1	100.0	97.3	2.2	0.2	0.3	100.0	95.3	55,202
Secondary	81.3	16.8	1.9	100.0	96.7	3.1	0.1	0.1	100.0	94.8	19,728
Higher	93.6	6.1	0.2	100.0	99.2	0.8	0.0	0.0	100.0	98.9	11,414
Missing/DK	74.8	10.8	14.4	100.0	89.4	10.6	0.0	0.0	100.0	74.9	62
Wealth index quintile											
Poorest	45.9	49.8	4.3	100.0	93.1	5.8	0.1	0.9	100.0	88.9	18,415
Second	67.1	30.8	2.1	100.0	96.7	3.0	0.2	0.2	100.0	94.5	18,413
Middle	77.2	20.8	2.0	100.0	98.0	1.9	0.1	0.0	100.0	96.0	18,416
Fourth	85.8	12.9	1.4	100.0	98.7	0.8	0.5	0.0	100.0	97.3	18,413
Richest	96.2	3.7	0.1	100.0	99.8	0.2	0.0	0.0	100.0	99.7	18,415
Language of household head											
Thai	75.4	23.0	1.6	100.0	97.6	2.0	0.2	0.2	100.0	96.0	86,139
Non-Thai	60.6	32.3	7.1	100.0	92.0	7.1	0.3	0.6	100.0	85.2	5,934

¹ MICS indicator 4.1; MDG indicator 7.8 - Use of improved drinking water sources

² MICS indicator 4.3; MDG indicator 7.9 - Use of improved sanitation

^a Those indicating bottled water as the main source of drinking water are distributed according to the water source used for other purposes such as cooking and handwashing.

Figure WS.2: Use of improved drinking water sources and improved sanitation facilities by household members, Thailand MICS, 2015-2016



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. Putting disposable diapers with solid waste – a very common practice throughout the world – has thus far been classified as an inadequate means of disposal due to concerns about the poor disposal of the solid waste itself. This classification is currently under review. Disposal of faeces of children 0-2 years of age is presented in Table WS.8 below. In 42.0 per cent of cases, child stools faeces were disposed of safely the last time the child passed stools. Interestingly, households in the South and urban areas, with higher educated mothers and in the richest wealth index quintile are less likely to dispose of child faeces safely.

In one quarter (24.6 per cent) of cases, the child used a toilet/latrine while in 17.4 per cent the faeces were put or rinsed into a toilet or latrine. However, a small proportion (2.4 per cent) left the faeces in the open. Burying the faeces was most common in the Northeast region (13.9 per cent) and among the poorest households (13.0 per cent).

It is pertinent to note that the use and binning of disposable diapers is very high (42.7 per cent) at the national level, and particularly in Bangkok (61.8 per cent). According to the current definition, disposal of faeces inside a diaper is considered unsafe. Changes in the definition and consideration of the use and binning of diapers as a safe method would drastically change the overall findings.

Table WS.8: Disposal of child's faeces

Per cent 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 stool, Thailand MICS, 2015-2016

	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	Buried	Left in the open	Used disposable diapers and thrown into garbage	Thrown into garbage but did not use disposable diapers	Other/ Missing/ DK	Total			
Total	24.6	17.4	2.0	5.5	2.4	42.7	5.3	0.1	100.0	42.0	7,235	
Type of sanitation facility used by household members												
Improved	24.7	17.5	2.0	5.5	2.1	42.8	5.4	0.1	100.0	42.2	7,187	
Unimproved	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	20	
Open defecation	(4.5)	(3.4)	(5.6)	(5.3)	(66.9)	(14.4)	(0.0)	(0.0)	100.0	(7.9)	29	
Region												
Bangkok	13.2	21.2	1.4	0.1	0.0	61.8	2.2	0.1	100.0	34.4	656	
Central	20.2	20.3	1.1	1.6	2.0	47.5	7.2	0.0	100.0	40.5	2,113	
North	31.0	20.2	2.6	3.8	4.7	32.4	5.2	0.0	100.0	51.2	1,305	
Northeast	29.8	16.0	1.8	13.9	2.3	31.2	4.8	0.1	100.0	45.8	2,005	
South	23.1	9.0	3.7	2.8	1.8	54.6	4.9	0.0	100.0	32.2	1,157	
Area												
Urban	22.9	16.1	1.3	2.1	1.0	51.1	5.5	0.0	100.0	39.0	2,914	
Rural	25.8	18.2	2.5	7.7	3.3	37.0	5.3	0.1	100.0	44.0	4,321	
Mother's education												
None	20.0	20.4	7.5	2.6	6.9	40.9	1.6	0.1	100.0	40.4	373	
Primary	26.3	17.7	2.3	7.8	3.0	38.1	4.7	0.2	100.0	44.0	1,890	
Secondary	25.0	19.1	1.3	5.6	2.4	40.2	6.4	0.0	100.0	44.1	3,462	
Higher	23.0	12.3	2.0	2.9	0.5	54.6	4.7	0.0	100.0	35.3	1,506	
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	4	
Wealth index quintile												
Poorest	28.1	20.4	2.3	13.0	7.8	24.7	3.5	0.2	100.0	48.5	1,381	
Second	26.1	19.1	2.5	7.1	1.7	39.7	3.7	0.0	100.0	45.2	1,651	
Middle	25.9	19.8	2.1	4.0	1.9	38.8	7.5	0.0	100.0	45.7	1,469	
Fourth	20.3	12.4	2.1	2.4	0.4	54.2	8.1	0.0	100.0	32.7	1,661	
Richest	22.8	15.2	0.8	0.0	0.3	57.9	3.0	0.0	100.0	38.0	1,074	
Language of household head												
Thai	25.3	17.5	1.8	5.2	1.9	42.7	5.6	0.1	100.0	42.8	6,550	
Non-Thai	18.6	16.4	4.6	8.1	7.0	42.4	2.9	0.1	100.0	35.0	685	

¹MICS indicator 4.4 - Safe disposal of child's faeces

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

Handwashing

Handwashing with water and soap is the most cost-effective health intervention to reduce both the incidence of diarrhoea and pneumonia in children under 5 years of age.³³ It is most effective when done using water and soap after visiting the toilet or cleaning a child, before eating or handling food, and before feeding a child. Monitoring correct handwashing behaviour at these critical times is challenging. A reliable alternative to observations or self-reported behaviour is assessing the likelihood that correct handwashing behaviour takes place by asking if a household has a specific place where people wash their hands and, if yes, observing whether water and soap or other local cleansing materials are available at this place.³⁴

In 83.2 per cent of the households in Thailand a specific place for handwashing was observed while 7.1 per cent could not indicate a specific place where household members usually wash their hands and 9.7 per cent did not give permission to see the place used for handwashing (Table WS.9). Among households where a place for handwashing was observed or in which there was no specific place for handwashing, more than 8 out of 10 (81.2 per cent) had both water and soap (or another cleansing agent) present at the specific place. In 6.7 per cent of the households only water was available at the specific place, while in 2.1 per cent the place had soap but no water. The remaining 2.1 per cent of households had neither water nor soap available at the specific place for handwashing.

The percentage of households with a specific place for handwashing where water and soap or other cleansing agents were present was highest in the Central region (85.7 per cent) and lowest in the South (73.7 per cent). This indicator also has a positive relationship with the household head's educational attainment and the household wealth index quintile. Almost 4 out of 10 (37.8 per cent) households in Bangkok refused to show a place for handwashing.

³³ Cairncross, Sandy and V. Valdmanis, 'Water supply, sanitation and hygiene promotion', ch. 41 in *Disease Control Priorities in Developing Countries*, 2nd ed., edited by Jameson et al., The World Bank, 2006.

³⁴ Ram, Pavani et al., eds., 'Use of a novel method to detect reactivity to structured observation for measurement of handwashing behavior', in *American Society of Tropical Medicine and Hygiene*, 2008.

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

Percentage of households where place for handwashing was observed, percentage with no specific place for handwashing, and per cent distribution of households by availability of water and soap at specific place for handwashing, Thailand MICS, 2015-2016												
	Percentage of households:		Number of households	Place for handwashing observed				Total	Percentage of households with a specific place for handwashing where water and soap or other cleansing agent are present ¹	No specific place for handwashing in the dwelling, yard, or plot	Number of households where handwashing was observed or with no specific place for handwashing in the dwelling, yard, or plot	
	Where place for handwashing was observed	With no specific place for handwashing in the dwelling, yard, or plot		Water is available and:	Water is not available and:	Soap present	Ash, mud, or sand present					No other cleansing agent present
Total	83.2	7.1	28,652	81.2	0.0	6.7	2.1	2.1	7.9	100.0	81.2	25,865
Region												
Bangkok	51.0	11.2	3,932	76.9	0.0	2.6	1.5	0.9	18.1	100.0	76.9	2,449
Central	84.7	5.9	8,747	85.7	0.0	5.6	1.5	0.8	6.5	100.0	85.7	7,927
North	94.5	3.8	5,103	85.1	0.0	8.4	1.1	1.5	3.9	100.0	85.1	5,015
Northeast	91.5	7.0	7,161	78.6	0.0	8.4	3.2	2.7	7.1	100.0	78.6	7,054
South	81.8	10.4	3,708	73.7	0.0	5.8	3.6	5.7	11.3	100.0	73.7	3,420
Area												
Urban	76.1	7.9	13,638	82.4	0.0	4.7	1.8	1.8	9.4	100.0	82.4	11,451
Rural	89.6	6.4	15,014	80.3	0.0	8.2	2.4	2.4	6.7	100.0	80.3	14,414
Education of household head												
None	79.2	9.5	1,759	72.3	0.0	10.7	3.1	3.1	10.7	100.0	72.3	1,560
Primary	87.3	6.8	16,584	80.2	0.0	7.6	2.6	2.4	7.2	100.0	80.2	15,613
Secondary	80.5	6.9	6,282	83.8	0.0	5.4	1.3	1.6	7.9	100.0	83.8	5,489
Higher	71.8	7.7	4,008	86.4	0.0	2.1	1.0	0.8	9.7	100.0	86.4	3,188
Missing/DK	77.7	2.3	18	47.8	0.0	29.4	8.3	11.7	2.9	100.0	47.8	14
Wealth index quintile												
Poorest	88.4	8.9	6,393	69.6	0.0	12.6	3.7	5.0	9.1	100.0	69.6	6,219
Second	86.1	7.6	5,952	80.1	0.0	7.4	2.4	2.0	8.1	100.0	80.1	5,577
Middle	85.6	6.6	5,728	83.7	0.0	5.7	2.0	1.4	7.1	100.0	83.7	5,276
Fourth	82.6	6.1	5,491	87.2	0.0	3.6	1.4	0.9	6.9	100.0	87.2	4,872
Richest	71.0	6.0	5,089	90.4	0.0	1.4	0.3	0.1	7.8	100.0	90.4	3,921
Language of household head												
Thai	83.4	6.9	26,879	81.8	0.0	6.5	2.0	2.0	7.7	100.0	81.8	24,277
Non-Thai	79.3	10.2	1,773	72.9	0.1	8.3	3.8	3.5	11.4	100.0	73.0	1,588

¹ MICS indicator 4.5 - Place for handwashing

As shown in Table WS.10 below, 9.5 per cent of the households were not able or refused to show any soap and 5.0 per cent did not have any soap in the household. In the remaining 85.5 per cent of households, either the soap was observed or shown to the interviewer (Table WS.10). The percentage of households with soap or other cleansing agent anywhere in the dwelling was lowest in Bangkok (57.5 per cent) and highest in the North (92.3 per cent). Interestingly, rural areas had a higher percentage of households (90.5 per cent) with soap or other cleansing agent anywhere in the dwelling compared to households in urban areas (80.1 per cent). Households with higher educated household heads and those in the richest wealth index quintile were less likely to have soap or other cleansing agent anywhere in the dwelling. Similarly, a large percentage of households in Bangkok (36.8 per cent), households with a higher educated household head (20.7 per cent) and households in the richest wealth index quintile (22.6 per cent) were not able to or did not want to show soap or other cleansing agent.

Table WS.10: Availability of soap or other cleansing agent

Per cent distribution of households by availability of soap or other cleansing agent in the dwelling, Thailand MICS, 2015-2016											
	Place for handwashing observed			Place for handwashing not observed			Total	Percentage of households with soap or other cleansing agent anywhere in the dwelling ¹	Number of households		
	Soap or other cleansing agent observed	Soap or other cleansing agent shown in household	No soap or other cleansing agent in household	Soap or other cleansing agent shown	No soap or other cleansing agent in household	Does not want to show soap or other cleansing agent					
	75.3	4.8	3.0	5.5	2.0	9.3	100.0	85.5	28,652		
Region											
Bangkok	48.9	0.9	1.1	7.7	4.7	36.6	100.0	57.5	3,932		
Central	79.0	4.4	1.1	5.9	1.2	8.2	100.0	89.3	8,747		
North	84.7	4.2	5.3	3.4	1.0	1.2	100.0	92.3	5,103		
Northeast	80.6	7.2	3.7	2.9	1.9	3.7	100.0	90.7	7,161		
South	71.2	5.5	4.7	10.6	2.8	4.7	100.0	87.4	3,708		
Area											
Urban	70.7	3.2	2.1	6.2	2.5	15.2	100.0	80.1	13,638		
Rural	79.4	6.2	3.7	4.9	1.6	3.9	100.0	90.5	15,014		
Education of household head											
None	66.9	6.1	6.0	5.3	5.5	10.0	100.0	78.4	1,759		
Primary	77.9	5.8	3.4	4.7	1.9	6.0	100.0	88.4	16,584		
Secondary	74.4	3.6	2.2	7.4	1.8	10.3	100.0	85.4	6,282		
Higher	69.5	1.6	0.7	6.3	1.3	20.6	100.0	77.4	4,008		
Missing/DK	44.8	7.2	25.7	2.3	0.1	19.9	100.0	54.3	18		
Wealth index quintile											
Poorest	71.3	9.3	7.5	5.5	3.3	2.7	100.0	86.1	6,393		
Second	77.3	5.8	2.7	5.2	3.1	5.7	100.0	88.3	5,952		
Middle	79.0	4.4	2.0	5.5	1.5	7.5	100.0	88.8	5,728		
Fourth	78.7	2.4	1.5	6.2	1.0	10.2	100.0	87.2	5,491		
Richest	69.9	0.8	0.3	5.4	0.9	22.6	100.0	76.2	5,089		
Language of household head											
Thai	75.7	4.7	2.9	5.5	1.8	9.3	100.0	85.8	26,879		
Non-Thai	68.8	5.9	4.3	6.8	5.6	8.2	100.0	81.5	1,773		

¹ MICS indicator 4.6 - Availability of soap or other cleansing agent

VII. REPRODUCTIVE HEALTH



VII. Reproductive Health

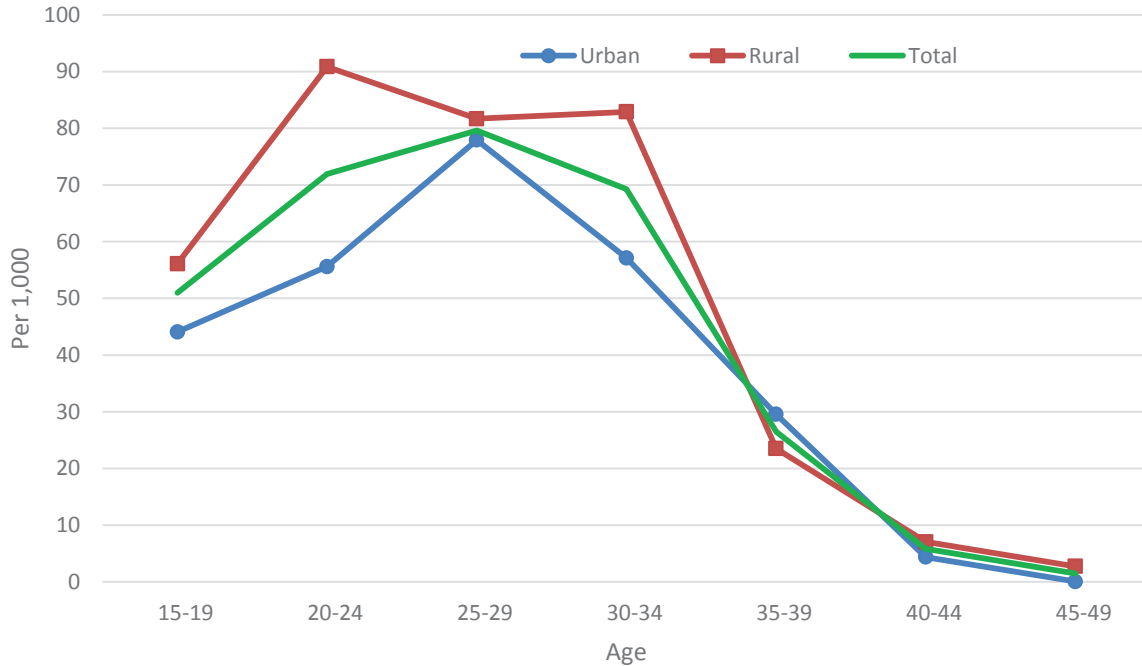
Fertility

Measures of current fertility are presented in Table RH.1 for the one-year period preceding the survey. In the MICS, age-specific and total fertility rates are calculated by using information on the date of last birth of each woman and are based on the one-year period (1-12 months) preceding the survey. Rates are underestimated by a very small margin due to the absence of information on multiple births (twins, triplets, etc.) and on women who may have had multiple deliveries during the one-year period preceding the survey. The total fertility rate (TFR) is calculated by summing the age-specific fertility rates (ASFRs) calculated for each of the five-year age groups of women, from age 15 through to age 49. The TFR is a synthetic measure that denotes the number of live births a woman would have if she were subject to the current age-specific fertility rates throughout her reproductive years (15-49 years). The general fertility rate (GFR) is the number of live births occurring during the specified period per 1,000 women aged 15-49. The crude birth rate (CBR) is the number of live births per 1,000 population during the specified period.

Table RH.1: Fertility rates			
Adolescent birth rate, age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the one-year period preceding the survey, by area, Thailand MICS, 2015-2016			
	Urban	Rural	Total
Age			
15-19 ¹	44	56	51
20-24	56	91	72
25-29	78	82	80
30-34	57	83	69
35-39	30	23	26
40-44	4	7	6
45-49	0	3	1
TFR ^a	1.3	1.7	1.5
GFR ^b	36.7	42.9	39.9
CBR ^c	9.5	9.8	9.7
¹ MICS indicator 5.1; MDG indicator 5.4 - Adolescent birth rate			
^a TFR: Total fertility rate expressed per woman age 15-49 years			
^b GFR: General fertility rate expressed per 1,000 women age 15-49 years			
^c CBR: Crude birth rate expressed per 1,000 population			

Table RH.1 shows current fertility in Thailand at the national level and by urban-rural area. The TFR for the one year preceding the Thailand MICS is 1.5 births per woman. There is a very small difference in urban (1.3 births per women) and rural (1.7 births per women) total fertility rates. As the ASFRs show, the pattern of higher rural fertility is prevalent in all age groups except for the 35-39-year-old cohort. These results are also shown in Figure RH.1.

Figure RH.1: Age-specific fertility rates by area, Thailand MICS, 2015-2016



Note: Rates refer to the one year years period preceding the survey

The urban-rural difference in fertility is most pronounced for women in the 20-24-year-old age group: 56 births per 1,000 women in urban areas versus 91 births per 1,000 women in rural areas. However, the fertility rate for the 35-39-year-old age group in urban areas (30 births per 1,000) supersedes fertility rates for rural areas (23 births per 1,000) in the same age group, indicating slightly delayed childbearing in urban areas. The overall age pattern of fertility, as reflected in the ASFRs, indicates that childbearing begins early. Fertility among young women rapidly increases from 51 births per 1,000 for women aged 15-19 to a peak of 80 births per 1,000 for women aged 25-29, and gradually starts to decline thereafter.

Table RH.2 shows adolescent birth rates and total fertility rates. The adolescent birth rate (age-specific fertility rate for women aged 15-19) is defined as the number of births to women aged 15-19 years during the one-year period preceding the survey, divided by the average number of women aged 15-19 (number of women-years lived between ages 15 through 19, inclusive) during the same period, expressed per 1,000 women.

Table RH.2: Adolescent birth rate and total fertility rate		
Adolescent birth rates and total fertility rates for the one-year period preceding the survey, Thailand MICS, 2015-2016		
	Adolescent birth rate ¹ (Age-specific fertility rate for women age 15-19 years)	Total fertility rate
Total	51	1.5
Region		
Bangkok	48	1.1
Central	41	1.6
North	72	1.9
Northeast	47	1.4
South	58	1.8
Woman's education		
None	(24)	(2.1)
Primary	104	1.7
Secondary	55	1.7
Higher	3	1.1
Wealth index quintile		
Poorest	76	1.5
Second	82	1.8
Middle	35	1.3
Fourth	43	1.8
Richest	12	1.1
Language of household head		
Thai	49	1.5
Non-Thai	67	1.8
¹ MICS indicator 5.1; MDG indicator 5.4 - Adolescent birth rate		
() Figures that are based on 25-49 unweighted cases		

As seen in Table RH.2, the adolescent birth rate (age-specific fertility rate for women aged 15-19) is highest in the North (72 births per 1,000), followed by the South (58 births per 1,000). The adolescent birth rate for primary educated women is extremely high (104 births per 1,000) compared to women with higher education (3 births per 1,000). The rate is also highest among women in the second poorest wealth index quintile.

Table RH.3 presents some early childbearing³⁵ indicators for women aged 15-19 and 20-24, while Table RH.4 presents the trends for early childbearing.

As shown in Table RH.3, 9.1 per cent of women aged 15-19 have already had a birth, 1.8 per cent are pregnant with their first child, and 0.4 per cent have had a live birth before age 15. The table also shows that 9.4 per cent of women aged 20-24 have had a live birth before age 18.

The percentage of women in the 15-19-year-old age group who have already started childbearing is highest in the North (15.0 per cent) and lowest in Bangkok (7.0 per cent) and is also slightly higher for women in rural areas. One out of three (33.2 per cent) primary educated women aged 15-19 has begun

³⁵ Childbearing is the process of giving birth to children. While early childbearing is defined as having had live births before specific young ages, for the purposes of Table RH.3, women age 15-19 years who have begun childbearing include those who have had a live birth as well as those who have not had a live birth but are pregnant with their first child.

childbearing. Wealth status of the household also shows an inverse relation with this indicator. Primary educated women are more likely to have had a live birth before the age of 15.

Only 7.1 per cent of women in the Central region have had a live birth before age 18, with the highest proportion in the Northeast region (13.7 per cent). There is a negative correlation between this indicator and wealth quintiles. For women aged 20-24 in the poorest quintile the percentage is 17.8 per cent compared with 4.0 per cent for women in the richest quintile.

Table RH.3: Early childbearing							
Percentage of women age 15-19 who have had a live birth, are pregnant with the first child, have begun childbearing, and who have had a live birth before age 15, and percentage of women age 20-24 years who have had a live birth before age 18, Thailand MICS, 2015-2016							
	Percentage of women age 15-19 years who:				Number of women age 15-19 years	Percentage of women age 20-24 years who have had a live birth before age 18 ¹	Number of women age 20-24 years
	Have had a live birth	Are pregnant with first child	Have begun childbearing	Have had a live birth before age 15			
Total	9.1	1.8	10.9	0.4	3,359	9.4	2,878
Region							
Bangkok	7.0	0.0	7.0	0.3	386	8.8	535
Central	6.8	1.2	8.0	0.4	958	7.1	1,075
North	13.4	1.6	15.0	0.5	480	10.1	404
Northeast	9.5	2.9	12.4	0.4	1,057	13.7	445
South	10.2	2.1	12.2	0.3	478	11.2	418
Area							
Urban	8.3	0.8	9.1	0.4	1,414	8.2	1,547
Rural	9.7	2.5	12.1	0.4	1,945	10.9	1,331
Woman's education							
None	(10.6)	(0.4)	(11.1)	(0.5)	45	1.7	103
Primary	24.7	8.5	33.2	3.0	164	20.9	226
Secondary	9.0	1.6	10.6	0.3	2,869	15.9	1,319
Higher	0.6	0.0	0.6	0.0	280	1.0	1,228
Missing/DK	(*)	(*)	(*)	(*)	1	(*)	1
Wealth index quintile							
Poorest	13.6	3.0	16.7	0.5	569	17.8	368
Second	12.6	2.7	15.3	0.6	785	9.8	493
Middle	8.6	2.0	10.6	0.3	794	10.3	687
Fourth	8.2	0.1	8.3	0.5	664	8.8	708
Richest	1.2	0.8	2.0	0.2	546	4.0	622
Language of household head							
Thai	9.0	1.7	10.8	0.4	3,097	10.0	2,558
Non-Thai	9.8	2.2	12.0	0.1	262	4.7	319
¹ MICS indicator 5.2 - Early childbearing							
() Figures that are based on 25-49 unweighted cases (*) Figures that are based on less than 25 unweighted cases							

Table RH.4 suggests that early childbearing has gradually declined over the last 10 years, particularly in rural areas. Overall, 0.7 per cent of women in the 25-29-year-old age group had a live birth before the age of 15 compared to 0.4 per cent in the 15-19-year-old age group. Similarly, 1.0 per cent of women in the 25-29-year-old age group in rural areas had a live birth before the age of 15 compared to 0.5 per cent in the same age group in urban areas.

Table RH.4: Trends in early childbearing

Percentage of women who have had a live birth by age 15 and 18, by area and age group, Thailand MICS, 2015-2016

	Urban				Rural				All			
	Percentage of women with a live birth before age 15	Number of women age 15-49 years	Percentage of women with a live birth before age 18	Number of women age 20-49 years	Percentage of women with a live birth before age 15	Number of women age 15-49 years	Percentage of women with a live birth before age 18	Number of women age 20-49 years	Percentage of women with a live birth before age 15	Number of women age 15-49 years	Percentage of women with a live birth before age 18	Number of women age 20-49 years
Total	0.6	12,599	7.2	11,185	0.7	13,015	10.2	11,071	0.7	25,614	8.7	22,255
Age												
15-19	0.4	1,414	na	na	0.4	1,945	na	na	0.4	3,359	na	na
20-24	0.3	1,547	8.2	1,547	0.6	1,331	10.9	1,331	0.4	2,878	9.4	2,878
25-29	0.5	1,671	8.3	1,671	1.0	1,417	11.4	1,417	0.7	3,089	9.7	3,089
30-34	0.8	1,885	4.6	1,885	0.2	1,553	8.1	1,553	0.5	3,437	6.1	3,437
35-39	0.8	2,002	7.1	2,002	0.6	2,082	9.6	2,082	0.7	4,084	8.4	4,084
40-44	0.7	1,920	8.0	1,920	0.4	2,221	10.5	2,221	0.5	4,141	9.3	4,141
45-49	0.6	2,159	7.2	2,159	1.4	2,467	10.7	2,467	1.1	4,626	9.1	4,626
na: not applicable												

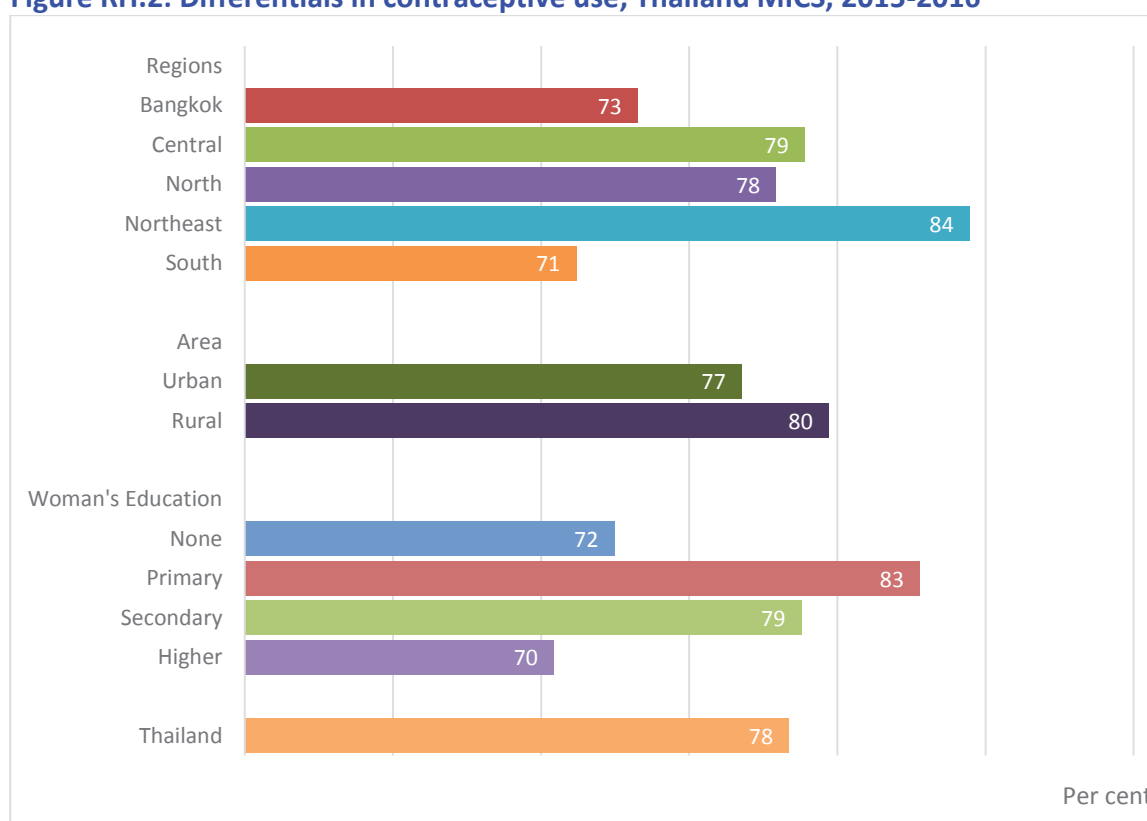
Contraception

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 total number of children. Access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late or too many is critical.

Current use of contraception was reported by 78.4 per cent of women currently married or in union³⁶ (Table RH.5). The most popular method is the pill, which is used by one in three married women in Thailand (32.8 per cent). The next most popular method is female sterilization (24.3 per cent), followed by injectables (14.0 per cent). Between 1.1 per cent and 2.5 per cent of married women reported the use of implants, periodic abstinence, withdrawal and the male condom. Less than 1.0 per cent uses male sterilization, the IUD and others (such as female condom, diaphragm/foam/jelly and contraceptive patch).

Contraceptive prevalence ranges from 71.2 per cent in the South to 84.5 per cent in the Northeast. About 76.8 per cent of married women in urban areas and 79.7 per cent in rural areas use a method of contraception. The findings by region, area and women's education are depicted in Figure RH.2.

Figure RH.2: Differentials in contraceptive use, Thailand MICS, 2015-2016



³⁶ All references to "married women" in this chapter include women in marital union as well.

Adolescents are far less likely to use contraception than older women. Only about 69.2 per cent of women aged 15-19 married or in union currently use a method of contraception compared to 75.4 per cent of 20-24 year olds, while the use of contraception among older women ranges from 75.7 per cent to 82.9 per cent. Nine out of 10 (90.0 per cent) women with two living children use a contraceptive compared to 5 out of 10 (48.9 per cent) with no living children.

Women's education shows a curvilinear association with contraceptive prevalence. The percentage of married women using any method of contraception increases from 72.5 per cent among those with no education to 82.8 per cent among those with primary education and drops to 70.4 per cent among those with higher education. Use of injectables as a contraceptive method is inversely related to the educational level of women and the wealth status of the household. Interestingly, use of no method is high among higher educated women (29.6 per cent) and women in the richest wealth index quintile (26.3 per cent). More than one third (34.9 per cent) of married women living in households headed by a non-Thai speaker do not use any method.

Approximately three in four women (75.5 per cent) use modern³⁷ contraceptive methods while only 2.8 per cent use traditional³⁸ methods. The use of traditional contraceptive methods is higher among women living in the South region (5.4 per cent), women aged 45-49 years (4.1 per cent), women with one child (4.1 per cent), women with higher education (5.1 per cent) and women in the richest quintile (4.1 per cent).

Women who were married or in union but not using any contraceptive method were asked the reasons why they did not use any contraception (Table RH.S1). Nine out of 10 women (90.7 per cent) reported fertility-related reasons for not using any method, followed by 5.2 per cent for method-related reasons. Opposition to the use of contraceptive methods was highest among women who had four or more living children (19.6 per cent), followed by women living in households headed by a non-Thai speaker (18.1 per cent). Overall, 14 per cent of women in the South region also reported opposition to the use of any contraceptive. A methods-related reason for not using any contraceptive method was common among women aged 15-19 years (10.8 per cent), women with four or more living children (16.1 per cent) and women living in the poorest households (11.5 per cent).

³⁷ Female sterilization, male sterilization, IUD, injectables, implants, pill, male condom, female condom, diaphragm/foam/jelly and contraceptive patch.

³⁸ Periodic abstinence and withdrawal.

Table RH.5: 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, Thailand MICS, 2015-2016

	No method	Female sterilization		Male sterilization		Per cent of women currently married or in union who are using (or whose partner is using):										Number of women age 15-49 currently married or in union
		IUD	Injectables	Implants	Pill	Male condom	Periodic abstinence	Withdrawal	Other*	Any modern method	Any traditional method	Any method ¹				
Total	21.6	24.3	0.4	0.4	0.4	14.0	1.1	32.8	2.5	1.3	1.5	0.1	75.5	2.8	78.4	16,756
Region																
Bangkok	26.7	21.3	0.1	0.1	0.1	9.2	0.7	33.2	5.2	1.4	1.8	0.3	69.9	3.2	73.3	2,097
Central	21.1	23.0	0.5	0.1	13.0	1.1	35.7	2.0	2.0	1.6	1.8	0.0	75.5	3.4	78.9	5,438
North	22.1	21.1	0.7	0.1	22.4	2.1	28.1	2.6	2.6	0.3	0.6	0.0	77.0	0.9	77.9	2,718
Northeast	15.5	32.9	0.5	0.7	13.1	0.6	33.6	1.3	1.3	0.9	0.8	0.1	82.8	1.7	84.5	4,191
South	28.8	18.4	0.2	1.0	12.1	1.3	29.7	2.9	2.9	2.3	2.9	0.3	65.8	5.4	71.2	2,311
Area																
Urban	23.2	25.0	0.5	0.4	10.4	1.0	32.5	3.6	3.6	1.5	1.8	0.1	73.5	3.2	76.8	7,649
Rural	20.3	23.8	0.4	0.3	16.9	1.2	33.0	1.5	1.5	1.2	1.3	0.1	77.2	2.5	79.7	9,106
Age																
15-19	30.8	0.5	0.0	0.4	27.7	2.4	34.4	2.8	2.8	0.4	0.5	0.0	68.2	1.0	69.2	475
20-24	24.6	3.3	0.5	0.2	18.1	1.3	45.5	3.5	3.5	1.4	1.6	0.0	72.4	3.1	75.4	1,363
25-29	23.7	10.7	0.0	0.1	16.3	1.1	43.9	1.8	1.8	1.1	1.1	0.2	74.0	2.3	76.3	1,974
30-34	24.3	18.6	0.5	0.4	12.6	2.0	35.6	2.9	2.9	1.3	1.8	0.0	72.7	3.1	75.7	2,584
35-39	17.8	28.4	0.2	0.3	13.4	1.1	34.0	2.3	2.3	1.1	1.2	0.1	79.9	2.3	82.2	3,235
40-44	17.1	33.7	0.4	0.3	12.3	0.9	31.0	1.9	1.9	0.8	1.4	0.2	80.6	2.2	82.9	3,360
45-49	23.8	34.1	0.9	0.7	12.3	0.4	20.8	2.7	2.7	2.2	1.9	0.2	72.0	4.1	76.2	3,765
Number of living children																
0	51.1	0.4	0.5	0.0	4.3	0.1	37.4	4.4	4.4	0.6	1.2	0.1	47.1	1.9	48.9	2,200
1	27.7	2.8	0.5	0.3	17.5	1.7	42.2	3.0	3.0	2.1	2.0	0.2	68.1	4.1	72.3	5,248
2	10.0	39.8	0.2	0.4	14.8	1.1	29.4	1.6	1.6	1.2	1.3	0.1	87.5	2.5	90.0	6,895
3	13.1	49.3	1.2	1.0	13.2	0.7	18.4	1.6	1.6	0.4	0.9	0.1	85.5	1.3	86.9	1,883
4+	21.5	45.6	0.2	0.1	11.1	0.4	14.9	2.5	2.5	1.4	2.3	0.1	74.7	3.8	78.5	531

Table RH.5: Use of contraception (continued)

Percentage of women age 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Thailand MICS, 2015-2016															
	No method	Per cent of women currently married or in union who are using (or whose partner is using):										Number of women age 15-49 currently married or in union			
		Female sterilization	Male sterilization	IUD	Injectables	Implants	Pill	Male condom	Periodic abstinence	Withdrawal	Other*		Any modern method	Any traditional method	Any method ¹
Woman's education															
None	27.5	15.2	0.9	1.0	17.4	3.4	31.0	1.5	0.2	1.3	0.5	70.4	1.5	72.5	616
Primary	17.2	29.4	0.4	0.5	16.4	1.0	31.6	1.6	0.8	1.1	0.1	81.0	1.8	82.8	6,081
Secondary	21.2	22.2	0.5	0.2	14.6	1.2	35.2	2.2	1.4	1.4	0.0	76.0	2.7	78.8	6,784
Higher	29.6	21.0	0.5	0.3	7.4	0.7	30.4	4.8	2.5	2.6	0.3	65.3	5.1	70.4	3,268
Missing/DK	47.2	9.2	0.0	0.7	7.4	1.9	32.5	1.1	0.0	0.0	0.0	52.8	0.0	52.8	7
Wealth index quintile															
Poorest	17.7	25.4	0.4	0.7	19.8	1.4	33.2	0.7	0.2	0.5	0.1	81.6	0.8	82.3	2,737
Second	21.8	23.3	0.4	0.2	18.1	1.2	31.9	1.1	0.5	1.2	0.1	76.4	1.8	78.2	3,293
Middle	19.9	23.5	0.5	0.5	14.3	1.4	34.5	2.1	1.7	1.5	0.2	76.8	3.3	80.1	3,663
Fourth	22.0	23.6	0.4	0.2	11.0	0.8	34.8	3.5	2.0	1.7	0.1	74.3	3.7	78.0	3,757
Richest	26.3	26.2	0.5	0.3	8.0	0.8	29.2	4.4	1.7	2.3	0.2	69.7	4.1	73.7	3,306
Language of household head															
Thai	20.6	25.4	0.4	0.3	13.6	1.0	33.1	2.6	1.4	1.5	0.1	76.5	2.9	79.4	15,537
Non-Thai	34.9	10.8	0.5	0.7	18.4	2.7	28.9	0.5	0.5	1.7	0.4	62.6	2.2	65.1	1,219

¹ MICS indicator 5.3; MDG indicator 5.3 - Contraceptive prevalence rate

*Female condom, diaphragm, foam, jelly and contraceptive patch

Table RH.S1: Reasons for not using contraceptive methods

Percentage of women age 15-49 years currently married or in union who express reasons for not using (or whose partner is not using) a contraceptive method, Thailand, 2015-2016		Per cent of women currently married or in union who are not using a contraceptive method					Total	Number of women age 15-49 years currently married or in union
	Fertility related	Opposition to use	Lack of knowledge	Method-related reason	Others	DK/Missing		
Total	90.7	2.8	0.1	5.2	0.6	0.7	100.0	3,222
Region								
Bangkok	94.2	1.0	0.0	4.1	0.1	0.6	100.0	523
Central	92.4	0.3	0.2	4.8	1.1	1.3	100.0	1,038
North	95.4	0.1	0.0	3.8	0.1	0.6	100.0	533
Northeast	92.5	0.4	0.0	6.2	0.9	0.0	100.0	561
South	78.2	14.0	0.1	7.1	0.1	0.6	100.0	567
Area								
Urban	93.2	1.8	0.0	4.2	0.3	0.5	100.0	1,623
Rural	88.2	3.7	0.1	6.1	0.8	1.0	100.0	1,598
Age of woman								
15-19	87.9	0.6	0.6	10.8	0.0	0.0	100.0	83
20-24	89.3	1.6	0.2	8.8	0.0	0.0	100.0	242
25-29	94.2	2.8	0.0	2.4	0.0	0.6	100.0	374
30-34	91.5	2.5	0.0	4.4	0.2	1.4	100.0	554
35-39	89.3	3.3	0.0	4.6	2.2	0.5	100.0	521
40-44	90.5	4.1	0.1	3.9	0.1	1.3	100.0	558
45-49	90.4	2.3	0.0	6.4	0.6	0.4	100.0	888
Number of living children								
0	94.2	0.7	0.0	3.6	0.0	1.5	100.0	942
1	93.0	1.3	0.1	4.6	0.4	0.7	100.0	1,297
2	88.7	3.6	0.1	5.7	1.9	0.0	100.0	647
3	81.7	10.0	0.0	8.2	0.0	0.0	100.0	228
4+	63.5	19.6	0.7	16.1	0.0	0.1	100.0	108
Education								
None	93.6	3.0	1.1	2.1	0.0	0.1	100.0	142
Primary	86.8	4.5	0.0	6.8	1.2	0.7	100.0	969
Secondary	92.3	1.9	0.0	5.0	0.4	0.4	100.0	1,233
Higher	92.4	2.1	0.0	4.0	0.1	1.4	100.0	875
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	100.0	2

Table RH.S1: Reasons for not using contraceptive methods (continued)

Percentage of women age 15-49 years currently married or in union who express reasons for not using (or whose partner is not using) a contraceptive method, Thailand, 2015-2016		Per cent of women currently married or in union who are not using a contraceptive method					Total	Number of women age 15-49 years currently married or in union
	Fertility related	Opposition to use	Lack of knowledge	Method-related reason	Others	DK/Missing		
Wealth index quintile								
Poorest	80.2	4.6	0.4	11.5	2.8	0.5	100.0	412
Second	91.6	3.4	0.0	4.4	0.1	0.5	100.0	611
Middle	88.8	3.4	0.0	6.6	0.7	0.4	100.0	658
Fourth	91.3	3.0	0.0	4.0	0.0	1.6	100.0	743
Richest	96.4	0.7	0.0	2.3	0.1	0.5	100.0	797
Language of household head								
Thai	92.9	0.8	0.0	5.2	0.3	0.8	100.0	2,853
Non-Thai	73.9	18.1	0.4	4.5	3.0	0.1	100.0	368

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

Unmet Need

Unmet need for contraception refers to fecund women who are married or in union and 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 the MICS by using a set of questions eliciting current behaviours and preferences pertaining to contraceptive use, fecundity, and fertility preferences.

Table RH.6 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 married or in union and are not using a method of contraception AND

- are not pregnant, and not postpartum amenorrheic,³⁹ and are fecund,⁴⁰ 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 the percentage of women who are married or in union and 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 did 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. Table RH.6 reveals that 3.3 per cent of women aged 15-49 who are married or in a union have an unmet need for contraception for spacing and 2.9 per cent for limiting children. These two indicators combine into a total unmet need for contraception of 6.2 per cent. The percentage for unmet need is highest in Bangkok (8.8 per cent) and lowest in the Northeast (4.8 per cent). It is interesting to note that the unmet need for spacing is higher among younger women and for limiting among women aged 45-49. It is also notable that young women aged 15-19 report the highest rate of unmet need for contraception (13.0 per cent). Moreover, 1 out of 10 (11.3 per cent) women living in households headed by a non-Thai speaker had their contraceptive needs unmet.

³⁹ A woman is postpartum amenorrheic if she had a birth in the last two years and is not currently pregnant, and her menstrual period has not returned since the birth of the last child.

⁴⁰ A woman 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) is in menopause/has had a hysterectomy OR (2) She declares that she has had a hysterectomy, or that she has never menstruated, or that she is menopausal, or that she has been trying to get pregnant for two or more years without a result in response to questions on why she thinks she is not physically able to get pregnant at the time of the survey OR (3) She declares she cannot get pregnant when asked about the desire for future birth OR (4) She has not had a birth in the preceding five years, is currently not using contraception and is currently married and was continuously married during the last five years preceding the survey.

This indicator is also known as unmet need for family planning and is one of the indicators used to track progress towards the Millennium Development Goal 5 of improving maternal health.

Met need for limiting includes women married or in union who are using (or whose partner is using) a contraceptive method⁴¹ 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. In Thailand, 78.4 per cent of contraceptive needs are met, of which 19.0 per cent is a met need for spacing and 59.4 per cent for limiting. For the regions, met need ranges from 71.2 per cent in the South to 84.5 per cent in the Northeast. Women in the 40-44 and 35-39-year-old age groups are more likely (82.9 per cent and 82.2 per cent respectively) to have their contraceptive needs met. It is interesting to note that met needs for limiting increases with women's age while met need for spacing decreases with the increase in women's age. In total, 67.7 per cent of women in the poorest households have their contraceptive needs for limiting met; however, this drops to 54.2 per cent for women in the richest households.

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 or in union who are currently using contraception, over 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.

In Thailand, 92.7 per cent of demand for contraception is satisfied. Regional demand for contraception satisfied varies from 89.3 per cent in Bangkok to 94.6 per cent in the Northeast. This indicator increases from 84.2 per cent for the 15-19-year-old age group to 95.5 per cent for the 40-44-year-old age group, with the exception of the 45-49-year-old age group, when demand satisfaction falls back to 92.6 per cent. Primary educated women and women in the poorest wealth index quintile are more likely to have their demand for contraception satisfied (approximately 94 per cent). Overall, contraceptive demand satisfaction is above 90 per cent for almost all background characteristics except for women in the 15-19-year-old age group, women with no education and women living in households headed by a non-Thai speaker (84.2 per cent, 85.5 per cent and 85.2 per cent respectively).

⁴¹ In this chapter whenever reference is made to the use of a contraceptive by a woman, this may refer to her partner using a contraceptive method (such as a male condom).

Table RH.6 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, Thailand MICS, 2015-2016											
	Met need for contraception			Unmet need for contraception			Total ¹	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					
Total	19.0	59.4	78.4	3.3	2.9	6.2	16,756	92.7	14,166		
Region											
Bangkok	22.6	50.7	73.3	4.7	4.1	8.8	2,097	89.3	1,722		
Central	22.2	56.7	78.9	3.0	2.2	5.2	5,438	93.9	4,571		
North	14.5	63.4	77.9	3.4	3.4	6.8	2,718	92.0	2,303		
Northeast	15.7	68.8	84.5	2.3	2.6	4.8	4,191	94.6	3,743		
South	19.6	51.6	71.2	4.3	3.6	7.9	2,311	90.1	1,827		
Area											
Urban	20.7	56.1	76.8	3.6	2.9	6.5	7,649	92.2	6,370		
Rural	17.6	62.1	79.7	2.9	3.0	5.9	9,106	93.1	7,796		
Age											
15-19	48.7	20.4	69.2	8.9	4.1	13.0	475	84.2	390		
20-24	51.6	23.8	75.4	5.7	2.1	7.9	1,363	90.6	1,135		
25-29	40.0	36.3	76.3	6.5	1.5	8.0	1,974	90.5	1,664		
30-34	30.6	45.1	75.7	5.0	1.7	6.6	2,584	92.0	2,128		
35-39	15.6	66.6	82.2	3.5	2.0	5.5	3,235	93.7	2,837		
40-44	3.8	79.0	82.9	1.0	2.9	3.9	3,360	95.5	2,916		
45-49	1.0	75.2	76.2	0.6	5.5	6.0	3,765	92.6	3,096		
Woman's education											
None	21.1	51.4	72.5	7.8	4.5	12.3	616	85.5	522		
Primary	7.6	75.2	82.8	1.3	3.6	4.9	6,081	94.4	5,335		
Secondary	24.7	54.0	78.8	3.7	2.5	6.2	6,784	92.7	5,764		
Higher	28.0	42.4	70.4	5.1	2.1	7.3	3,268	90.6	2,540		
Missing/DK	16.8	36.0	52.8	5.3	1.1	6.4	7	(89.1)	4		

Table RH.6 Unmet need for contraception (continued)

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, Thailand MICS, 2015-2016									
	Met need for contraception		Unmet need for contraception		Total ¹	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	For spacing	For limiting					
Wealth index quintile									
Poorest	14.6	67.7	82.3	2.5	2.7	5.2	2,737	94.0	2,397
Second	17.3	60.8	78.2	4.1	3.4	7.5	3,293	91.3	2,820
Middle	20.5	59.7	80.1	2.7	3.1	5.9	3,663	93.2	3,151
Fourth	21.8	56.2	78.0	3.5	2.4	5.9	3,757	92.9	3,155
Richest	19.5	54.2	73.7	3.3	3.0	6.3	3,306	92.2	2,644
Language of household head									
Thai	18.6	60.8	79.4	2.9	2.9	5.8	15,537	93.2	13,234
Non-Thai	24.1	41.0	65.1	8.3	3.0	11.3	1,219	85.2	931

¹ MICS indicator 5.4; MDG indicator 5.6 - Unmet need

() 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, antenatal care can be used to inform women and families about risks and symptoms in pregnancy and about the risks of labour and delivery, and therefore it may provide the route for ensuring that pregnant women do, in practice, deliver with the assistance of a skilled health care provider. Antenatal visits also provide 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 the infant. The prevention and treatment of malaria among pregnant women, management of anaemia during pregnancy and treatment of sexually transmitted infections (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 antenatal care as an entry point for HIV prevention and care, in particular for preventing the transmission of HIV from mother to child, has led to renewed interest in access to and use of antenatal services.

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

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

It is of crucial importance for pregnant women to start attending antenatal care visits as early in pregnancy as possible in order to prevent and detect pregnancy conditions that could affect both the woman and her baby. Antenatal care should continue throughout the entire pregnancy.

Antenatal care coverage indicators (at least one visit with a skilled provider and four or more visits with any providers) are used to track progress towards the Millennium Development Goal 5 of improving maternal health.

The type of personnel providing antenatal care to women aged 15-49 years who gave birth in the two preceding years is presented in Table RH.7. The results show that a relatively small percentage of women (1.9 per cent) do not receive antenatal care. In Thailand, the majority of antenatal care is provided by medical doctors (79.2 per cent) while a small percentage (8.9 per cent) of women receive care from a health centre staff or nurse's aide. One in 10 (11.1 per cent) women who had a live birth in the two years preceding the survey in rural areas received antenatal care by a health centre staff or nurse's aide, almost double the level in urban areas. The provision of antenatal care by a health centre staff or nurse's aide was highest in the Northeast and South compared to other regions (14.3 per cent and 12.9 per cent respectively). Seeking antenatal care from a medical doctor correlates with a woman's education and the wealth status of the household. In Thailand, antenatal care from any skilled provider is high across all background characteristics (above 95 per cent) except for women with no education (85.6 per cent) and women living in households headed by a non-Thai speaker (92.6 per cent). Overall,

52.7 per cent of women in households headed by a non-Thai speaker received antenatal care from a medical doctor, more than one in four (27.2 per cent) from a nurse and 12.7 per cent from health centre staff or a nurse's aide while 7.4 per cent received no antenatal care at all. The chances of receiving no antenatal care are higher among women who have no education (14.4 per cent).

Table RH.7 Antenatal care coverage								
Per cent distribution of women age 15-49 years with a live birth in the last two years by antenatal care provider during the pregnancy for the last birth, Thailand MICS, 2015-2016								
	Provider of antenatal care^a				No antenatal care	Total	Any skilled provider ^{1,b}	Number of women with a live birth in the last two years
	Medical doctor	Nurse/Midwife	Health center staff/nurse's aide	Community health worker				
Total	79.2	10.1	8.9	0.0	1.9	100.0	98.1	2,092
Region								
Bangkok	99.3	0.4	0.2	0.0	0.2	100.0	99.8	231
Central	80.5	10.9	6.3	0.0	2.3	100.0	97.7	713
North	76.9	10.5	9.0	0.0	3.6	100.0	96.4	354
Northeast	71.7	13.1	14.3	0.0	0.9	100.0	99.1	437
South	74.9	10.6	12.9	0.0	1.7	100.0	98.3	359
Area								
Urban	86.7	4.9	6.1	0.0	2.3	100.0	97.7	932
Rural	73.2	14.2	11.1	0.0	1.5	100.0	98.5	1,160
Mother's age at birth								
Less than 20	73.1	10.0	15.4	0.0	1.5	100.0	98.5	319
20-34	80.3	9.8	7.6	0.0	2.3	100.0	97.7	1,464
35-49	80.2	11.5	8.2	0.0	0.1	100.0	99.8	309
Woman's education								
None	49.9	30.8	4.9	0.0	14.4	100.0	85.6	103
Primary	65.7	16.0	15.7	0.0	2.6	100.0	97.4	300
Secondary	79.5	8.8	10.4	0.0	1.3	100.0	98.7	1,173
Higher	92.3	5.3	2.0	0.0	0.3	100.0	99.7	514
Missing/DK	(*)	(*)	(*)	(*)	(*)	100.0	(*)	1
Wealth index quintile								
Poorest	60.3	16.1	21.1	0.0	2.5	100.0	97.5	305
Second	66.0	17.3	12.2	0.0	4.5	100.0	95.5	491
Middle	76.6	13.4	8.2	0.0	1.8	100.0	98.2	425
Fourth	92.9	2.6	4.2	0.0	0.3	100.0	99.7	540
Richest	97.1	1.8	1.1	0.0	0.0	100.0	100.0	331
Language of household head								
Thai	82.2	8.2	8.4	0.0	1.3	100.0	98.7	1,881
Non-Thai	52.7	27.2	12.7	0.0	7.4	100.0	92.6	211
¹ MICS indicator 5.5a; MDG indicator 5.5 - Antenatal care coverage								
^a Only the most qualified provider is considered in cases where more than one provider was reported.								
^b Skilled providers include Medical doctor, Nurse/Midwife and Health center staff/nurse's aide.								
(*) Figures that are based on less than 25 unweighted cases								

Table RH.8 shows the number of antenatal care visits during the latest pregnancy that took place within the two years preceding the survey, regardless of provider, by selected characteristics. More than 9 in 10 mothers (93.3 per cent) received antenatal care more than once and 90.8 per cent of mothers received antenatal care at least four times. Mothers with no education and from households headed by a non-Thai speaker are less likely than more advantaged mothers to receive antenatal care four or more times. For example, 59.3 per cent of the women with no education reported four or more antenatal care visits compared with 95.2 per cent of those with higher education.

Table RH.8 also provides information about the timing of the first antenatal care visit. Overall, 79.8 per cent of women with a live birth in the last two years had their first antenatal care visit during the first trimester of their last pregnancy, with a median of 2.0 months of pregnancy at the first visit among those who received antenatal care. Regional differences for the first antenatal visit during the first trimester range from 71.4 per cent in the South to 87.4 per cent in Bangkok. More than four in five women in the 20-34 and 35-49 age groups with a live birth in the last two years had their first antenatal visit during the first trimester. The mother's educational level and household wealth have a positive relation with the percentage of women who had their first antenatal care visit during the first trimester of their recent pregnancy.

Table RH.8 Number of antenatal care visits and timing of first visit

Per cent distribution of women age 15-49 years with a live birth in the last two years by number of antenatal care visits by any provider and by the timing of first antenatal care visits, Thailand MICS, 2015-2016

	Per cent distribution of women who had:					Total	Per cent distribution of women by number of months pregnant at the time of first antenatal care visit					Number of women with a live birth in the last two years	Median months pregnant at first ANC visit	Number of women with a live birth in the last two years who had at least one ANC visit				
	Antenatal care visits						Total	No ANC visits	First trimester	4-5 months	6-7 months				8+ months	Missing DK		
	No ANC visits	One visit	Two visits	Three visits	4 or more visits ¹												Missing DK	
Total	1.9	1.0	0.7	1.8	90.8	3.7	100.0	2.1	79.8	13.3	2.3	1.5	1.0	100.0	2,092	2.0	2,028	
Region																		
Bangkok	0.2	1.4	0.0	0.3	95.5	2.6	100.0	0.2	87.4	4.9	6.3	0.5	0.7	100.0	231	2.0	229	
Central	2.3	0.0	0.4	2.9	90.4	4.0	100.0	2.3	81.8	11.7	0.9	1.7	1.7	100.0	713	2.0	684	
North	3.6	2.8	0.7	1.5	88.8	2.6	100.0	3.6	77.2	15.5	1.9	0.5	1.3	100.0	354	2.0	336	
Northeast	0.9	1.1	0.7	1.7	90.2	5.4	100.0	1.3	81.7	14.2	1.4	1.0	0.3	100.0	437	2.0	430	
South	1.7	0.8	1.7	1.2	91.5	3.0	100.0	2.4	71.4	18.4	4.1	3.5	0.2	100.0	359	2.0	349	
Area																		
Urban	2.3	0.4	0.6	1.2	92.2	3.3	100.0	2.3	79.6	14.3	2.8	0.7	0.2	100.0	932	2.0	908	
Rural	1.5	1.5	0.8	2.3	89.8	4.0	100.0	1.9	80.1	12.4	1.9	2.1	1.6	100.0	1,160	2.0	1,120	
Mother's age at birth																		
Less than 20	1.5	1.9	0.8	2.8	89.1	3.9	100.0	2.0	62.9	27.4	6.1	1.2	0.6	100.0	319	3.0	311	
20-34	2.3	1.0	0.6	0.7	91.9	3.6	100.0	2.5	83.2	10.8	1.2	1.1	1.2	100.0	1,464	2.0	1,410	
35-49	0.1	0.3	1.3	6.0	87.9	4.3	100.0	0.2	81.3	10.4	3.7	3.9	0.4	100.0	309	2.0	307	
Woman's education																		
None	14.4	0.0	1.9	10.4	59.3	14.0	100.0	14.6	40.3	20.1	0.6	10.3	14.1	100.0	103	3.0	74	
Primary	2.6	2.1	1.7	1.3	85.3	7.0	100.0	3.0	68.1	19.3	5.5	3.4	0.7	100.0	300	3.0	289	
Secondary	1.3	1.2	0.3	1.4	93.1	2.6	100.0	1.5	80.8	14.8	2.2	0.5	0.3	100.0	1,173	2.0	1,152	
Higher	0.3	0.1	0.8	1.4	95.2	2.2	100.0	0.4	92.5	4.9	1.2	1.0	0.1	100.0	514	2.0	512	
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	100.0	1	(*)	1	

Table RH.8 Number of antenatal care visits and timing of first visit

Per cent distribution of women age 15-49 years with a live birth in the last two years by number of antenatal care visits by any provider and by the timing of first antenatal care visits, Thailand MICS, 2015-2016

	Per cent distribution of women who had:				Total	Per cent distribution of women by number of months pregnant at the time of first antenatal care visit						Number of women with a live birth in the last two years who had ANC visit					
	Antenatal care visits					No ANC visits	First trimester	4-5 months	6-7 months	8+ months	Missing DK		Total				
	No ANC visits	One visit	Two visits	Three or more visits ¹													
Wealth index quintile																	
Poorest	2.5	0.6	1.7	1.6	89.2	4.4	100.0	2.9	69.3	21.8	4.3	0.6	1.1	100.0	305	3.0	293
Second	4.5	1.1	0.6	2.5	88.9	2.5	100.0	5.0	70.6	17.9	2.1	4.1	0.2	100.0	491	2.0	465
Middle	1.8	1.5	0.7	1.6	88.7	5.6	100.0	1.8	80.5	11.2	2.3	0.9	3.2	100.0	425	2.0	403
Fourth	0.3	1.4	0.6	1.2	92.7	3.8	100.0	0.3	84.6	11.9	1.8	0.9	0.4	100.0	540	2.0	536
Richest	0.0	0.1	0.1	2.4	95.0	2.4	100.0	0.1	94.6	3.3	1.6	0.3	0.1	100.0	331	2.0	330
Language of household head																	
Thai	1.3	1.1	0.6	1.4	92.9	2.9	100.0	1.4	81.8	13.4	2.4	0.9	0.2	100.0	1,881	2.0	1,852
Non-Thai	7.4	0.5	2.1	6.1	72.9	10.9	100.0	8.5	62.5	12.2	1.8	6.8	8.2	100.0	211	2.0	176

¹ MICS indicator 5.5b; MDG indicator 5.5 - Antenatal care coverage

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

The coverage of key services that pregnant women are expected to receive during antenatal care are shown in Table RH.9. Among those women who had a live birth during the two years preceding the survey, 97.8 per cent reported that a blood sample was taken during antenatal care visits, 98.0 per cent that their blood pressure was checked, 97.4 per cent that a urine specimen was taken and 97.0 per cent received all three key services expected. The coverage of these key services is high across all background characteristics. The lowest percentage of a blood sample taken (85.3 per cent), blood pressure measured (85.6 per cent) and a urine sample taken (85.3 per cent) was observed among women with no education.

Table RH.9 Content of antenatal care					
Percentage of women age 15-49 years with a live birth in the last two years who, at least once, had their blood pressure measured, urine sample taken, and blood sample taken as part of antenatal care, during the pregnancy for the last birth, Thailand MICS, 2015-2016					
	Percentage of women who, during the pregnancy of their last birth, had:				Number of women with a live birth in the last two years
	Blood pressure measured	Urine sample taken	Blood sample taken	Blood pressure measured, urine and blood sample taken ¹	
Total	98.0	97.4	97.8	97.0	2,092
Region					
Bangkok	99.1	99.8	99.8	99.1	231
Central	97.7	97.1	97.7	97.1	713
North	96.3	96.2	96.3	96.0	354
Northeast	99.0	97.8	99.0	97.6	437
South	98.3	97.3	96.8	95.9	359
Area					
Urban	97.5	96.8	97.5	96.5	932
Rural	98.4	97.9	98.1	97.5	1,160
Mother's age at birth					
Less than 20	97.9	97.8	97.8	96.9	319
20-34	97.7	96.9	97.4	96.6	1,464
35-49	99.8	99.5	99.7	99.3	309
Education					
None	85.6	85.3	85.3	85.1	103
Primary	97.4	97.0	97.1	96.8	300
Secondary	98.5	98.0	98.5	97.6	1,173
Higher	99.7	98.8	99.3	98.3	514
Missing/DK	(*)	(*)	(*)	100.0	1
Wealth index quintile					
Poorest	97.5	96.5	97.1	96.2	305
Second	95.5	95.2	95.1	94.8	491
Middle	98.0	97.4	97.8	96.9	425
Fourth	99.7	98.9	99.5	98.7	540
Richest	99.5	99.2	99.9	98.7	331
Language of household head					
Thai	98.6	98.0	98.6	97.8	1,881
Non-Thai	92.5	92.3	90.5	90.3	211
¹ MICS indicator 5.6 - Content of antenatal care					
(*) Figures that are based on less than 25 unweighted cases					

Table RH.S2: Content of antenatal care					
Percentage of women age 15-49 years with a live birth in the last two years whose vaccination card was observed and who had their blood tested for STIs, Thalassemia, and their husband's blood was tested for Thalassemia as part of antenatal care, Thailand, 2015-2016					
	Percentage of women who were tested for:			Percentage of women whose husband was tested for Thalassemia ⁴	Number of women with a live birth in the last two years whose vaccination card was observed
	STI (VDRL) 1 st 1	STI (VDRL) 2 nd 2	Thalassemia ³		
Total	93.2	48.6	87.6	37.1	1,246
Region					
Bangkok	(95.1)	(52.4)	(92.5)	(52.9)	37
Central	89.9	45.1	87.3	30.9	303
North	97.4	60.4	90.0	50.0	265
Northeast	96.3	44.1	91.9	48.7	350
South	88.7	46.5	79.7	15.7	292
Area					
Urban	95.3	46.2	89.3	37.3	442
Rural	92.0	49.9	86.6	36.9	804
Mother's age at birth					
Less than 20	92.7	52.1	92.0	39.7	232
20-34	94.6	50.5	88.5	37.3	793
35-49	88.6	38.0	79.4	33.3	221
Woman's education					
None	74.6	58.2	71.5	18.6	51
Primary	92.4	46.1	86.8	37.8	192
Secondary	94.9	50.2	89.5	39.1	736
Higher	92.7	44.3	85.7	34.5	266
Missing/DK	(*)	(*)	(*)	(*)	1
Wealth index quintile					
Poorest	95.1	51.6	88.2	41.3	244
Second	90.6	51.5	85.5	35.9	347
Middle	96.2	50.8	90.7	39.7	280
Fourth	91.2	44.8	86.7	31.2	261
Richest	94.1	37.0	86.5	38.4	115
Language of household head					
Thai	94.0	48.5	88.6	38.8	1,113
Non-Thai	86.5	49.6	78.5	22.1	133
¹ Country specific indicator 5.S6 - STI (VDRL 1st) screening during antenatal care ² Country specific indicator 5.S7 - STI (VDRL 2nd) screening during antenatal care ³ Country specific indicator 5.S8 - Thalassemia screening for women during antenatal care ⁴ Country specific indicator 5.S9 - Thalassemia screening for husband () Figures that are based on 25-49 unweighted cases (*) Figures that are based on less than 25 unweighted cases					

As part of antenatal care, information related to testing for STIs (VDRL 1st and 2nd), thalassemia and a thalassemia test for the husband was also collected. This information was collected for women who had a live birth and whose health card was observed. Due to the technical complexity of inquiring into the VDRL and thalassemia tests, questions on memory recall were excluded. About 93.2 per cent of women who had a live birth during the last two years whose health card was observed, were tested for STIs (VDRL 1st) during the last pregnancy. However, only 48.6 per cent of women who had a live birth were tested for STIs (VDRL 2nd) during the last pregnancy. Almost 9 out of 10 women (87.6 per cent) were tested for thalassemia and 37.1 per cent of women had their husband tested for thalassemia. The percentage of women tested for STIs (VDRL 1st) was high across all background characteristics. The

lowest percentage of women tested for STIs (VDRL 1st) was recorded for uneducated women (74.6 per cent).

The percentage of women tested for STIs (VDRL 2nd) ranged from 44.1 per cent in the Northeast to 60.4 per cent in the North region. Older women (35-49 years) were less likely (38.0 per cent) to be tested for STIs (VDRL 2nd) compared to younger women (about half). The wealth status of the household also showed an inverse relation with the percentage of women tested for STIs (VDRL 2nd).

The percentage of husbands tested for thalassemia showed large variations across regions and other background characteristics. For example, 52.9 per cent of women in Bangkok had their husbands tested for thalassemia compared to 15.7 per cent in the South region. However, percentage for Bangkok is based on 37 weighted women. 18.6 per cent of women with no education had their husbands tested for thalassemia compared to 39.1 per cent of secondary educated women. Women living in households headed by a non-Thai speaker were least likely to have their husband tested for thalassemia (22.1 per cent) compared to women in Thai-speaking-headed households (38.8 per cent).

Assistance at Delivery

About three quarters of all maternal deaths occur due to direct obstetric causes.⁴² The single most critical intervention for safe motherhood is to ensure that a competent health worker with midwifery skills is present at every birth, and in case of emergency that transport is available to a referral facility for obstetric care. The skilled attendant at delivery indicator is used to track progress toward the Millennium Development Goal 5 of improving maternal health.

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 health center staff/nurse's aide.

About 99.1 per cent of births occurring in the two years preceding the MICS survey were delivered by skilled personnel (Table RH.10). The percentage for this indicator ranges from 97.4 per cent in the North to 99.9 per cent in the Central region and is equally high across all background characteristics. In terms of person assisting at delivery, 82.1 per cent of births in the two years preceding the MICS survey were delivered with the assistance of a medical doctor. Nurse or a midwife assisted with the delivery of 16.1 per cent of births and health centre staff/nurse's aide assisted with 1.0 per cent. For regions, the percentage of births assisted by a doctor ranges from 76.1 per cent in the South to 98.3 per cent in Bangkok. Deliveries in urban areas are more likely to be assisted by a doctor (87.4 per cent) compared to deliveries in rural areas (77.8 per cent). Women's age also shows a positive relation with deliveries assisted by a doctor. For example, approximately three quarters (77.7 per cent) of the deliveries to women under 20 years of age were attended by a doctor compared to 85.5 per cent for the 35-49 age group. Deliveries to women in the poorest quintile are less likely to be attended by a doctor (68.3 per cent) compared to women in other wealth index quintiles. About 6 out of 10 (61.2 per cent) deliveries to women in households headed by a non-Thai speaker are attended by a doctor compared to more than 8 out of 10 in households headed by a Thai speaker.

⁴² Say, L. et al., 'Global causes of maternal death: a WHO systematic analysis', in *The Lancet Global Health*, vol. 2, no. 6, 2014: e323-33. DOI: 10.1016/S2214-109X(14)70227-X

Table RH.10 Assistance during delivery and caesarian section

Per cent distribution of women age 15-49 years with a live birth in the last two years by person providing assistance at delivery, and percentage of births delivered by C-section, Thailand MICS, 2015-2016

	Person assisting at delivery										Per cent delivered by C-section			Number of women who had a live birth in the last two years
	Medical doctor	Nurse/ Midwife	Health center staff/ nurse's aide	Community health worker	Relative/ Friend	Other/ Missing	No attendant	Total	Delivery assisted by any skilled attendant ^{1,a}	Decided before onset of labour pains	Decided after onset of labour pains	Total ²		
Total	82.1	16.1	1.0	0.0	0.4	0.3	0.2	100.0	99.1	21.2	11.6	32.7	2,092	
Region														
Bangkok	98.3	0.6	0.0	0.0	0.0	0.0	1.1	100.0	98.9	35.1	11.4	46.5	231	
Central	84.6	14.9	0.4	0.0	0.0	0.1	0.0	100.0	99.9	19.8	12.1	31.9	713	
North	78.4	18.1	1.0	0.1	2.1	0.4	0.0	100.0	97.4	18.9	16.6	35.5	354	
Northeast	77.2	20.8	1.3	0.0	0.0	0.6	0.0	100.0	99.4	17.6	7.6	25.1	437	
South	76.1	20.5	2.4	0.0	0.1	0.6	0.2	100.0	99.1	21.7	10.5	32.2	359	
Area														
Urban	87.4	10.7	0.6	0.0	0.7	0.3	0.3	100.0	98.7	26.0	11.6	37.6	932	
Rural	77.8	20.4	1.3	0.0	0.1	0.3	0.1	100.0	99.5	17.3	11.6	28.8	1,160	
Mother's age at birth														
Less than 20	77.7	21.4	0.3	0.0	0.0	0.6	0.0	100.0	99.4	11.2	8.8	20.0	319	
20-34	82.3	15.5	1.2	0.0	0.5	0.3	0.2	100.0	98.9	19.9	12.2	32.1	1,464	
35-49	85.5	13.3	1.0	0.0	0.1	0.1	0.1	100.0	99.7	37.5	11.3	48.8	309	
Place of delivery														
Home	(7.9)	(4.8)	(4.3)	(1.2)	(41.8)	(21.0)	(18.9)	100.0	(17.1)	(0.0)	(0.0)	(0.0)	18	
Health facility	82.8	16.2	1.0	0.0	0.0	0.0	0.0	100.0	100.0	21.5	11.7	33.2	2,063	
Public	81.0	17.9	1.1	0.0	0.0	0.0	0.0	100.0	100.0	17.8	11.9	29.8	1,856	
Private	99.1	0.9	0.0	0.0	0.0	0.0	0.0	100.0	100.0	54.3	9.8	64.1	207	
Other/DK/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	11	

Table RH.10 Assistance during delivery and caesarian section (continued)

Per cent distribution of women age 15-49 years with a live birth in the last two years by person providing assistance at delivery, and percentage of births delivered by C-section, Thailand MICS, 2015-2016

	Person assisting at delivery					Total	Delivery assisted by any skilled attendant ^{1,a}	Per cent delivered by C-section		Number of women who had a live birth in the last two years			
	Medical doctor	Nurse/Midwife	Health center staff/nurse's aide	Community health worker	Relative/Friend			Other/Missing	No attendant		Decided before onset of labour pains	Decided after onset of labour pains	Total ²
Woman's education													
None	49.7	40.0	2.0	0.2	6.6	1.5	0.0	100.0	91.8	1.7	10.2	11.9	103
Primary	71.9	24.9	2.9	0.0	0.2	0.1	0.1	100.0	99.6	14.9	7.4	22.3	300
Secondary	82.4	16.2	0.8	0.0	0.0	0.3	0.3	100.0	99.4	18.5	9.3	27.9	1,173
Higher	93.7	5.8	0.2	0.0	0.0	0.3	0.0	100.0	99.7	34.8	19.4	54.2	514
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	1
Wealth index quintile													
Poorest	68.3	27.3	2.2	0.1	0.3	1.7	0.1	100.0	97.9	7.8	7.1	15.0	305
Second	72.5	24.3	1.8	0.0	1.4	0.1	0.0	100.0	98.6	15.4	11.3	26.7	491
Middle	79.8	18.8	1.1	0.0	0.0	0.1	0.2	100.0	99.7	13.5	13.4	26.8	425
Fourth	92.2	7.0	0.1	0.0	0.0	0.2	0.5	100.0	99.3	30.1	12.0	42.0	540
Richest	95.2	4.8	0.0	0.0	0.0	0.0	0.0	100.0	100.0	37.5	13.1	50.5	331
Language of household head													
Thai	84.4	14.4	0.7	0.0	0.0	0.2	0.2	100.0	99.6	22.8	11.8	34.6	1,881
Non-Thai	61.2	30.5	3.5	0.1	3.6	1.2	0.0	100.0	95.2	6.5	9.9	16.5	211

¹ MICS indicator 5.7; MDG indicator 5.2 - Skilled attendant at delivery

² MICS indicator 5.9 - Caesarean section

^a Skilled attendants include Medical doctor, Nurse/Midwife and Health center staff/nurse's aide.

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

Figure RH.3: Delivery assisted by medical doctor, Thailand MICS, 2015-2016

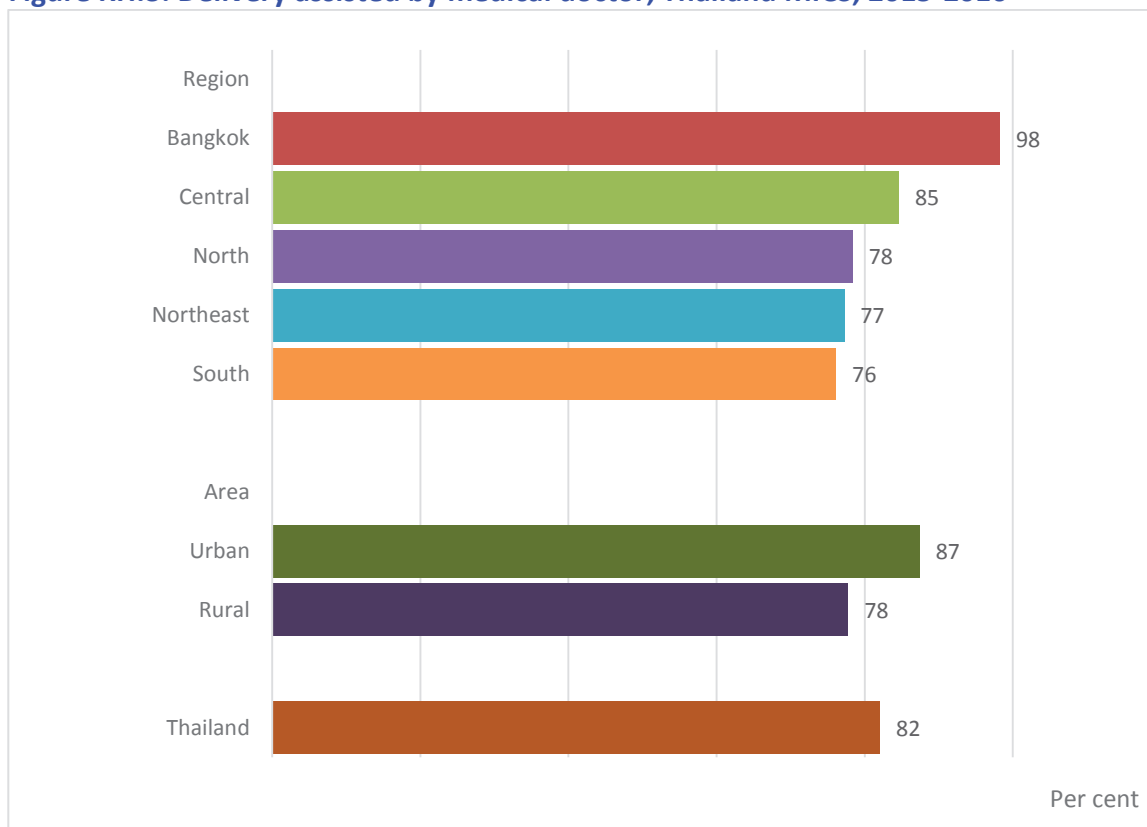


Table RH.10 also shows information on women who delivered by caesarian section (C-section) and provides additional information on the timing of the decision to conduct a C-section (before labour pains began or after) in order to better assess if such decisions are mostly driven by medical or non-medical reasons.

Overall, one third of women (32.7 per cent) who delivered in the last two years had a C-section; for 21.2 per cent of women, the decision was taken before the onset of labour pains and for 11.6 per cent it was taken after. C-sections are most common in Bangkok. Almost half the births (46.5 per cent) in Bangkok were delivered by C-section compared to one in four births (25.1 per cent) in the Northeast. One in five (20.0 per cent) births to women under 20 years of age were delivered through C-section compared to 48.8 per cent to women in the 35-49-year-old age group. C-section deliveries are more common in private health facilities. Interestingly, majority of C-section deliveries in private health facilities were decided before the onset of labour pains. A majority of higher educated women (54.2 per cent) and women in the richest households (50.5 per cent) prefer to give birth through a C-section. Women in non-Thai-speaking headed households are less likely to have C-section births (16.5 per cent) compared to 34.6 per cent of women in households headed by a Thai speaker. In the majority of C-section births to women in non-Thai-speaking headed households, the C-section was decided after the onset of labour pains (9.9 per cent).

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.11 presents the per cent distribution of women aged 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.11 Place of delivery								
Per cent distribution of women age 15-49 years with a live birth in the last two years by place of delivery of their last birth, Thailand MICS, 2015-2016								
	Place of delivery					Total	Delivered in health facility ¹	Number of women with a live birth in the last two years
	Health facility		Home	Other	Missing/DK			
	Public sector	Private sector						
Total	88.7	9.9	0.9	0.1	0.4	100.0	98.6	2,092
Region								
Bangkok	68.7	30.2	1.1	0.0	0.0	100.0	98.9	231
Central	88.0	10.8	0.3	0.0	0.9	100.0	98.8	713
North	90.7	6.4	3.0	0.0	0.0	100.0	97.0	354
Northeast	95.7	3.7	0.2	0.0	0.4	100.0	99.4	437
South	92.6	6.1	0.6	0.3	0.4	100.0	98.7	359
Area								
Urban	81.4	16.2	1.4	0.1	0.9	100.0	97.6	932
Rural	94.6	4.8	0.4	0.0	0.1	100.0	99.4	1,160
Mother's age at birth								
Less than 20	95.0	4.3	0.6	0.0	0.0	100.0	99.4	319
20-34	88.7	9.6	1.1	0.1	0.6	100.0	98.3	1,464
35-49	82.5	17.1	0.2	0.1	0.1	100.0	99.6	309
Number of antenatal care visits								
None	54.3	0.1	21.8	0.0	23.8	100.0	54.4	39
1-3 visits	92.0	2.7	4.9	0.3	0.0	100.0	94.8	75
4+ visits	89.3	10.3	0.3	0.1	0.0	100.0	99.6	1,901
Missing/DK	89.2	10.7	0.1	0.0	0.0	100.0	99.9	78
Woman's education								
None	84.5	0.2	9.2	0.0	6.2	100.0	84.6	103
Primary	95.2	3.9	0.5	0.4	0.1	100.0	99.0	300
Secondary	90.9	8.5	0.5	0.0	0.1	100.0	99.4	1,173
Higher	81.0	18.5	0.3	0.0	0.3	100.0	99.4	514
Missing/DK	(*)	(*)	(*)	(*)	(*)	100.0	(*)	1
Wealth index quintile								
Poorest	95.8	1.2	2.0	0.4	0.6	100.0	97.0	305
Second	93.5	3.7	1.5	0.0	1.3	100.0	97.2	491
Middle	95.6	4.1	0.2	0.0	0.0	100.0	99.8	425
Fourth	86.7	12.6	0.5	0.0	0.2	100.0	99.3	540
Richest	69.4	30.1	0.4	0.0	0.0	100.0	99.6	331
Language of household head								
Thai	88.2	10.9	0.4	0.0	0.5	100.0	99.1	1,881
Non-Thai	92.9	1.0	5.4	0.5	0.1	100.0	93.9	211

¹ MICS indicator 5.8 - Institutional deliveries

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

About 98.6 per cent of births in Thailand are delivered in a health facility; 88.7 per cent of deliveries occur in public sector facilities and 9.9 per cent in private sector facilities. Very few births (0.9 per cent) take place at home. Women in rural areas are somewhat more likely to deliver in a health facility than their urban counterparts (99.4 per cent compared with 97.6 per cent). The proportion of institutional deliveries does not vary much by region, being lowest (97.0 per cent) in the North and highest (99.4 per cent) in the Northeast. Women with some level of educational attainment are more likely to deliver in a health facility than women with no education. A large proportion of women who received no antenatal care services delivered at home (21.8 per cent). A public health facility is the most common place of delivery for women in the poorest households (95.8 per cent) and the least common for women in the richest households (69.4 per cent). Similarly, the higher a mother's education is the greater the likelihood for delivery in a private health facility. Almost all women living in households headed by non-Thai speakers, who had institutional deliveries, delivered at a public health facility.

Post-natal Health Checks

The time of birth and immediately after is a critical window of opportunity to deliver lifesaving interventions for both the mother and newborn. Across the world, approximately 3 million newborns annually die in the first month of life⁴³ and the majority of these deaths occur within a day or two of birth,⁴⁴ which is also the time when the majority of maternal deaths occur.⁴⁵

Despite the importance of the first few days following birth, large-scale, nationally representative household survey programmes have not systematically included questions on the post-natal period and care for the mother and newborn. In 2008, the Countdown to 2015 initiative, which monitors progress on maternal, newborn and child health interventions, highlighted this data gap, and called not only for post-natal care (PNC) programmes to be strengthened, but also for better data availability and quality.⁴⁶

PNC programmes in Thailand involve examinations of both the mother and the child. Both should receive health checks and/or post-natal care visits from a health provider after birth in three different time periods: 1) within seven days after the day of birth, 2) during 8-15 days after the day of birth, and 3) during 16-42 days after the day of birth.

Table RH.S3 presents information collected on post-natal health checks of the mother within 42 days of delivery. Overall, 78.1 per cent of mothers receive at least one post-natal health check following birth while in a facility or at home. This percentage varies by region: it is highest in Bangkok (86.0 per cent) and lowest (74.5 per cent) in the North region.

Table RH.S3 also shows the percentage of women who had at least three post-natal health checks within 42 day of delivery. Only 3.0 per cent of mothers had at least three post-natal health checks within 42 days of delivery. For regions the percentage ranges from 1.6 per cent in the Central region to 8.1 per cent in Bangkok. Women in urban areas are more likely to have at least three post-natal health checks. Women who had deliveries at private health facilities are almost three times as likely to have three or more post-natal health checks compared to mothers who had deliveries in a public health facility. Interestingly, 4.8 per cent of women living in households headed by a non-Thai speaker had at least three post-natal health checks within 42 days compared to 2.8 per cent of women from households headed by a Thai speaker.

⁴³ UN Interagency Group for Child Mortality Estimation, *Levels and Trends in Child Mortality: Report 2013*.

⁴⁴ Lawn, J.E. et al., '4 million neonatal deaths: When? Where? Why?' in *The Lancet*, 2005; 365:891-900.

⁴⁵ WHO, UNICEF, UNFPA, The World Bank, *Trends in Maternal Mortality: 1990-2010*, World Health Organization, 2012.

⁴⁶ HMN, UNICEF, WHO, *Countdown to 2015: Tracking Progress in Maternal, Newborn & Child Survival, The 2008 Report*, UNICEF.

Table RH.S3 Post-natal health checks for mothers

Percentage of women age 15-49 years with a live birth in the last two years who received health checks within 42 days following birth, per cent distribution who received post-natal health checks visits from any health provider after birth at the time of last birth, by number of visits, Thailand, 2015-2016

	Number of post-natal health checks within 42 days of delivery							Total	At least one post-natal health check within 42 days of delivery	At least three post-natal health checks within 42 days of delivery	Number of women with a live birth in the last two years
	No post-natal health checks	Once	Twice	Three times	Four times or more	Missing/DK					
Total	18.2	56.1	19.0	1.7	1.3	3.7	100.0	78.1	3.0	2,092	
Region											
Bangkok	12.9	59.5	18.3	3.0	5.1	1.2	100.0	86.0	8.1	231	
Central	13.0	48.0	29.9	0.3	1.2	7.5	100.0	79.5	1.6	713	
North	25.2	64.7	7.1	2.4	0.3	0.3	100.0	74.5	2.8	354	
Northeast	19.9	60.4	13.1	2.4	1.0	3.2	100.0	77.0	3.5	437	
South	23.4	56.2	16.7	1.7	0.5	1.5	100.0	75.1	2.2	359	
Area											
Urban	14.8	57.3	18.7	1.7	1.8	5.6	100.0	79.6	3.6	932	
Rural	21.0	55.1	19.2	1.6	0.9	2.1	100.0	76.9	2.5	1,160	
Mother's age at birth											
Less than 20	18.0	63.7	13.8	0.9	1.8	1.8	100.0	80.1	2.6	319	
20-34	18.5	55.3	18.6	1.8	1.3	4.5	100.0	77.0	3.1	1,464	
35-49	17.2	52.2	26.3	1.6	1.2	1.5	100.0	81.3	2.8	309	
Place of delivery											
Home	(82.1)	(11.8)	(3.7)	(2.3)	(0.0)	(0.0)	100.0	(17.9)	(2.3)	18	
Health facility	17.6	56.8	19.2	1.7	1.4	3.4	100.0	79.0	3.0	2,063	
Public	18.1	58.5	18.0	1.5	1.0	3.0	100.0	78.9	2.5	1,856	
Private	13.2	41.7	30.7	2.9	4.5	7.1	100.0	79.8	7.3	207	
Other/DK/Missing	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	11	

Table RH.S3 Post-natal health checks for mothers (continued)

Percentage of women age 15-49 years with a live birth in the last two years who received health checks within 42 days following birth, per cent distribution who received post-natal health checks visits from any health provider after birth at the time of last birth, by number of visits, Thailand, 2015-2016

	Number of post-natal health checks within 42 days of delivery							Total	At least one post-natal health check within 42 days of delivery	At least three post-natal health checks within 42 days of delivery ¹	Number of women with a live birth in the last two years
	No post-natal health checks	Once	Twice	Three times	Four times or more	Missing/DK					
Type of delivery											
Vaginal birth	17.7	57.3	18.2	1.9	1.3	3.6	100.0	78.7	3.2	1,393	
C-section	19.4	53.6	20.6	1.1	1.5	3.7	100.0	76.9	2.6	699	
Woman's education											
None	23.4	63.1	3.1	4.0	0.0	6.4	100.0	70.2	4.0	103	
Primary	25.5	58.3	7.9	2.0	1.2	5.2	100.0	69.3	3.2	300	
Secondary	18.0	56.4	19.8	1.2	1.8	2.8	100.0	79.2	3.0	1,173	
Higher	13.3	52.9	26.9	2.0	0.6	4.2	100.0	82.5	2.6	514	
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	1	
Wealth index quintile											
Poorest	20.3	59.1	16.2	1.7	1.0	1.7	100.0	78.0	2.7	305	
Second	22.0	62.5	7.8	2.9	1.6	3.2	100.0	74.8	4.5	491	
Middle	19.8	63.8	11.0	0.5	1.9	3.0	100.0	77.2	2.4	425	
Fourth	18.1	47.2	28.3	0.8	0.8	4.8	100.0	77.1	1.6	540	
Richest	9.0	48.5	33.3	2.6	1.5	5.2	100.0	85.9	4.1	331	
Language of household head											
Thai	17.1	56.9	19.5	1.3	1.5	3.6	100.0	79.2	2.8	1,881	
Non-Thai	28.2	48.6	14.7	4.5	0.3	3.7	100.0	68.1	4.8	211	
¹ County specific indicator 5.S10 – Post-natal health check											
() Figures that are based on 25-49 unweighted cases											
(*) Figures that are based on less than 25 unweighted cases											

VIII. EARLY CHILDHOOD DEVELOPMENT



VIII. Early Childhood Development

Early Childhood Care and Education

The readiness of children for primary school can be improved through attending early childhood education programmes or by attendance at pre-school. Early childhood education programmes include those that have organized learning components as opposed to baby-sitting and day-care, which do not typically have organized education and learning.

Given that early childhood development is the foundation of human development, the Thai Government is aware of the importance of early childhood care and education. On 22 May 2007, the Cabinet approved the policy and strategic development plan for pre-school-age children (0-5 years). This long-term plan (2007-2016) has assigned related ministries and agencies to share responsibility for policy implementation to achieve concrete results. The plan aims to develop various aspects of early childhood development, including the physical, intellectual, emotional, mental, social and ethical domains.

Table CD.1: Early childhood education		
Percentage of children age 36-59 months who are attending an organized early childhood education programme, Thailand MICS, 2015-2016		
	Percentage of children age 36-59 months attending early childhood education ¹	Number of children age 36-59 months
Total	84.7	5,079
Sex		
Male	84.2	2,580
Female	85.1	2,499
Region		
Bangkok	63.4	500
Central	82.4	1,439
North	89.2	794
Northeast	92.8	1,564
South	81.5	781
Area		
Urban	81.6	2,093
Rural	86.8	2,986
Age of child		
36-47 months	75.4	2,560
48-59 months	94.1	2,519
Mother's education		
None	64.1	215
Primary	85.8	1,690
Secondary	85.1	2,122
Higher	86.2	1,050
Missing/DK	(*)	2
Wealth index quintile		
Poorest	86.3	1,196
Second	87.2	1,030
Middle	84.4	919
Fourth	81.5	1,086
Richest	83.5	848
Language of household head		
Thai	86.0	4,625
Non-Thai	70.7	454

¹ MICS indicator 6.1 - Attendance to early childhood education

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

In Thailand, 84.7 per cent of children aged 36-59 months are attending an organized early childhood education programme (Table CD.1). Urban-rural and regional differentials are notable, with 86.8 per cent attendance in rural areas compared to 81.6 per cent in urban areas. Among children aged 36-59 months, attendance in early childhood education programmes is more prevalent in the Northeast (92.8 per cent) and lowest in Bangkok (63.4 per cent). No major gender differentials exist, but small variations by socio-economic status are seen (ranging between 81.0 and 87.0 per cent). However, differentials by the child's age and the mother's education appear to be highly visible. Among children aged 48-59 months, 94.1 per cent attend early childhood education programmes against 75.4 per cent among children in the 36-47-month age group. Children whose mothers have no education are least likely to attend such programmes (64.1 per cent) compared to at least 85 per cent of children whose mothers have some education. Similarly, 7 out of 10 (70.7 per cent) children living in households headed by a non-Thai-speaking household head attend compared to nearly 9 out of 10 (86.0 per cent) children living in households headed by a Thai speaker.

Quality of Care

It is well recognized that a period of rapid brain development occurs in the first three to four years of life and that the quality of home care is a major determinant of the child's development during this period.⁴⁷ In this context, engagement of adults in activities with children, the presence of books in the home for the child and the conditions of care are important indicators of the quality of home care. As set out in *A World Fit for Children*, children should be nurtured in a "safe environment that enables them to be physically healthy, mentally alert, emotionally secure, socially competent and able to learn".⁴⁸

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 92.7 per cent of children aged 36-59 months, an adult household member engaged in four or more activities that promote learning and school readiness during the three days preceding the survey (Table CD.2). The mean number of activities that adults engaged in with children was 5.3. The table also indicates that the father's involvement in such activities was somewhat limited. The father's involvement in four or more activities was 34.0 per cent, almost half the level of the mother's involvement (62.8 per cent).

The mother's involvement in four or more activities was lower in rural areas (56.3 per cent) than in urban areas (72.1 per cent). The father's involvement in four or more activities was lowest in the Northeast (26.7 per cent), while only half (50.8 per cent) of biological mothers in this region engaged in four or more activities. Mothers with no education are more likely (40.2 per cent) to engage in four or more activities with their children compared to mothers with primary education (32.5 per cent). However, the percentage of children whose biological mother engaged in four or more activities sharply

⁴⁷ Grantham-McGregor, Sally, et al., 'Developmental Potential in the First 5 Years for Children in Developing Countries', in *The Lancet*, vol. 369, no. 9555, 6 January 2007, pp. 60-70; Belsky, Jay, et al., 'Socioeconomic Risk, Parenting During the Preschool Years and Child Health Age 6 Years', in *European Journal of Public Health*, vol. 17, no. 5, 14 December 2006, pp. 508-513.

⁴⁸ United Nations, *A World Fit For Children* adopted by the UN General Assembly at the 27th Special Session of the UN General Assembly, 10 May 2002, Annex, no. 7 para. 4.

increased to 76.4 per cent among children born to secondary educated mothers and 88.8 per cent among children born to higher educated mothers.

Among children aged 36-59 months living with a biological parent, more than one third (37.7 per cent) live without their biological father and 24.9 per cent live without their biological mother. It was interesting to note that the proportion of children in the Northeast living with a biological parent was lowest compared to other regions, with 48.2 per cent living with their biological father and 60.6 per cent living with their biological mother. In contrast, living with a biological parent was very common in Bangkok, where 74.6 per cent and 86.6 per cent live with their biological father and biological mother respectively. The wealth index quintile is positively correlated with the percentage of children living with their biological father or mother.

Table CD.2: Support for learning

Percentage of children age 36-59 months with whom adult household members engaged in activities that promote learning and school readiness during the last three days, and engagement in such activities by biological fathers and mothers, Thailand MICS, 2015-2016

	Percentage of children with whom adult household members have engaged in four or more activities ¹	Mean number of activities with adult household members	Percentage of children living with their:	Number of children age 36-59 months	Percentage of children with whom biological fathers have engaged in four or more activities ²	Mean number of activities with biological fathers	Number of children age 36-59 months living with Their biological Fathers	Percentage of children with whom biological mothers have engaged in four or more activities ³	Mean number of activities with biological mothers	Number of children age 36-59 months living with their biological mothers
Total	92.7	5.3	62.3 75.1	5,079	34.0	2.3	3,163	62.8	3.7	3,816
Sex										
Male	93.1	5.3	60.0 74.8	2,580	32.7	2.2	1,548	62.8	3.6	1,930
Female	92.2	5.4	64.6 75.5	2,499	35.3	2.4	1,615	62.7	3.7	1,886
Region										
Bangkok	96.9	5.6	74.6 86.6	500	47.3	3.0	373	75.7	4.4	433
Central	95.8	5.4	67.9 83.7	1,439	33.9	2.4	978	70.7	4.1	1,205
North	84.8	5.0	60.7 70.3	794	32.9	2.3	482	53.9	3.2	558
Northeast	92.0	5.3	48.2 60.6	1,564	26.7	1.7	754	50.8	2.9	948
South	93.6	5.4	73.8 85.8	781	41.5	2.8	577	72.9	4.3	671
Area										
Urban	96.0	5.5	66.4 81.2	2,093	37.1	2.5	1,391	72.1	4.1	1,700
Rural	90.4	5.2	59.4 70.8	2,986	31.8	2.2	1,772	56.3	3.3	2,115
Age										
36-47 months	91.3	5.3	60.0 73.5	2,560	31.9	2.2	1,537	60.2	3.5	1,881
48-59 months	94.1	5.4	64.6 76.8	2,519	36.1	2.4	1,626	65.4	3.8	1,935
Mother's education^a										
None	73.3	4.7	60.3 58.0	215	36.9	2.4	129	40.2	2.5	125
Primary	90.3	5.1	42.0 43.8	1,690	19.7	1.4	709	32.5	2.0	740
Secondary	94.7	5.4	69.5 91.5	2,122	35.2	2.5	1,474	76.4	4.4	1,942
Higher	96.4	5.6	80.9 96.0	1,050	54.0	3.4	849	88.8	5.1	1,008
Missing/DK	(*)	(*)	(*) (*)	2	(*)	(*)	2	(*)	(*)	2

Table CD.2: Support for learning (continued)

Percentage of children age 36-59 months with whom adult household members engaged in activities that promote learning and school readiness during the last three days, and engagement in such activities by biological fathers and mothers, Thailand MICS, 2015-2016											
	Percentage of children with whom adult household members have engaged in four or more activities ¹	Mean number of activities with adult household members	Percentage of children living with their:		Number of children age 36-59 months	Percentage of children with whom biological fathers have engaged in four or more activities ²	Mean number of activities With biological fathers	Number of children age 36-59 months living with their biological fathers	Percentage of children with whom biological mothers have engaged in four or more activities ³	Mean number of activities with biological mothers	Number of children age 36-59 months living with their biological mothers
			Biological father	Biological mother							
Father's education											
None	78.8	4.9	100.0	95.4	96	42.8	3.5	96	52.7	3.9	91
Primary	93.7	5.4	100.0	94.6	885	49.3	3.4	885	77.3	4.5	837
Secondary	94.8	5.4	100.0	94.8	1,517	52.7	3.7	1,517	79.8	4.6	1,438
Higher	96.9	5.6	100.0	94.3	663	67.7	4.2	663	87.2	5.0	626
Father not in the household	89.7	5.2	0.0	42.9	1,916	0.0	0.0	0	34.7	2.0	821
Missing/DK	(*)	(*)	(*)	(*)	3	(*)	(*)	3	(*)	(*)	3
Wealth index quintile											
Poorest	86.6	5.1	50.2	59.9	1,196	24.7	1.7	600	45.6	2.7	717
Second	91.5	5.2	54.5	67.8	1,030	25.7	1.8	561	51.9	3.1	699
Middle	92.2	5.3	65.2	79.9	919	35.8	2.5	600	68.7	3.9	734
Fourth	96.3	5.5	69.4	81.0	1,086	36.6	2.6	754	68.2	4.0	879
Richest	98.4	5.7	76.4	92.8	848	51.9	3.2	648	87.1	5.0	787
Language of household head											
Thai	93.0	5.3	61.3	74.6	4,625	33.3	2.3	2,833	62.9	3.7	3,450
Non-Thai	89.7	5.3	72.8	80.6	454	41.1	2.8	330	61.6	3.8	366

¹ MICS indicator 6.2 - Support for learning

² MICS Indicator 6.3 - Father's support for learning

³ MICS Indicator 6.4 - Mother's support for learning

na: not applicable

^a The background characteristic "Mother's education" refers to the education level of the respondent to the Questionnaire for Children Under Five, and covers both mothers and primary caretakers, who are interviewed when the mother is not listed in the same household. Since indicator 6.4 reports on the biological mother's support for learning, this background characteristic refers to only the educational levels of biological mothers when calculated for the indicator in question.

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

Exposure to books in the 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. The presence of books is important for later school performance. The mothers/caretakers of all children under 5 were asked about the number of children's books or picture books they have for the child, and the types of playthings that are available at home.

In Thailand, fewer than half (41.2 per cent) of children aged 0-59 months live in households where at least three children's books are present for the child (Table CD.3). The proportion of children with 10 or more books declines to 13.5 per cent. While no gender differentials are observed, a higher percentage of urban children appear to have access to children's books than those living in rural households. The proportion of children under 5 who have three or more children's books is 47.8 per cent in urban areas compared to 36.7 per cent in rural areas. The presence of children's books is positively correlated with the child's age: in the homes of 54.9 per cent of children aged 24-59 months, there are three or more children's books, while the figure is 18.7 per cent for children aged 0-23 months. In Bangkok, 6 out of 10 children (59.7 per cent) have three or more children's books at home compared to 33.8 per cent in the Northeast.

The mother's education and household wealth status are positively correlated with the percentage of children who have three or more children's books at home. Children in the richest wealth quintile are more than three times more likely (72.6 per cent) to have three or more children's books compared to children in poorest wealth quintile (22.9 per cent). Similarly, 15.4 per cent of children born to mothers with no education have three or more children's books compared to 63.4 per cent of children born to higher educated mothers. Children living in households with a Thai-speaking household head are twice as likely (43.3 per cent) to have three or more children's books compared to children in households headed by a non-Thai speaker (21.2 per cent).

In terms of the presence of 10 or more children's books or picture books in the home, the percentage is only 7.4 per cent for children in the Northeast. However, in Bangkok, one out of three children (33.6 per cent) have access to 10 or more children's books at home. Urban children are twice as likely (19.6 per cent) to have 10 or more children's books compared to their rural counterparts (9.4 per cent). Similarly, older children are more likely to have 10 or more children's books. Mother's education and household wealth status positively contribute towards the percentage of children having age-appropriate books. Among children born to mothers with no education, 1.7 per cent have 10 or more children's books compared to 30.0 per cent of children born to higher educated mothers. Similarly, 2.8 per cent of children in the poorest wealth quintile have 10 or more children's books at home compared to 41.8 per cent of children in the richest quintile households. Children in households headed by a Thai-speaking household head are nearly seven times more likely (14.7 per cent) to have 10 or more books compared to children in households with a non-Thai-speaking household head (2.2 per cent).

Table CD.3 also shows that 75.6 per cent of children aged 0-59 months had two or more kinds of playthings to play with in their homes. Playthings included in the questionnaires were 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). The questionnaire also included a survey-specific question on the use of electronic devices as a type of plaything but this question has not been included in the calculation of the standard MICS indicator 6.6. It is interesting to note that 90.9 per cent of children play with toys that come from a store and only 36.3 per cent of children play with homemade toys. There is no difference in the

percentage of male and female children who play with two or more types of playthings. Some urban-rural differentials are observed in this respect (71.9 per cent and 78.2 per cent respectively).

Interestingly, the percentage of children who play with two or more types of playthings is lowest in Bangkok (65.3 per cent) compared to any other region. Older children (24-59 months) are more likely (89.4 per cent) to play with two or more types of playthings compared to their younger counterparts (52.9 per cent.) This percentage is highest among children in the poorest households (81.3 per cent) and children born to primary educated mothers (80.0 per cent).

Table CD.3 also shows that more than half of children (50.9 per cent) have access to electronic devices as play things (such as mobile phones, tablets and game players). The percentage of girls playing with electronic devices is slightly higher than boys (53.1 per cent and 48.9 per cent respectively). Considering regional variations, the percentages of children in Bangkok and the South region who play with electronic devices are higher than in other regions. Children in rural areas are less likely to play with the devices compared to children in urban areas. Nearly 7 out of 10 (67.1 per cent) children aged 2 years and older play with electronic devices. The results further reveal that the mother's education and household wealth status are positively associated with the percentage of children who play with electronic devices.

Table CD.3: Learning materials

Percentage of children under 5 by numbers of children's books present in the household, and by playthings that child plays with, Thailand MICS, 2015-2016									
	Percentage of children living in households that have for the child:			Percentage of children who play with:					Number of children under age 5
	3 or more children's books ¹	10 or more children's books	13.5	Homemade Toys	Toys from a shop/ manufactured toys	Household objects/objects found outside	Two or more types of playthings ²	Electronic Devices (Mobile phones, tablets and game players) ³	
Total	41.2	13.5	36.3	90.9	72.8	75.6	50.9	12,250	
Sex									
Male	40.2	13.1	37.5	91.4	72.8	75.4	48.9	6,392	
Female	42.3	13.9	34.9	90.5	72.8	75.8	53.1	5,858	
Region									
Bangkok	59.7	33.6	34.2	87.2	61.4	65.3	56.0	1,146	
Central	47.0	15.2	31.2	92.1	72.0	74.2	47.4	3,546	
North	37.0	12.3	26.4	89.6	76.0	76.5	45.9	2,084	
Northeast	33.8	7.4	41.7	92.3	75.1	78.3	52.6	3,545	
South	37.8	11.1	47.5	89.9	73.5	78.3	56.7	1,929	
Area									
Urban	47.8	19.6	34.6	91.5	68.4	71.9	55.3	4,988	
Rural	36.7	9.4	37.4	90.5	75.9	78.2	47.9	7,262	
Age									
0-23 months	18.7	5.3	22.1	78.1	50.0	52.9	24.2	4,622	
24-59 months	54.9	18.5	44.9	98.7	86.7	89.4	67.1	7,628	
Mother's education									
None	15.4	1.7	32.3	82.9	64.9	65.3	23.9	587	
Primary	28.7	5.5	37.8	92.7	77.7	80.0	44.6	3,557	
Secondary	41.8	12.3	37.2	90.9	74.1	76.9	53.3	5,562	
Higher	63.4	30.0	33.0	90.5	65.0	69.0	60.8	2,537	
Missing/DK	(12.6)	(5.0)	(10.3)	(68.9)	(63.7)	(52.5)	(25.7)	6	
Wealth index quintile									
Poorest	22.9	2.8	39.9	92.6	79.3	81.3	40.1	2,565	
Second	29.9	5.1	36.2	89.8	73.4	75.5	43.9	2,675	
Middle	40.2	8.9	42.8	91.0	74.9	78.7	51.5	2,366	
Fourth	48.5	16.1	31.2	90.4	71.7	73.6	54.8	2,727	
Richest	72.6	41.8	30.6	91.0	62.5	67.3	68.8	1,917	
Language of household head									
Thai	43.3	14.7	36.1	91.5	73.3	76.0	52.6	11,112	
Non-Thai	21.2	2.2	37.7	85.1	67.8	71.5	34.3	1,138	

¹ MICS indicator 6.5 - Availability of children's books

² MICS indicator 6.6 - Availability of playthings

³ Country specific indicator 6.S6 - Availability of playthings (Electronic Devices)

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

Table CD.4: Inadequate care				
Percentage of children under 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, Thailand MICS, 2015-2016				
	Percentage of children under age 5:			Number of children under age 5
	Left alone in the past week	Left in the care of another child younger than 10 years of age in the past week	Left with inadequate care in the past week ¹	
Total	2.2	5.0	6.1	12,250
Sex				
Male	2.1	4.5	5.9	6,392
Female	2.2	5.5	6.3	5,858
Region				
Bangkok	1.7	2.5	4.2	1,146
Central	1.3	3.8	4.9	3,546
North	2.5	3.6	4.8	2,084
Northeast	2.9	6.9	7.8	3,545
South	2.2	6.7	7.7	1,929
Area				
Urban	1.4	4.3	5.1	4,988
Rural	2.7	5.5	6.8	7,262
Age				
0-23 months	1.3	2.2	3.2	4,622
24-59 months	2.7	6.7	7.9	7,628
Mother's education				
None	3.2	2.6	5.1	587
Primary	3.0	7.1	8.2	3,557
Secondary	2.2	4.6	6.1	5,562
Higher	0.7	3.3	3.6	2,537
Missing/DK	(1.9)	(2.6)	(2.6)	6
Wealth index quintile				
Poorest	2.8	6.2	7.6	2,565
Second	2.4	6.6	7.7	2,675
Middle	2.6	5.0	5.9	2,366
Fourth	2.3	4.0	5.7	2,727
Richest	0.4	2.5	2.7	1,917
Language of household head				
Thai	1.7	4.5	5.4	11,112
Non-Thai	6.8	10.0	12.6	1,138
¹ MICS indicator 6.7 - Inadequate care				
() Figures that are based on 25-49 unweighted cases				

Leaving children alone or in the presence of other young children is known to increase the risk of injuries.⁴⁹ In the 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 5.0 per cent of children aged 0-59 months were left in the care of other children, while 2.2 per cent were left alone during the week preceding the interview. Combining the two care indicators, it is calculated that a total of 6.1 per cent of children were left with inadequate care during the previous week, either by being left alone or in the care of another child. No major differences were

⁴⁹ Grossman, David C., 'The History of Injury Control and the Epidemiology of Child and Adolescent Injuries', in *The Future of Children*, vol. 10, no. 1, Spring/Summer 2000, pp. 23-52.

observed by the sex of the child. However, a slightly higher percentage of children in rural areas (6.8 per cent) were left with inadequate care in the previous week compared to children in urban areas (5.1 per cent). Regionally, inadequate care was more prevalent among children in the Northeast followed by the South (7.8 per cent and 7.7 per cent respectively). Children aged 24-59 months are more than twice as likely (7.9 per cent) to be left with inadequate care compared to children aged 0-23 months (3.2 per cent). Children of mothers with primary education were more likely to be left with inadequate care (8.2 per cent) than children whose mothers had higher education (3.6 per cent). Children in the richest wealth quintile are the least likely (2.7 per cent) to be left with inadequate care compared to children in the poorest households (7.6 per cent). It is interesting to note that children living in households headed by a non-Thai speaker were more vulnerable to being left alone (6.8 per cent), left in the care of other children less than 10 years of age (10.0 per cent) and left with inadequate care (12.6 per cent) during the previous week compared to children from Thai-speaking households.

Developmental Status of Children

Early childhood 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.⁵⁰

A 10-item module was used to calculate the Early Child Development Index (ECDI). The primary purpose of the ECDI is to inform public policy regarding the developmental status of children in Thailand. The index is based on selected milestones that children are expected to achieve by ages 3 and 4. The 10 items are used to determine if children are developmentally on track in four domains:

- Literacy-numeracy: Children are identified as being developmentally on track based on whether they can identify/name at least 10 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.

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

In Thailand, 91.1 per cent of children aged 36-59 months are developmentally on track. The ECDI is slightly higher among girls (92.1 per cent) than boys (90.2 per cent). Regionally, the Central region has a higher percentage of children (94.0 per cent) developmentally on track than other regions. No major difference was observed between children living in urban and rural areas. As expected, the ECDI is higher (95.6 per cent) in the older age group (48-59 months) than among those aged 36-47 months (86.7 per cent) since children acquire more skills with age. A higher ECDI is seen in children attending an early childhood education programme (93.4 per cent) compared to those who are not attending (78.6 per cent). Children born to higher educated mothers are also more likely (95.4 per cent) to be developmentally on track compared to children born to mothers with no education (82.1 per cent). Children living in the poorest households have a lower ECDI (87.0 per cent) than children living in the richest households (96.0 per cent). Similarly, children living in households with a Thai-speaking household head are more likely to be developmentally on track than children in households headed by a non-Thai speaker.

⁵⁰ Shonkoff, Jack, and Debra Phillips, eds., *From neurons to neighborhoods: the science of early childhood development*, Committee on Integrating the Science of Early Childhood Development, National Research Council and Institute of Medicine, National Academy Press, Washington, D.C., 2000.

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, Thailand MICS, 2015-2016						
	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		
Total	69.3	97.7	79.4	97.6	91.1	5,079
Sex						
Male	67.9	97.8	76.3	97.5	90.2	2,580
Female	70.8	97.7	82.6	97.6	92.1	2,499
Region						
Bangkok	76.0	97.6	79.4	97.8	89.5	500
Central	73.5	97.8	83.7	97.3	94.0	1,439
North	62.4	97.9	85.3	97.6	92.3	794
Northeast	67.7	98.1	75.0	98.1	89.5	1,564
South	67.7	96.6	74.4	96.8	89.0	781
Area						
Urban	70.8	97.9	80.5	97.8	91.6	2,093
Rural	68.3	97.6	78.6	97.4	90.8	2,986
Age						
36-47 months	59.4	96.8	76.6	95.5	86.7	2,560
48-59 months	79.5	98.7	82.2	99.6	95.6	2,519
Attendance to early childhood education						
Attending	74.1	99.0	80.5	99.0	93.4	4,299
Not attending	42.9	90.4	73.1	89.6	78.6	780
Mother's education						
None	60.5	99.2	89.1	88.1	82.1	215
Primary	66.4	97.9	76.6	98.2	90.3	1,690
Secondary	69.0	98.2	77.7	97.9	90.6	2,122
Higher	76.6	96.2	85.4	97.8	95.4	1,050
Missing/DK	(*)	(*)	(*)	(*)	(*)	2
Wealth index quintile						
Poorest	57.3	98.3	79.1	96.8	87.0	1,196
Second	66.9	98.6	77.2	98.0	90.6	1,030
Middle	74.3	97.0	81.6	96.6	93.4	919
Fourth	71.9	97.5	76.0	97.6	90.4	1,086
Richest	80.6	96.8	84.6	99.1	96.0	848
Language of household head						
Thai	71.2	97.7	79.3	98.0	91.9	4,625
Non-Thai	50.4	97.5	80.3	93.4	83.1	454

¹ MICS indicator 6.8 - Early child development index

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

The analysis of the four domains of child development shows that 97.7 per cent of children are on track in the physical domain followed by 97.6 per cent in the learning domain, but they are much less on track in the literacy-numeracy (69.3 per cent) and social-emotional (79.4 per cent) domains. It is also observed that almost all children (99.0 per cent) attending early childhood education are developmentally on track in the physical and learning domains. Interestingly, almost all children (99.2 per cent) born to mothers with no education are developmentally on track in the physical domain. In each individual domain, higher scores are observed for children living in the richest households, children attending early childhood education programmes, older children and girls.

IX. LITERACY AND EDUCATION



IX. Literacy and Education

Literacy among Young Women and Men

The Youth Literacy Rate reflects the outcomes of primary education over the previous 10 years or so. As a measure of the effectiveness of the primary education system, it is often seen as a proxy measure for social progress and economic achievement. In the Thailand MICS, questionnaires for both women and men were administered and the results are based on females and males aged 15-24. Literacy is assessed on the ability of the respondent to read a short, simple statement or based on school attendance.

Table ED.1: Literacy (young women)			
Percentage of women age 15-24 years who are literate, Thailand MICS, 2015-2016			
	Percentage literate ¹	Percentage not known	Number of women age 15-24 years
Total	95.4	1.5	6,236
Region			
Bangkok	94.8	1.5	920
Central	91.5	3.4	2,033
North	96.8	0.2	884
Northeast	99.2	0.2	1,503
South	97.1	0.4	896
Area			
Urban	94.7	1.6	2,961
Rural	96.0	1.3	3,276
Education			
None	0.2	13.4	148
Primary	64.5	18.0	390
Secondary	100.0	0.0	4,188
Higher	100.0	0.0	1,508
Missing/DK	(*)	(*)	2
Age			
15-19	97.0	0.8	3,359
20-24	93.5	2.3	2,878
Wealth index quintile			
Poorest	94.2	1.3	937
Second	90.3	3.5	1,279
Middle	96.2	1.5	1,481
Fourth	98.6	0.2	1,372
Richest	97.1	0.9	1,168
Language of household head			
Thai	98.3	0.2	5,655
Non-Thai	66.7	13.4	581
¹ MICS indicator 7.1; MDG indicator 2.3 - Literacy rate among young women			
(*) Figures that are based on less than 25 unweighted cases			

Table ED.1M: Literacy (young men)			
Percentage of men age 15-24 years who are literate, Thailand MICS, 2015-2016			
	Percentage literate ¹	Percentage not known	Number of men age 15-24 years
Total	94.7	1.1	6,197
Region			
Bangkok	95.0	3.2	881
Central	91.4	1.5	2,005
North	96.0	0.1	915
Northeast	98.6	0.0	1,515
South	94.1	0.9	882
Area			
Urban	94.1	1.7	2,967
Rural	95.3	0.5	3,230
Education			
None	16.1	1.5	151
Primary	75.6	7.8	817
Secondary	100.0	0.0	4,217
Higher	100.0	0.0	1,010
Missing/DK	(*)	(*)	1
Age			
15-19	96.3	0.6	3,400
20-24	92.8	1.7	2,797
Wealth index quintile			
Poorest	92.9	0.6	1,197
Second	87.0	2.9	1,375
Middle	96.4	1.2	1,436
Fourth	99.4	0.2	1,167
Richest	99.4	0.0	1,022
Language of household head			
Thai	98.4	0.1	5,545
Non-Thai	63.8	9.5	652
¹ MICS indicator 7.1; MDG indicator 2.3 - Literacy rate among young men ^[M]			
(*) Figures that are based on less than 25 unweighted cases			

Literacy rates are presented in Table ED.1 and Table ED.1M. Table ED.1 indicates that 95.4 per cent of young women in Thailand are literate and that literacy status varies somewhat by area and region. Of women who stated that primary school was their highest level of education, just 64.5 per cent were actually able to read the statement shown to them. Interestingly, almost all women (99.2 per cent) in the 15-24 year age group in the Northeast are literate, with the Central region having the lowest rate (91.5 per cent). Similarly, women in rural areas are slightly more likely to be literate than women in urban areas.

Men in the 15-24 age group showed a 94.7 per cent literacy rate. Slightly more than 9 out of 10 (91.4 per cent) men in the Central region are literate compared to almost all (98.6 per cent) in the Northeast. Three out of four primary educated men were able to read the statement shown to them. Both men and women living in households headed by a non-Thai speaker are the least likely to be literate.

School Readiness

Table ED.2: School readiness		
Percentage of children attending first grade of primary school who attended pre-school the previous year, Thailand MICS, 2015-2016		
	Percentage of children attending first grade who attended preschool in previous year ¹	Number of children attending first grade of primary school
Total	98.7	1,155
Sex		
Male	99.2	585
Female	98.3	570
Region		
Bangkok	96.7	119
Central	96.6	306
North	100.0	175
Northeast	100.0	356
South	99.8	200
Area		
Urban	97.1	488
Rural	99.9	667
Mother's education		
None	100.0	44
Primary	99.2	479
Secondary	97.5	420
Higher	100.0	211
Missing/DK	(*)	1
Wealth index quintile		
Poorest	99.9	211
Second	97.9	188
Middle	100.0	278
Fourth	99.6	227
Richest	96.1	251
Language of household head		
Thai	99.0	1,077
Non-Thai	95.0	78
¹ MICS indicator 7.2 - School readiness		
(*) Figures that are based on less than 25 unweighted cases		

Attendance in pre-school education is important for the readiness of children to go to school. Table ED.2 shows the proportion of children in the first grade of primary school (regardless of age) who attended pre-school the previous year.⁵¹ Overall, 98.7 per cent of children who are currently attending the first grade of primary school were attending pre-school the previous year. The proportion among females is insignificantly different (98.3 per cent) from males (99.2 per cent), while all the children in first grade in the North and Northeast (100.0 per cent) had attended pre-school the previous year compared to 96.6 per cent of children living in the Central region. There is a small difference for urban/rural areas as well. Children attending first grade in urban areas are less likely to have attended pre-school in the previous year. Socio-economic status and the mother's educational level appear to have no significant relation with school readiness.

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 Millennium Development Goals. 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.

In Thailand, children enter primary school at 6 years of age and secondary school at 12. There are six grades in primary school and six grades in secondary school. In primary school, grades are referred to as Prathom 1 to Prathom 6. For secondary school, grades are referred to as Mathayom 1 to Mathayom 6. The school year typically runs from May to the following February.

Of children who are of primary school entry age (age 6) in Thailand, 75.7 per cent are attending the first grade (Table ED.3). Differentials by sex, region and urban-rural area are minimal; however, there are significant differences according to the mother's educational background. For children born to higher educated mothers, the value of the indicator reaches 87.2 per cent, while it is 66.0 per cent for children born to mothers with no education. A positive correlation with socio-economic status is observed: for children age 6 in the poorest households, 66.9 per cent were attending the first grade compared with 80.3 per cent in the richest households. The proportion is 59.7 per cent among children living in households headed by a non-Thai speaker.

⁵¹ The computation of the indicator does not exclude repeaters, and therefore is inclusive of both children who are attending primary school for the first time, as well as those who were in the first grade of primary school the previous school year and are repeating. Children repeating may have attended pre-school prior to the school year during which they attended the first grade of primary school for the first time; these children are not captured in the numerator of the indicator.

Table ED.3: Primary school entry		
Percentage of children of primary school entry age entering grade 1 (net intake rate), Thailand MICS, 2015-2016		
	Percentage of children of primary school entry age entering grade 1 ¹	Number of children of primary school entry age
Total	75.7	1,230
Sex		
Male	75.2	630
Female	76.2	600
Region		
Bangkok	78.9	133
Central	76.8	310
North	74.4	199
Northeast	75.2	381
South	74.1	208
Area		
Urban	75.6	500
Rural	75.8	730
Mother's education		
None	66.0	41
Primary	75.4	505
Secondary	70.5	435
Higher	87.2	248
Missing/DK	(*)	1
Wealth index quintile		
Poorest	66.9	255
Second	75.2	205
Middle	78.8	275
Fourth	77.1	238
Richest	80.3	257
Language of household head		
Thai	76.9	1,146
Non-Thai	59.7	83
¹ MICS indicator 7.3 - Net intake rate in primary education		
(*) Figures that are based on less than 25 unweighted cases		

Table ED.4 provides the percentage of children of primary school age (6 to 11 years) who are attending primary or secondary school⁵² and those who are out of school. The majority of children of primary school age are attending school (94.8 per cent). However, 5.1 per cent of the children are out of school, though primarily due to a very low attendance rate (75.7 per cent) for children age 6, who appear to be starting late in school, as seen by a relatively high percentage (22.5 per cent) attending pre-school. There is no major difference across regions and by area. However, children born to mothers with no education, children living in the poorest households and children in households headed by a non-Thai speaker are more likely to be out of school (13.1 per cent, 6.9 per cent and 10.4 per cent respectively). This trend further increases for male children. For instance, more male children in the poorest households (7.8 per cent) are likely to be out of school compared to female children from the poorest households (5.9 per cent).

⁵² Ratios presented in this table are "adjusted" since they include not only primary school attendance but also secondary school attendance in the numerator.

Table ED.4: Primary school attendance and out of school children

Percentage of children of primary school age attending primary or secondary school (adjusted net attendance ratio), percentage attending preschool, and percentage out of school, Thailand MICS, 2015-2016

	Male						Female						Total			
	Net attendance ratio (adjusted)	Percentage of children:		Number of children	Net attendance ratio (adjusted)	Percentage of children:		Number of children	Net attendance ratio (adjusted) ¹	Percentage of children:		Number of children	Net attendance ratio (adjusted) ¹	Percentage of children:		Number of children
		Not attending school or preschool	Attending preschool			Out of school ^a	Not attending school or preschool			Attending preschool	Out of school ^a			Not attending school or pre-school	Attending preschool	
Total	94.6	1.1	4.1	3,885	95.0	0.9	4.0	3,887	94.8	1.0	4.1	7,772	94.8	1.0	4.1	7,772
Region																
Bangkok	96.2	0.1	3.7	370	93.2	1.1	5.7	383	94.7	0.6	4.7	753	94.7	0.6	4.7	753
Central	94.8	2.1	3.1	1,043	96.4	1.5	2.2	1,053	95.6	1.8	2.6	2,096	95.6	1.8	2.6	2,096
North	92.8	2.5	4.6	598	93.8	1.2	5.0	657	93.3	1.8	4.8	1,256	93.3	1.8	4.8	1,256
Northeast	95.8	0.1	3.7	1,253	94.5	0.5	5.0	1,221	95.2	0.3	4.4	2,474	95.2	0.3	4.4	2,474
South	92.7	0.8	6.5	621	96.3	0.6	3.1	572	94.4	0.7	4.9	1,193	94.4	0.7	4.9	1,193
Area																
Urban	94.7	0.4	4.8	1,594	94.7	1.8	3.5	1,598	94.7	1.1	4.2	3,191	94.7	1.1	4.2	3,191
Rural	94.5	1.6	3.7	2,292	95.2	0.3	4.4	2,289	94.9	1.0	4.0	4,581	94.9	1.0	4.0	4,581
Age at beginning of school year																
6	75.3	1.7	23.1	630	76.2	1.9	21.9	600	75.7	1.8	22.5	1,230	75.7	1.8	22.5	1,230
7	96.8	0.9	2.3	599	96.4	0.2	3.4	658	96.6	0.6	2.9	1,256	96.6	0.6	2.9	1,256
8	99.8	0.1	0.1	647	99.0	0.8	0.2	699	99.4	0.5	0.2	1,346	99.4	0.5	0.2	1,346
9	98.3	1.7	0.1	677	99.5	0.3	0.2	589	98.8	1.0	0.1	1,265	98.8	1.0	0.1	1,265
10	98.2	1.2	0.0	704	98.7	1.3	0.0	621	98.4	1.2	0.0	1,326	98.4	1.2	0.0	1,326
11	98.8	1.2	0.0	629	98.9	1.1	0.0	720	98.9	1.1	0.0	1,349	98.9	1.1	0.0	1,349
Mother's education																
None	85.7	8.6	5.6	158	87.9	3.9	8.1	160	86.8	6.2	6.9	318	86.8	6.2	6.9	318
Primary	94.6	1.3	3.9	1,809	95.8	0.6	3.6	1,841	95.2	0.9	3.7	3,650	95.2	0.9	3.7	3,650
Secondary	94.8	0.5	4.7	1,371	93.9	1.4	4.8	1,244	94.4	0.9	4.7	2,614	94.4	0.9	4.7	2,614
Higher	96.8	0.1	3.1	545	97.0	0.3	2.6	638	96.9	0.2	2.9	1,184	96.9	0.2	2.9	1,184
Missing/DK	(*)	(*)	(*)	3	(*)	(*)	(*)	4	(80.9)	(1.3)	(13.6)	6	(80.9)	(1.3)	(13.6)	6

Table ED.4: Primary school attendance and out of school children (continued)

		Male				Female				Total					
		Net attendance ratio (adjusted)	Not attending school or preschool	Percentage of children: Attending preschool	Out of school ^a children	Net attendance ratio (adjusted)	Not attending school or preschool	Percentage of children: Attending preschool	Out of school ^a children	Net attendance ratio (adjusted) ¹	Not attending school or pre-school	Percentage of children: Attending preschool	Out of school ^a children		
Wealth index quintile															
Poorest	92.2	1.7	6.1	7.8	824	94.1	0.4	5.5	5.9	768	93.1	1.1	5.8	6.9	1,593
Second	94.3	2.2	3.5	5.7	795	95.2	1.0	3.9	4.8	774	94.7	1.6	3.7	5.3	1,569
Middle	95.1	1.1	3.3	4.3	846	93.9	1.7	4.3	6.1	864	94.5	1.4	3.8	5.2	1,710
Fourth	94.6	0.3	5.1	5.4	714	96.5	0.3	3.2	3.5	693	95.5	0.3	4.2	4.5	1,407
Richest	97.3	0.1	2.6	2.7	706	95.8	1.1	3.2	4.2	788	96.5	0.6	2.9	3.5	1,494
Language of household head															
Thai	95.2	0.7	4.0	4.6	3,637	95.1	0.9	4.0	4.9	3,652	95.2	0.8	4.0	4.7	7,288
Non-Thai	85.8	8.0	6.2	14.1	249	93.4	1.6	4.9	6.5	236	89.5	4.9	5.5	10.4	484
¹ MICS indicator 7.4; MDG indicator 2.1 - Primary school net attendance ratio (adjusted)															

^a The percentage of children of primary school age out of school are those not attending school and those attending pre-school
 () Figures that are based on 25-49 unweighted cases

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

The secondary school net attendance ratio is presented in Table ED.5.⁵³ The ratio is distinctly lower than for primary school, with 8 out of 10 (81.0 per cent) secondary school age children attending secondary school or higher. Of the remaining children, a small percentage (4.9 per cent) are attending primary school, but 14.1 per cent of secondary school age children are completely out of school. Regional differences are also apparent, with 16.7 per cent of children in the Central region out of school compared with 10.9 per cent in the Northeast.

Age shows a very strong positive correlation with being out of school. Only 2.6 per cent of 12-year-old children are out of school but this dramatically increases to 16.9 per cent for children aged 15 and 28.3 per cent for children aged 17. Similarly, the mother's education is negatively correlated with being out of school. Almost one out of four (23.7 per cent) children born to mothers with no education are out of school compared to almost no children (0.4 per cent) born to higher educated mothers. More than one out of five children of secondary school age in the poorest and second poorest households (19.8 per cent and 22.1 per cent respectively) are out of school compared to fewer than 1 in 20 (4.3 per cent) in the richest households. One out of three (33.7 per cent) secondary school-age children living in a household headed by a non-Thai speaker are out of school, the highest percentage for any background characteristic. Boys are more likely to be out of school than girls for all background characteristics.

⁵³ Ratios presented in this table are "adjusted" since they include not only secondary school attendance, but also attendance at higher levels in the numerator.

Table ED.5: Secondary school attendance and out of school children

Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance ratio), percentage attending primary school, and percentage out of school, Thailand MICS, 2015-2016												
	Male				Female				Total			
	Net attendance ratio (adjusted)	Percentage of children: Attending primary school	Out of school ^a	Number of children	Net attendance ratio (adjusted)	Percentage of children: Attending Primary School	Out of school ^a	Number of children	Net attendance ratio (adjusted) ¹	Percentage of children: Attending primary school	Out of school ^a	Number of children
Total	76.6	5.8	17.5	3,839	85.5	4.0	10.5	3,747	81.0	4.9	14.1	7,585
Region												
Bangkok	81.6	3.2	15.3	395	89.5	3.6	6.9	401	85.6	3.4	11.0	796
Central	72.4	6.9	20.6	1,085	83.0	4.5	12.5	1,021	77.6	5.7	16.7	2,105
North	71.9	7.9	20.1	588	84.0	4.7	11.3	547	77.7	6.3	15.9	1,135
Northeast	81.5	5.1	13.3	1,238	88.3	3.2	8.5	1,202	84.9	4.2	10.9	2,440
South	75.2	4.7	20.0	533	82.3	4.6	13.1	576	78.9	4.6	16.4	1,109
Area												
Urban	77.9	5.7	16.3	1,590	85.2	4.0	10.8	1,559	81.5	4.9	13.6	3,149
Rural	75.7	5.9	18.4	2,249	85.7	4.0	10.3	2,188	80.6	5.0	14.4	4,437
Age at beginning of school year												
12	71.6	26.4	2.0	697	75.8	21.1	3.1	625	73.6	23.9	2.6	1,322
13	91.1	4.6	4.3	576	91.3	1.9	6.9	595	91.2	3.2	5.6	1,171
14	87.5	0.5	12.0	547	93.9	0.3	5.8	578	90.8	0.4	8.8	1,125
15	76.9	0.9	22.0	617	88.4	0.1	11.5	586	82.5	0.5	16.9	1,203
16	75.4	0.1	24.4	697	85.3	0.6	14.2	635	80.1	0.3	19.5	1,332
17	62.2	0.5	37.3	705	80.1	0.3	19.7	727	71.3	0.4	28.3	1,432
Mother's education												
None	65.4	14.5	20.0	132	61.5	10.8	27.7	122	63.5	12.7	23.7	254
Primary	75.6	8.6	15.8	1,553	88.3	4.6	7.2	1,541	81.9	6.6	11.5	3,094
Secondary	86.5	5.6	7.8	844	92.3	6.2	1.5	819	89.4	5.9	4.7	1,662
Higher	95.0	4.6	0.4	403	95.0	4.7	0.3	280	95.0	4.6	0.4	683
Cannot be determined ^b	62.7	0.4	36.8	905	75.7	0.2	24.1	982	69.4	0.3	30.2	1,887
Missing/DK	(*)	(*)	(*)	2	(*)	(*)	(*)	3	(*)	(*)	(*)	5

Table ED.5: Secondary school attendance and out of school children (continued)

		Male				Female				Total			
		Net attendance ratio (adjusted)	Percentage of children: Attending primary school	Out of school ^a	Number of children	Net attendance ratio (adjusted)	Percentage of children: Attending Primary School	Out of school ^a	Number of children	Net attendance ratio (adjusted) ¹	Percentage of children: Attending primary school	Out of school ^a	Number of children
Wealth index quintile													
Poorest	68.5	8.8	22.6	826	77.9	5.6	16.5	694	72.8	7.4	19.8	1,520	
Second	66.9	5.1	27.9	821	80.1	3.3	16.5	838	73.6	4.2	22.1	1,660	
Middle	79.1	3.1	17.7	789	88.7	3.3	8.0	824	84.0	3.2	12.8	1,613	
Fourth	82.2	5.4	12.4	686	88.1	5.3	6.6	760	85.3	5.3	9.4	1,446	
Richest	89.0	6.5	4.5	716	93.3	2.7	4.0	630	91.0	4.7	4.3	1,346	
Language of household head													
Thai	79.0	5.3	15.7	3,528	87.1	3.8	9.2	3,474	83.0	4.6	12.4	7,002	
Non-Thai	49.8	11.1	38.8	311	64.9	7.2	27.9	273	56.8	9.3	33.7	584	
¹MICS indicator 7.5 - Secondary school net attendance ratio (adjusted)													

^aThe percentage of children of secondary school age out of school are those who are not attending primary, secondary, or higher education

^bChildren age 15 or higher at the time of the interview whose mothers were not living in the household

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

The percentage of children entering first grade who eventually reach the last grade of primary school is presented in Table ED.6. Of all children starting grade 1, almost all (99.5 per cent) will eventually reach grade 6. The MICS included only questions on school attendance in the current and previous year. Thus, the indicator is calculated synthetically by computing the cumulative probability of survival from the first to the last grade of primary school, as opposed to calculating the indicator for a real cohort which would need to be followed from the time a cohort of children entered primary school up to the time they reached the last grade of primary. Repeaters are excluded from the calculation of the indicator because it is not known whether they will eventually graduate. As an example, the probability that a child will move from the first grade to the second grade is computed by dividing the number of children who moved from the first grade to the second grade (during the two consecutive school years covered by the survey) by the number of children who have moved from the first to the second grade plus the number of children who were in the first grade the previous school year, but dropped out. Both the numerator and denominator exclude children who repeated during the two school years under consideration.

The percentage of children reaching the last grade of primary school is quite high across all background characteristics. However, children born to mothers with no education (93.2 per cent) and children living in households headed by a non-Thai speaker (95.8 per cent) are somewhat less likely to reach primary grade 6.

Table ED.6: Children reaching last grade of primary school						
Percentage of children entering first grade of primary school who eventually reach the last grade of primary school (Survival rate to last grade of primary school), Thailand MICS, 2015-2016						
	Per cent attending grade 1 last school year who are in grade 2 this school year	Per cent attending grade 2 last school year who are attending grade 3 this school year	Per cent attending grade 3 last school year who are attending grade 4 this school year	Per cent attending grade 4 last school year who are attending grade 5 this school year	Per cent attending grade 5 last school year who are attending grade 6 this school year	Per cent who reach grade 6 of those who enter grade 1 ¹
Total	99.9	99.9	99.9	100.0	99.8	99.5
Sex						
Male	99.7	100.0	99.8	100.0	99.9	99.4
Female	100.0	99.8	100.0	100.0	99.7	99.5
Region						
Bangkok	100.0	100.0	100.0	100.0	98.5	98.5
Central	100.0	100.0	100.0	100.0	100.0	100.0
North	99.2	99.8	99.3	100.0	99.9	98.2
Northeast	100.0	100.0	100.0	100.0	100.0	100.0
South	100.0	99.6	100.0	100.0	99.9	99.5
Area						
Urban	100.0	99.8	100.0	100.0	99.7	99.4
Rural	99.8	100.0	99.8	100.0	99.9	99.5
Mother's education						
None	96.9	100.0	96.6	100.0	99.6	93.2
Primary	100.0	99.8	100.0	100.0	100.0	99.8
Secondary	100.0	100.0	100.0	100.0	100.0	100.0
Higher	100.0	100.0	100.0	100.0	98.9	98.9
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)
Wealth index quintile						
Poorest	100.0	100.0	100.0	100.0	99.9	99.9
Second	99.5	99.8	99.4	100.0	99.9	98.6
Middle	100.0	99.7	100.0	100.0	100.0	99.7
Fourth	100.0	100.0	100.0	100.0	99.3	99.3
Richest	100.0	100.0	100.0	100.0	100.0	100.0
Language of household head						
Thai	100.0	99.9	100.0	100.0	99.8	99.7
Non-Thai	98.1	100.0	98.2	100.0	99.6	95.8
¹ MICS indicator 7.6; MDG indicator 2.2 - Children reaching last grade of primary						
(*) Figures that are based on less than 25 unweighted cases						

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 primary graduation age at the beginning of the current school year.

Table ED.7 shows that the primary school completion rate is 99.5 per cent. The MICS found that 98.2 per cent of the children who were attending the last grade of primary school in the previous school year were attending the first grade of secondary in the school year of the survey. The table also provides the “effective” transition rate, which takes into account the presence of repeaters in the final grade of primary school. This indicator better reflects situations in which pupils repeat the last grade of primary education but eventually make the transition to the secondary level. The simple transition rate tends to underestimate pupils’ progression to secondary school as it assumes that the repeaters never reach the secondary level. The table shows that in total, 98.2 per cent of the children in the last grade of primary school are expected to move on to secondary school.

The primary school completion rate for boys is 104.8 per cent compared to 94.9 per cent for girls. The primary completion rate is highest in the North at 103.1 per cent and lowest in the South at 97.1 per cent. It is higher in urban areas (104.4 per cent) compared to rural areas (96.0 per cent) and is lowest among children born to higher educated women (81.9 per cent) due to early transition of children at the age of 11 to secondary school.

Table ED.7: Primary school completion and transition to secondary school						
Primary school completion rates and transition and effective transition rates to secondary school, Thailand MICS, 2015-2016						
	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	Effective transition rate to secondary school	Number of children who were in the last grade of primary school the previous year and are not repeating that grade in the current school year
Total	99.5	1,349	98.2	1,271	98.2	1,270
Sex						
Male	104.8	629	98.6	636	98.6	636
Female	94.9	720	97.7	635	97.8	635
Region						
Bangkok	102.5	116	98.2	137	98.2	137
Central	98.9	378	98.3	327	98.3	327
North	103.1	199	99.7	184	99.7	184
Northeast	98.9	450	98.3	433	98.3	433
South	97.1	206	95.9	189	96.2	188
Area						
Urban	104.4	571	98.4	509	98.4	509
Rural	96.0	778	98.0	762	98.1	762
Mother's education						
None	86.0	56	99.4	44	99.4	44
Primary	104.9	682	96.6	650	96.6	650
Secondary	99.2	412	99.8	383	99.9	383
Higher	81.9	197	99.8	178	99.8	178
Cannot be determined	-	-	(*)	12	(*)	12
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)
Wealth index quintile						
Poorest	98.6	308	94.7	253	94.7	253
Second	91.8	275	98.9	280	99.1	279
Middle	90.1	261	98.9	271	98.9	271
Fourth	113.3	238	98.6	255	98.6	255
Richest	105.5	267	99.9	213	99.9	213
Language of household head						
Thai	97.9	1,287	98.1	1,210	98.1	1,209
Non-Thai	133.5	63	99.3	61	99.3	61
¹ MICS indicator 7.7 - Primary completion rate						
² MICS indicator 7.8 - Transition rate to secondary school						
(*) Figures that are based on less than 25 unweighted cases						

The ratios of girls to boys attending primary and secondary education are provided in Table ED.8. These ratios are better known as the Gender Parity Index (GPI). Note that the ratios included here are obtained from net attendance ratios rather than gross attendance ratios. The latter provide an erroneous description of the GPI mainly because, in most cases, the majority of overage children attending primary education tend to be boys.

The table shows that gender parity for primary school is equal to 1.00, indicating no difference in the attendance of girls and boys at primary school. The indicator increases to 1.11 for secondary education, indicating a disadvantage among boys. However, girls born to mothers with no education are slightly more disadvantaged in terms of attending secondary school compared to boys (0.94). This disadvantage is particularly pronounced in households headed by a non-Thai speaker (1.30), in the North region, (1.17) as well as among children in the second poorest wealth quintile (1.20), those born to primary educated mothers (1.17) and children living in rural areas (1.13).

Table ED.8: Education gender parity						
Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, Thailand MICS, 2015-2016						
	Primary school			Secondary school		
	Primary school adjusted net attendance ratio, girls	Primary school adjusted net Attendance ratio, Boys	Gender parity index (GPI) for primary school adjusted NAR ¹	Secondary school adjusted net attendance ratio, girls	Secondary school adjusted net attendance ratio, boys	Gender parity index (GPI) for secondary school adjusted NAR ²
Total	95.0	94.6	1.00	85.4	76.6	1.11
Region						
Bangkok	93.2	96.2	0.97	89.5	81.5	1.10
Central	96.4	94.8	1.02	83.0	72.4	1.15
North	93.8	92.8	1.01	84.0	71.9	1.17
Northeast	94.5	95.8	0.99	88.2	81.5	1.08
South	96.3	92.7	1.04	82.3	75.2	1.09
Area						
Urban	94.7	94.7	1.00	85.1	77.9	1.09
Rural	95.2	94.5	1.01	85.6	75.7	1.13
Mother's education						
None	87.9	85.7	1.03	61.5	65.4	0.94
Primary	95.8	94.6	1.01	88.3	75.6	1.17
Secondary	93.9	94.8	0.99	92.3	86.5	1.07
Higher	97.0	96.8	1.00	95.0	95.0	1.00
Cannot be determined ^a	na	na	na	75.5	62.6	1.21
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)
Wealth index quintile						
Poorest	94.1	92.2	1.02	77.8	68.5	1.13
Second	95.2	94.3	1.01	80.1	66.9	1.20
Middle	93.9	95.1	0.99	88.7	79.1	1.12
Fourth	96.5	94.6	1.02	88.1	82.2	1.07
Richest	95.8	97.3	0.98	93.3	88.9	1.05
Language of household head						
Thai	95.1	95.2	1.00	87.0	79.0	1.10
Non-Thai	93.4	85.8	1.09	64.9	49.8	1.30
¹ MICS indicator 7.9; MDG indicator 3.1 - Gender parity index (primary school)						
² MICS indicator 7.10; MDG indicator 3.1 - Gender parity index (secondary school)						
^a Children age 15 or higher at the time of the interview whose mothers were not living in the household						
na: not applicable						
(*) Figures that are based on less than 25 unweighted cases						

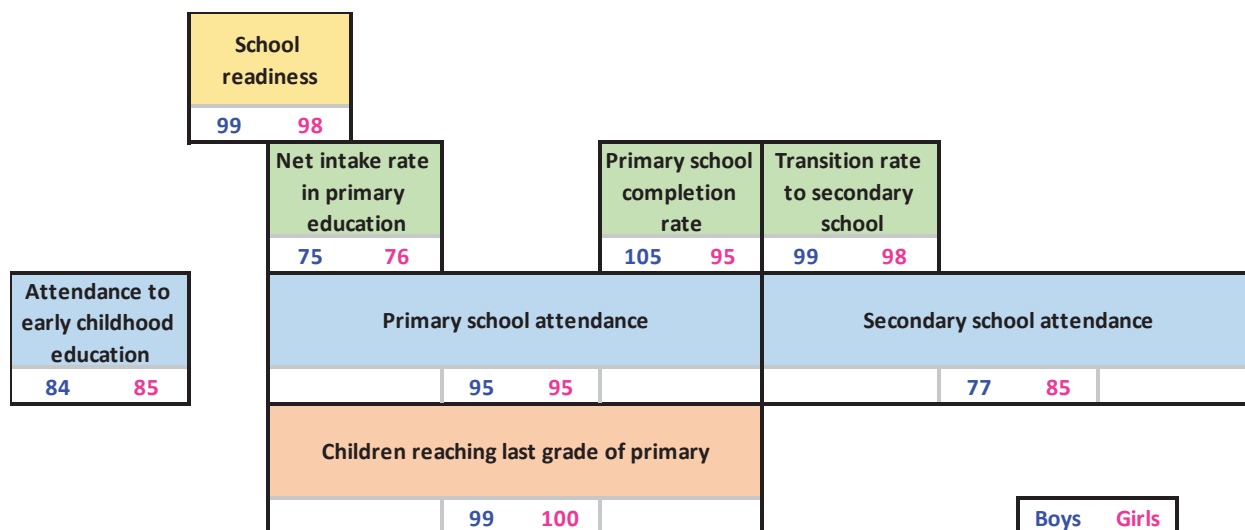
The percentages of girls in the total out-of-school population, in both primary and secondary school, are provided in Table ED.9. The table shows that at the primary level girls account for about half (48.6 per cent) of the out-of-school population. This share decreases to 37.0 per cent at the secondary level. In Bangkok (64.7 per cent) and among the richest quintile (63.8 per cent), girls account for most of the out-of-school population at primary level. However, girls born to mothers with no education are more likely to be out of school compared to boys across any other background characteristics at secondary level.

Table ED.9: Out of school gender parity								
Percentage of girls in the total out of school population, in primary and secondary school, Thailand MICS, 2015-2016								
	Primary school				Secondary school			
	Percentage of out of school children	Number of children of primary school age	Percentage of girls in the total out of school population of primary school age	Number of children of primary school age out of school	Percentage of out of school children	Number of children of secondary school age	Percentage of girls in the total out of school population of secondary school age	Number of children of secondary school age out of school
Total	5.1	7,772	48.6	397	14.1	7,585	37.0	1,069
Region								
Bangkok	5.3	753	64.7	40	11.1	796	31.4	88
Central	4.4	2,096	41.0	93	16.7	2,105	36.4	351
North	6.6	1,256	48.8	83	15.9	1,135	34.4	180
Northeast	4.6	2,474	58.6	114	11.0	2,440	38.4	267
South	5.6	1,193	32.0	66	16.4	1,109	41.3	182
Area								
Urban	5.2	3,191	50.1	167	13.7	3,149	39.5	430
Rural	5.0	4,581	47.5	229	14.4	4,437	35.4	639
Mother's education								
None	13.1	318	46.3	42	23.7	254	56.1	60
Primary	4.7	3,650	45.4	170	11.5	3,094	31.0	355
Secondary	5.6	2,614	51.8	147	4.7	1,662	16.0	79
Higher	3.1	1,184	52.3	36	0.4	683	32.9	3
Cannot be determined ^a	na	na	na	na	30.3	1,887	41.6	572
Missing/DK	(14.9)	6	(*)	1	(*)	5	(*)	0
Wealth index quintile								
Poorest	6.9	1,593	41.4	110	19.8	1,520	38.2	302
Second	5.3	1,569	45.1	83	22.1	1,660	37.7	368
Middle	5.2	1,710	58.7	89	12.8	1,613	32.0	206
Fourth	4.5	1,407	38.6	63	9.4	1,446	37.3	136
Richest	3.5	1,494	63.8	52	4.3	1,346	43.7	58
Language of household head								
Thai	4.7	7,288	51.2	346	12.5	7,002	36.6	872
Non-Thai	10.4	484	30.4	50	33.7	584	38.7	197

^a Children age 15 or higher at the time of the interview whose mothers were not living in the household
na: not applicable
() Figures that are based on 25-49 unweighted cases (*) Figures that are based on less than 25 unweighted cases

Figure ED.1 brings together all of the attendance and progression-related education indicators covered in this chapter, by sex. Information on attendance in early childhood education is also included, which was covered in Chapter 8, Table CD.1.

Figure ED.1: Education indicators by sex, Thailand, 2015-2016



Note: All indicator values are in percent

X. CHILD PROTECTION



X. Child Protection

Birth Registration

A name and nationality is every child's right, enshrined in the Convention on the Rights of the Child (CRC) and other international treaties. Yet the births of around one in four children under the age of five worldwide have never been recorded.⁵⁴ This lack of formal recognition by the State usually means that a child is unable to obtain a birth certificate. As a result, he or she may be denied health care or education. Later in life, the lack of official identification documents can mean that a child may enter into marriage or the labour market, or be conscripted into the armed forces, before the legal age. In adulthood, birth certificates may be required to obtain social assistance or a job in the formal sector, to buy or prove the right to inherit property, to vote and to obtain a passport. Registering children at birth is the first step in to securing their recognition before the law, safeguarding their rights, and ensuring that any violation of these rights does not go unnoticed.⁵⁵

Table CP.1 reveals that the births of 99.5 per cent of children under 5 in Thailand have been registered. There are no essential variations in birth registration across gender, age, or wealth status of households. However, children whose mothers have no education are somewhat less likely to have their births registered (92.3 per cent) than other children. Overall, birth certificates were actually seen by enumerators for only 72.8 per cent of children. Major differentials were also noted for this percentage across regions. The percentage of certificates observed was lowest in Bangkok (56.5 per cent) and highest in the South region (85.7 per cent). Almost all children in the richest households were reported to have birth certificates but they were least likely (61.2 per cent) to show the certificates to the enumerators compared to the poorest households (78.0 per cent). These findings are also presented in Figure CP.1.

⁵⁴ UNICEF, *The State of the World's Children 2015*, UNICEF, 2014.

⁵⁵ UNICEF, *Every Child's Birth Right: Inequities and trends in birth registration*, UNICEF, 2013.

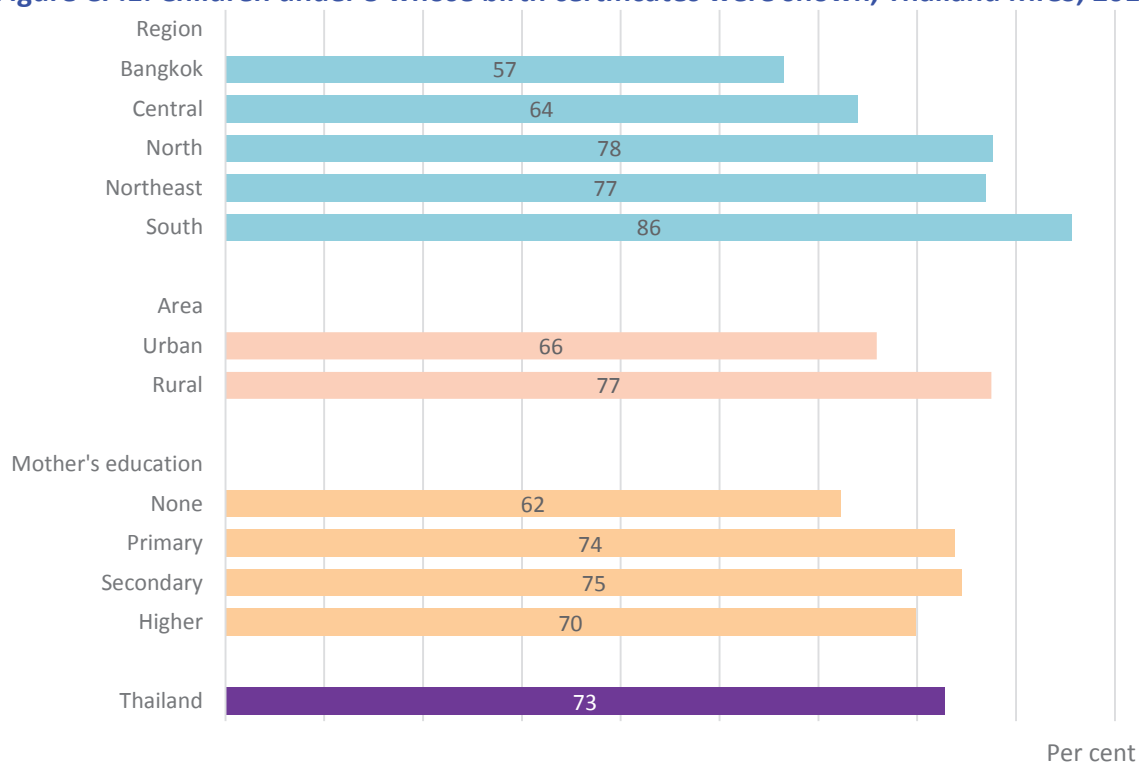
Table CP.1: Birth registration					
Percentage of children under age 5 by whether or not they have a birth certificate, Thailand MICS, 2015-2016					
	Children under age 5 whose birth is registered with civil authorities			No birth certificate	Number of children under age 5
	Has birth certificate		Total registered ¹		
	Seen	Not seen			
Total	72.8	26.8	99.5	0.5	12,250
Sex					
Male	72.5	27.0	99.5	0.5	6,392
Female	73.1	26.4	99.5	0.5	5,858
Region					
Bangkok	56.5	43.4	100.0	0.0	1,146
Central	64.0	35.0	98.9	1.1	3,546
North	77.7	21.5	99.2	0.8	2,084
Northeast	76.9	23.1	100.0	0.0	3,545
South	85.7	14.2	99.9	0.1	1,929
Area					
Urban	65.9	33.1	99.0	1.0	4,988
Rural	77.5	22.4	99.9	0.1	7,262
Age					
0-11 months	75.7	23.6	99.3	0.7	2,111
12-23 months	71.8	27.7	99.5	0.5	2,510
24-35 months	71.6	27.8	99.4	0.6	2,550
36-47 months	73.1	26.4	99.6	0.4	2,560
48-59 months	72.2	27.7	99.9	0.1	2,519
Mother's education					
None	62.2	30.1	92.3	7.7	587
Primary	73.8	25.9	99.7	0.3	3,557
Secondary	74.6	25.4	100.0	0.0	5,562
Higher	69.8	30.2	100.0	0.0	2,537
Missing/DK	(70.5)	(29.5)	(100.0)	(0.0)	6
Wealth index quintile					
Poorest	78.0	21.8	99.8	0.2	2,565
Second	74.6	23.5	98.1	1.9	2,675
Middle	76.1	23.8	99.9	0.1	2,366
Fourth	71.3	28.7	100.0	0.0	2,727
Richest	61.2	38.8	99.9	0.1	1,917
Language of household head					
Thai	72.5	27.2	99.7	0.3	11,112
Non-Thai	75.3	22.1	97.5	2.5	1,138

¹ MICS indicator 8.1 - Birth registration

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

The number of unregistered children is very small and the interpretation of the findings is not reliable. Therefore, the column for per cent of children whose mother/caretaker knows how to register the birth and the column for the number of children under age 5 without birth registration have been excluded from CP.1.

Figure CP.1: Children under 5 whose birth certificates were shown, Thailand MICS, 2015-2016



Child Discipline

Teaching children self-control and acceptable behaviour is an integral part of child discipline in all cultures. Positive parenting practices involve providing guidance on how to handle emotions or conflicts in manners that encourage judgment and responsibility and preserve children's self-esteem, physical and psychological integrity and dignity. Too often, however, children are raised with the use of punitive methods that rely on the use of physical force or verbal intimidation to obtain desired behaviours. Studies⁵⁶ have found that exposing children to violent discipline has harmful consequences, which range from immediate impacts to long-term harm that children carry forward into adult life. Violence hampers children's development, learning abilities and school performance; it inhibits positive relationships, provokes low self-esteem, emotional distress and depression; and, at times, it leads to risk taking and self-harm.

In the MICS, respondents to the household questionnaire were asked a series of questions on the methods adults in the household used to discipline a selected child during the past month. In Thailand, 75.2 per cent of children aged 1-14 years were subjected to at least one form of psychological or physical punishment by household members during the past month.

For the most part, households employ a combination of violent disciplinary practices, reflecting caregivers' motivation to control children's behaviour by any means possible. While 61.5 per cent of

⁵⁶ Straus, Murray A., and Paschall, Mallie J., 'Corporal Punishment by Mothers and Development of Children's Cognitive Ability: A longitudinal study of two nationally representative age cohorts', in *Journal of Aggression, Maltreatment & Trauma*, vol. 18, no. 5, 2009, pp. 459-583.

Erickson, M.F., and B. Egeland, 'A Developmental View of the Psychological Consequences of Maltreatment', in *School Psychology Review*, vol. 16, 1987, pp. 156-168.

Schneider, M.W. et al., 'Do Allegations of Emotional Maltreatment Predict Developmental Outcomes Beyond that of Other Forms of Maltreatment?', in *Child Abuse & Neglect*, vol. 29, no. 5, 2005, pp. 513-532.

children experienced psychological aggression, about 55.9 per cent experienced physical punishment. The most severe forms of physical punishment (hitting the child on the head, ears or face or hitting the child hard and repeatedly) are overall less common: 4.2 per cent of children were subjected to severe punishment.

Male children were subjected to physical discipline (58.3 per cent) more than female children (53.4 per cent). Differentials in using any violent discipline methods were visible across regions, with the highest percentage in the North (80.8 per cent) and the lowest in Bangkok (68.5 per cent). Interestingly, children in the 3-4-year-old age group were most likely (80.5 per cent) to receive any violent discipline method. Moreover, household economic status was negatively correlated with use of any violent discipline method. More than 8 out of 10 (82.5 per cent) children in the poorest households experienced any violent discipline methods compared to slightly above 6 out of 10 (62.5 per cent) in the richest households. Children in households headed by a Thai-speaking household head are somewhat more likely to experience any violent discipline method compared to children in other households. Children in the poorest households (61.1 per cent) and those aged 3-4 years (72.7 per cent) are more vulnerable to experiencing physical punishment for discipline. It is pertinent to note that non-violent discipline is positively associated with household wealth status. While 15.7 per cent of children in the poorest households experience any non-violent discipline method, the percentage doubles (31.7 per cent) for children in the richest households.

Figure CP.2: Child disciplining methods, children age 1-14 years, Thailand MICS, 2015-2016

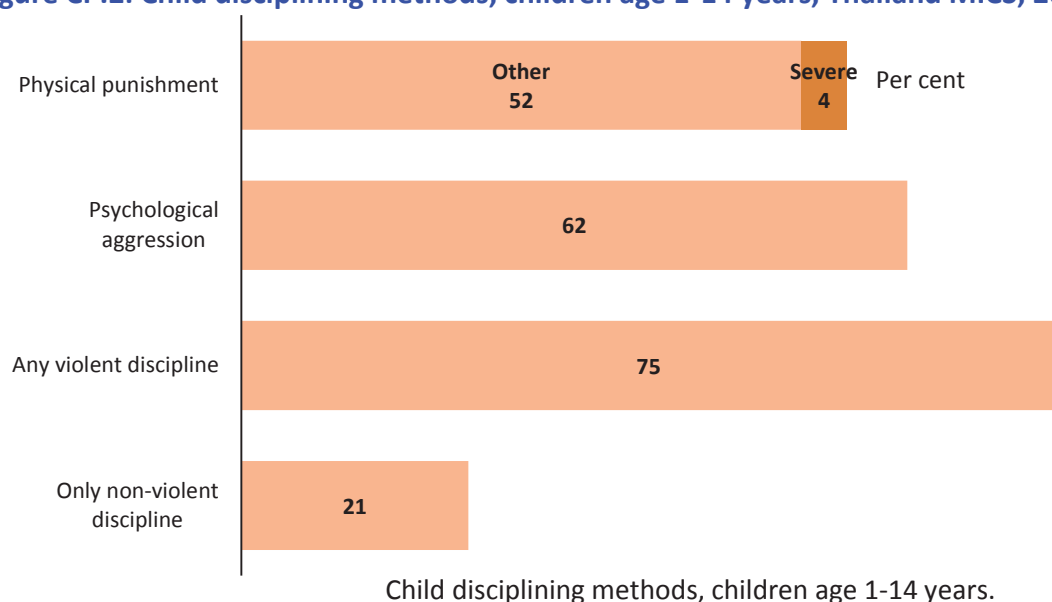


Table CP.2: Child discipline						
Percentage of children age 1-14 years by child disciplining methods experienced during the last one month, Thailand MICS, 2015-2016						
	Percentage of children age 1-14 years who experienced:					Number of children age 1-14 years
	Only non-violent discipline	Psychological aggression	Physical punishment		Any violent discipline method ¹	
			Any	Severe		
Total	21.0	61.5	55.9	4.2	75.2	28,237
Sex						
Male	19.3	63.7	58.3	4.7	77.1	14,407
Female	22.7	59.2	53.4	3.7	73.2	13,830
Region						
Bangkok	29.2	52.3	57.5	6.1	68.5	2,652
Central	21.8	52.9	53.5	3.1	70.0	7,706
North	17.3	72.7	54.1	3.2	80.8	4,507
Northeast	19.3	65.6	57.8	4.6	78.9	8,872
South	21.5	62.3	57.2	5.4	75.2	4,500
Area						
Urban	22.3	59.5	56.3	4.2	74.4	11,486
Rural	20.0	62.9	55.7	4.3	75.8	16,751
Age						
1-2 years	21.7	52.0	65.1	2.0	73.1	3,866
3-4 years	16.5	57.6	72.7	4.3	80.5	3,735
5-9 years	18.5	65.5	62.8	5.2	79.1	9,873
10-14 years	24.5	62.6	40.5	4.1	70.6	10,763
Education of household head						
None	19.0	63.0	54.3	3.8	75.6	1,602
Primary	18.8	64.4	57.4	4.3	77.9	17,110
Secondary	22.1	58.6	55.3	5.2	72.8	6,500
Higher	31.9	50.7	50.1	1.6	65.3	2,998
Missing/DK	31.4	58.7	48.8	12.1	67.5	27
Wealth index quintile						
Poorest	15.7	70.8	61.1	5.3	82.5	6,005
Second	17.4	67.1	57.0	3.9	78.8	5,927
Middle	20.0	63.2	57.6	4.3	76.5	5,910
Fourth	21.8	58.6	54.2	4.0	73.5	5,411
Richest	31.7	44.8	48.4	3.6	62.5	4,982
Language of household head						
Thai	20.9	62.0	55.7	4.2	75.5	26,167
Non-Thai	21.9	55.6	58.5	4.6	71.0	2,069

¹ MICS indicator 8.3 - Violent discipline

Table CP.3: Attitudes toward physical punishment		
Percentage of respondents to the child discipline module who believe that physical punishment is needed to bring up, raise, or educate a child properly, Thailand MICS, 2015-2016		
	Respondent believes that a child needs to be physically punished	Number of respondents to the child discipline module
Total	47.5	11,672
Sex		
Male	44.7	2,861
Female	48.4	8,811
Region		
Bangkok	41.2	1,107
Central	45.1	3,295
North	46.5	1,969
Northeast	51.1	3,581
South	49.7	1,720
Area		
Urban	46.8	4,786
Rural	48.0	6,886
Age		
< 25	43.5	679
25-39	49.6	3,734
40-59	46.2	5,525
60+	48.8	1,735
Respondent's relationship to selected child		
Mother	47.5	5,043
Father	43.1	1,600
Other	48.9	5,030
Respondent's education		
None	51.3	538
Primary	48.1	6,039
Secondary	47.1	3,561
Higher	44.8	1,529
Missing/DK	(29.5)	5
Wealth index quintile		
Poorest	52.2	2,443
Second	50.1	2,426
Middle	48.3	2,471
Fourth	45.1	2,251
Richest	40.5	2,081
Language of household head		
Thai	47.9	10,928
Non-Thai	42.0	744

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

While violent methods are extremely common forms of discipline, Table CP.3 reveals that only 47.5 per cent of respondents to the household questionnaire believe that physical punishment is a necessary part of child-rearing. There are some differentials across the background variables of respondents. Overall, respondents with low educational attainment and those residing in poorer households are more likely to find physical punishment necessary for disciplining children. The respondent's relationship to the child also matters: a slightly higher proportion of mothers believe that a child needs to be physically punished (47.5 per cent) compared to fathers (43.1 per cent).

Early Marriage and Polygyny

Marriage⁵⁷ before the age of 18 is a reality for many young girls. 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.⁵⁸ 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 in 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 for this young wife to reproduce and the power imbalance resulting from the age differential lead to very low condom use among such couples.⁵⁹

The percentages of women married before age 15 and 18 years are provided in Table CP.4. Among women aged 15-49 years, 4.3 per cent were married before age 15 and among women aged 20-49 years, 21.3 per cent of women were married before age 18.

About 14.1 per cent of young women aged 15-19 years are currently married or in union. A somewhat higher percentage of women in this age group are currently married in the North (17.7 per cent) compared to other regions. There is not much variation between urban (13.4 per cent) and rural (14.7 per cent) areas, but there is a marked difference according to women's educational background. Almost half (46.6 per cent) of the women aged 15-19 with a primary level education are currently married while 15.7 per cent of women with no education, 13.5 per cent with secondary education and just 1.4 per cent with higher education are currently married. Household economic status is inversely related to the percentage of women aged 15-19 currently married. Almost one in four women in this age cohort in the poorest households are currently married compared to 2.5 per cent in the richest households.

The percentage of women in a polygynous union is also provided in Table CP.4. Among all women aged 15-49 years who are in union, 3.4 per cent are in polygynous union. Bangkok has the highest (4.5 per cent) percentage of women in polygynous marriage compared to women in other regions. Overall, 3.9 per cent of women aged 15-49 are in polygynous marriage, decreasing to 1.9 per cent of women aged

⁵⁷ All references to marriage in this chapter include marital union as well.

⁵⁸ Bajracharya, Ashish, and Sajeda Amin, *Poverty, marriage timing, and transitions to adulthood in Nepal: A longitudinal analysis using the Nepal living standards survey*, Poverty, Gender, and Youth Working Paper No. 19, Population Council, 2010; Godha, Deepali, David Hotchkiss and Anastasia Gage, *The influence of child marriage on fertility, fertility-control, and maternal health care utilization: A multi country study from South Asia*, MEASURE Evaluation PRH Project Working Paper 11-124, November 2011.

⁵⁹ Clark, Shelley, Judith Bruce and Annie Dude, 'Protecting young women from HIV/AIDS: The case against child and adolescent marriage', in *International Family Planning Perspectives*, vol. 32, no. 2, 2006, pp.79–88; Raj, A., et al., 'Prevalence of child marriage and its effect on fertility and fertility-control outcomes of young women in India: a cross-sectional, observational study', in *The Lancet*, vol. 373 (9678), May 2009, pp.1883–1889.

15-19 years. Women with primary education and women in the second richest households are more likely to be in polygynous marriages.

Table CP.4: Early marriage and polygyny (women)

Percentage of women age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of women age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of women age 15-19 years currently married or in union, and the percentage of women who are in a polygynous marriage or union, Thailand MICS, 2015-2016

	Women age 15-49 years		Women age 20-49 years		Women age 15-19 years		Women age 15-49 years		
	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 currently married/in union ³	Number of women age 15-19 years	Percentage in polygynous marriage/union ⁴	Number of women age 15-49 years currently married/in union
Total	4.3	25,614	4.3	21.3	22,255	14.1	3,359	3.4	16,756
Region									
Bangkok	2.8	3,998	3.0	13.7	3,612	12.4	386	4.5	2,097
Central	3.7	8,415	3.7	19.1	7,457	11.9	958	3.1	5,438
North	5.9	3,815	5.5	28.7	3,335	17.7	480	3.3	2,718
Northeast	5.5	5,937	5.5	24.5	4,880	15.3	1,057	3.7	4,191
South	3.6	3,450	3.8	22.5	2,972	13.9	478	2.9	2,311
Area									
Urban	3.5	12,599	3.4	17.4	11,185	13.4	1,414	3.5	7,649
Rural	5.0	13,015	5.1	25.2	11,071	14.7	1,945	3.4	9,106
Age									
15-19	4.4	3,359	na	na	na	14.1	3,359	1.9	475
20-24	4.4	2,878	4.4	22.5	2,878	na	na	3.3	1,363
25-29	4.0	3,089	4.0	19.6	3,089	na	na	2.9	1,974
30-34	4.4	3,437	4.4	17.2	3,437	na	na	3.5	2,584
35-39	4.1	4,084	4.1	21.4	4,084	na	na	3.7	3,235
40-44	4.8	4,141	4.8	22.7	4,141	na	na	3.1	3,360
45-49	4.0	4,626	4.0	23.4	4,626	na	na	3.9	3,765
Education									
None	6.1	829	6.2	29.0	784	(15.7)	45	2.9	616
Primary	6.9	7,281	6.6	32.2	7,117	46.6	164	3.8	6,081
Secondary	4.4	11,043	4.5	24.8	8,174	13.5	2,869	3.4	6,784
Higher	1.0	6,453	1.0	3.0	6,173	1.4	280	2.8	3,268
Missing/DK	5.1	8	5.5	35.9	7	(*)	1	9.0	7

Table CP.4: Early marriage and polygyny (women) (continued)

Percentage of women age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of women age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of women age 15-19 years currently married or in union, and the percentage of women who are in a polygynous marriage or union, Thailand MICS, 2015-2016

	Women age 15-49 years		Women age 20-49 years		Women age 15-19 years		Women age 15-49 years		
	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 Currently married/in union ³	Number of women age 15-19 years	Percentage in polygynous marriage/union ⁴	Number of women age 15-49 years currently married/in union
Wealth index quintile									
Poorest	7.1	3,655	7.0	30.2	3,086	21.8	569	3.4	2,737
Second	5.5	4,747	5.6	28.1	3,962	20.2	785	3.4	3,293
Middle	4.2	5,522	4.2	24.5	4,728	14.9	794	3.7	3,663
Fourth	4.0	5,820	4.1	19.1	5,155	9.1	664	4.3	3,757
Richest	1.9	5,870	2.0	10.4	5,324	2.5	546	2.2	3,306
Language of household head									
Thai	4.3	23,755	4.3	21.2	20,658	14.0	3,097	3.5	15,537
Non-Thai	4.0	1,859	4.2	22.7	1,597	15.5	262	2.6	1,219

na: not applicable
 () Figures that are based on 25-49 unweighted cases (*) Figures that are based on fewer than 25 unweighted cases

¹ MICS indicator 8.4 - Marriage before age 15
² MICS indicator 8.5 - Marriage before age 18
³ MICS indicator 8.6 - Young women age 15-19 years currently married or in union
⁴ MICS indicator 8.7 - Polygyny

The percentages of men married before ages 15 and 18 years are provided in Table CP.4M. Among men aged 15-49 years, 1.7 per cent were married before age 15 and, among men aged 20-49 years, 8.0 per cent were married before age 18.

Overall, 6.8 per cent of young men aged 15-19 years are currently married or in union. This proportion does not vary much between urban (6.8 per cent) and rural (6.7 per cent) areas; however, there is some regional variation. In the South, 8.2 per cent of men aged 15-19 are currently married compared to 5.6 per cent in the North region. Men with no education in the 15-19-year-old age group are less likely (1.1 per cent) to be currently married, with the percentage rising to 13.7 per cent among primary educated men in the same age group. However, only 43 weighted men with no education aged 15-19 were found.

The percentage of men in a polygynous union is also provided in Table CP.4M. Among all men aged 15-49 years who are in union, 2.9 per cent are in polygynous union. In the Northeast region, 4.0 per cent of men in the 15-49 age group are in polygynous marriages. However, in the North region, only 1.6 per cent of men in the same age group are in polygynous marriages. Polygynous marriages are more common (3.3 per cent) among men with secondary level education, men living in the poorest households (3.5 per cent) and men in the 40-44-year-old age group (3.9 per cent).

Table CP.4M: Early marriage and polygyny (men)

Percentage of men age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of men age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of men age 15-19 years currently married or in union, and the percentage of men who are in a polygynous marriage or union, Thailand MICS, 2015-2016

	Men age 15-49 years		Men age 20-49 years		Men age 15-19 years		Men age 15-49 years		
	Percentage married before age 15 ¹	Number of men age 15-49 years	Percentage married before age 15	Percentage Married Before age 18 ²	Number of men age 20-49 years	Percentage currently married/in union ³	Number of men age 15-19 years	Percentage in polygynous marriage/union ⁴	Number of men age 15-49 years currently married/in union
Total	1.7	23,183	1.9	8.0	19,783	6.8	3,400	2.9	13,346
Region									
Bangkok	1.8	3,460	2.0	8.0	3,038	6.8	421	3.4	1,760
Central	1.9	7,663	1.9	8.7	6,662	6.8	1,001	2.9	4,562
North	1.6	3,358	1.8	8.9	2,816	5.6	542	1.6	1,980
Northeast	1.3	5,547	1.5	7.2	4,597	6.7	950	4.0	3,186
South	1.9	3,155	2.2	6.9	2,670	8.2	485	1.8	1,857
Area									
Urban	1.6	11,216	1.8	8.1	9,703	6.8	1,512	2.6	6,195
Rural	1.8	11,967	1.9	8.0	10,080	6.7	1,887	3.1	7,150
Age									
15-19	0.8	3,400	na	na	na	6.8	3,400	0.9	230
20-24	1.3	2,797	1.3	10.1	2,797	na	na	2.0	862
25-29	1.8	2,524	1.8	7.5	2,524	na	na	0.9	1,252
30-34	2.3	3,267	2.3	5.7	3,267	na	na	2.5	2,117
35-39	2.4	3,666	2.4	8.2	3,666	na	na	2.9	2,676
40-44	2.0	3,678	2.0	8.9	3,678	na	na	3.3	2,904
45-49	1.3	3,850	1.3	7.8	3,850	na	na	3.9	3,304
Education									
None	4.4	728	4.6	11.7	685	(1.1)	43	1.9	443
Primary	2.4	6,870	2.3	10.9	6,499	13.7	371	3.1	4,917
Secondary	1.6	10,713	2.0	9.0	7,949	6.1	2,764	3.3	5,448
Higher	0.6	4,865	0.6	1.9	4,644	5.1	221	1.9	2,532
Missing/DK	1.0	7	1.1	5.5	7	(*)	1	(10.2)	6

Table CP.4M: Early marriage and polygyny (men) (continued)

Percentage of men aged 15-49 years who first married or entered a marital union before their 15th birthday, percentages of men aged 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of men age 15-19 years currently married or in union, and the percentage of men who are in a polygynous marriage or union, Thailand MICS, 2015-2016

	Men age 15-49 years		Men age 20-49 years		Men age 15-19 years		Men age 15-49 years		
	Percentage married before age 15 ¹	Number of men age 15-49 years	Percentage married before age 15	Percentage Married Before age 18 ²	Number of men age 20-49 years	Percentage currently married/in union ³	Number of men age 15-19 years	Percentage in polygynous marriage/union ⁴	Number of men age 15-49 years currently married/in union
Wealth index quintile									
Poorest	1.9	4,155	2.2	7.3	3,472	9.4	683	3.5	2,196
Second	1.8	4,757	2.0	10.2	3,971	8.8	785	2.8	2,652
Middle	1.7	4,875	1.7	9.6	4,115	5.4	759	2.3	2,920
Fourth	2.3	4,937	2.5	8.8	4,337	7.2	599	3.3	3,028
Richest	0.7	4,460	0.8	4.0	3,888	2.4	573	2.6	2,551
Language of household head									
Thai	1.7	21,325	1.8	8.0	18,245	7.1	3,080	2.9	12,345
Non-Thai	2.0	1,858	2.3	8.0	1,538	3.6	320	2.5	1,000

na: not applicable
 () Figures that are based on 25-49 unweighted cases (*) Figures that are based on fewer than 25 unweighted cases

¹ MICS indicator 8.4 - Marriage before age 15^[M]
² MICS indicator 8.5 - Marriage before age 18^[M]
³ MICS indicator 8.6 - Young men age 15-19 years currently married or in union^[M]
⁴ MICS indicator 8.7 - Polygyny^[M]

Tables CP.5 and CP.5M present, respectively, the proportion of women and men who were first married or entered into a marital union before ages 15 and 18 by area and age groups. Examining the percentages married before ages 15 and 18 by different age groups enables trends to be observed in early marriage over time. Data show that the proportion of women married or in union by ages 15 and 18 has not changed much over time: 4.0 per cent of women aged 45-49 years were first married/in union by age 15 while 4.8 per cent in the 40-44 age group and 4.0 per cent of the 25-29 age group were married before the age of 15. However, for the 15-19 age group, which represents the latest trend, 4.4 per cent of women were married before the age of 15. Similar trends are observed for the percentage of women married before the age of 18.

The percentage of men married before age 15 tells a different story. The percentage of men aged 15-19 who married before the age of 15 is the lowest (0.8 per cent) of any age group. Among men in the 35-39-year-old age group, 2.4 per cent reported being married before the age of 15 – showing a slight declining trend in such marriages. However, the proportion of men marrying before the age of 18 was highest for the 20-24-year-old age group compared to men in other age groups.

Table CP.5: Trends in early marriage (women)

Percentage of women who were first married or entered into a marital union before age 15 and 18, by area and age groups, Thailand MICS, 2015-2016												
Age	Urban				Rural				All			
	Percentage of women Married Before age 15	Number of women age 15-49 years	Percentage of women married before age 18	Number of women age 20-49 years	Percentage of women married before age 15	Number of women age 15-49 years	Percentage of women married before age 18	Number of women age 20-49 years	Percentage of women married before age 15	Number of women age 15-49 years	Percentage of women married before age 18	Number of women age 20-49 years
Total	3.5	12,599	17.4	11,185	5.0	13,015	25.2	11,071	4.3	25,614	21.3	22,255
15-19	4.1	1,414	na	na	4.5	1,945	na	na	4.4	3,359	na	na
20-24	2.7	1,547	17.5	1,547	6.3	1,331	28.4	1,331	4.4	2,878	22.5	2,878
25-29	2.7	1,671	14.4	1,671	5.5	1,417	25.7	1,417	4.0	3,089	19.6	3,089
30-34	2.5	1,885	13.9	1,885	6.7	1,553	21.3	1,553	4.4	3,437	17.2	3,437
35-39	3.5	2,002	17.3	2,002	4.6	2,082	25.2	2,082	4.1	4,084	21.4	4,084
40-44	5.3	1,920	20.0	1,920	4.3	2,221	25.1	2,221	4.8	4,141	22.7	4,141
45-49	3.5	2,159	20.6	2,159	4.5	2,467	25.8	2,467	4.0	4,626	23.4	4,626

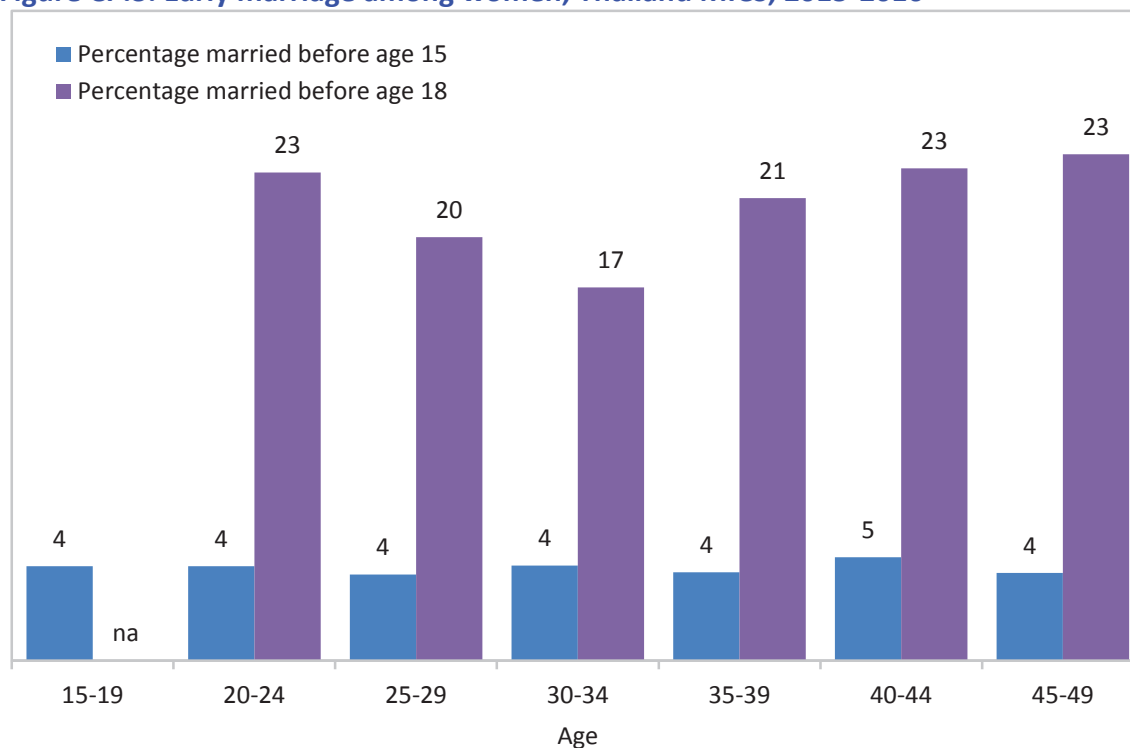
na: not applicable

Table CP.5M: Trends in early marriage (men)

Percentage of men who were first married or entered into a marital union before age 15 and 18, by area and age groups, Thailand MICS, 2015-2016												
Age	Urban				Rural				All			
	Percentage of men Married Before age 15	Number of men age 15-49 years	Percentage of men married before age 18	Number of Men age 20-49 Years	Percentage of men married before age 15	Number of men age 15-49 years	Percentage of men married before age 18	Number of men age 20-49 years	Percentage of men married before age 15	Number of men age 15-49 years	Percentage of men married before age 18	Number of men age 20-49 years
Total	1.6	11,216	8.1	9,703	1.8	11,967	8.0	10,080	1.7	23,183	8.0	19,783
15-19	0.5	1,512	na	na	1.1	1,887	na	na	0.8	3,400	na	na
20-24	0.9	1,454	8.9	1,454	1.8	1,343	11.3	1,343	1.3	2,797	10.1	2,797
25-29	1.2	1,279	6.3	1,279	2.4	1,245	8.8	1,245	1.8	2,524	7.5	2,524
30-34	1.7	1,661	4.8	1,661	2.9	1,606	6.6	1,606	2.3	3,267	5.7	3,267
35-39	2.5	1,877	9.1	1,877	2.4	1,789	7.4	1,789	2.4	3,666	8.2	3,666
40-44	2.8	1,679	9.3	1,679	1.3	1,999	8.7	1,999	2.0	3,678	8.9	3,678
45-49	1.6	1,753	9.6	1,753	1.0	2,098	6.4	2,098	1.3	3,850	7.8	3,850

na: not applicable

Figure CP.3: Early marriage among women, Thailand MICS, 2015-2016



Another component is the spousal age difference, with the indicator being the percentage of married/in union women 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 Thailand. Among currently married/in union women aged 20-24 years, about one in seven (15.1 per cent) are married/in union with a man who is older by 10 or more years. For currently married/in union women aged 15-19 years, the corresponding figure is about 1 in 13 (7.5 per cent). Women in the 20-24 age group in the North region (17.7 per cent), who are primary educated (23.7 per cent), in the poorest wealth quintile (20.4 per cent) and women living in households headed by a Thai-speaker (16.0 per cent) are more likely to marry a man who is 10 or more years older.

Among women currently married in the 20-24-year-old age group, almost one out of two women (46.9 per cent) is married to a man 0-4 years older. This tendency is highest (71.3 per cent) among women with no education followed by women in households headed by a non-Thai speaker (60.8 per cent). More than one in four (26.8 per cent) currently married women aged 20-24 in the second richest households are married to a man 5-9 years older, which is one third higher compared to women in other wealth quintiles. It is also pertinent to note that a large percentage (18.6 per cent) of currently married women aged 20-24 are married to a younger husband. Higher educated women and women in the second poorest households are more likely to marry a younger husband (19.8 per cent and 22.4 per cent respectively).

Table CP.6: Spousal age difference

Per cent distribution of women currently married/in union age 15-19 and 20-24 years according to the age difference with their husband or partner, Thailand MICS, 2015-2016

	Percentage of currently married/in union women age 15-19 years whose husband or partner is:					Number of women age 15-19 years currently married/in union	Percentage of currently married/in union women age 20-24 years whose husband or partner is:					Number of women age 20-24 years currently married/in union
	age 15-19 years whose husband or partner is:						age 20-24 years whose husband or partner is:					
	Younger	0-4 years older	5-9 years older	10+ years older ²	Total		Younger	0-4 years older	5-9 years older	10+ years older ²	Total	
Total	17.6	51.6	23.2	7.5	100.0	475	18.6	46.9	19.3	15.1	100.0	1,363
Region												
Bangkok	(22.9)	(44.4)	(29.2)	(3.4)	100.0	48	23.0	46.6	16.3	14.1	100.0	165
Central	27.6	46.3	20.7	5.4	100.0	114	17.9	49.0	18.5	14.5	100.0	507
North	12.6	67.6	10.5	9.3	100.0	85	19.4	42.6	20.4	17.7	100.0	216
Northeast	11.0	53.4	28.0	7.7	100.0	162	17.6	45.3	24.0	12.9	100.0	257
South	19.3	41.4	28.0	11.3	100.0	66	17.2	48.8	16.8	17.2	100.0	217
Area												
Urban	21.4	53.6	20.0	5.0	100.0	190	20.7	42.8	22.2	14.2	100.0	598
Rural	15.1	50.4	25.4	9.1	100.0	285	17.0	50.2	17.1	15.8	100.0	765
Age												
15-19	17.6	51.6	23.2	7.5	100.0	475	na	na	na	na	na	na
20-24	na	na	na	na	na	na	18.6	46.9	19.3	15.1	100.0	1,363
Education												
None	(*)	(*)	(*)	(*)	100.0	7	15.3	71.3	7.0	6.5	100.0	49
Primary	14.8	48.0	25.3	11.9	100.0	76	19.4	32.5	24.3	23.7	100.0	129
Secondary	18.7	52.7	22.2	6.4	100.0	387	18.3	46.6	19.9	15.1	100.0	925
Higher	(*)	(*)	(*)	(*)	100.0	4	19.8	50.7	17.0	12.5	100.0	259
Missing/DK	(*)	(*)	(*)	(*)	100.0	0	(*)	(*)	(*)	(*)	100.0	1
Wealth index quintile												
Poorest	13.3	54.3	23.9	8.4	100.0	124	13.5	50.6	15.5	20.4	100.0	241
Second	26.3	45.3	22.3	6.1	100.0	158	22.4	48.3	18.3	11.0	100.0	267
Middle	11.2	53.4	27.1	8.3	100.0	118	20.0	46.8	15.7	17.2	100.0	317
Fourth	19.4	54.6	16.9	9.2	100.0	61	17.5	43.8	26.8	11.9	100.0	366
Richest	(*)	(*)	(*)	(*)	100.0	13	19.5	46.6	16.9	17.0	100.0	172
Language of household head												
Thai	17.2	51.9	23.1	7.8	100.0	434	19.0	45.4	19.6	16.0	100.0	1,226
Non-Thai	22.0	48.8	24.6	4.6	100.0	41	15.3	60.8	16.4	7.5	100.0	137
¹ MICS indicator 8.8a - Spousal age difference (among women aged 15-19) ² MICS indicator 8.8b - Spousal age difference (among women aged 20-24)												
na: not applicable												
() Figures that are based on 25-49 unweighted cases												
(*) Figures that are based on fewer than 25 unweighted cases												

Attitudes towards Domestic Violence

MICS assessed the attitudes of women and men aged 15-49 years towards wife/partner beating by asking the respondents whether husbands/partners are justified to hit or beat their wives/partners in a variety of situations. The purpose of these questions is to capture the social justification of violence (in contexts where women have a lower status in society) as a disciplinary action when a woman does not comply with certain expected gender roles.

The responses to these questions can be found in Table CP.7 for women and in Table CP.7M for men. Overall, 8.6 per cent of women in Thailand feel that a husband/partner is justified in hitting or beating his wife in at least one of the five situations. Women who justify a husband's violence, in most cases agree and justify violence in instances when a wife neglects the children (6.6 per cent), or if she demonstrates her autonomy, exemplified by going out without telling her husband (2.0 per cent) or arguing with him (2.2 per cent). Around 1.0 per cent of women believe that wife-beating is justified if the wife refuses to have sex with her husband and fewer than 1.0 per cent justify wife-beating if she burns food. Justification in any of the five situations is more present among those living in the North region (13.0 per cent), rural areas (10.3 per cent), women aged 45-49 (11.0 per cent), primary educated women (13.5 per cent) and women in the poorest households (14.7 per cent). The justification of wife-beating shows a strong inverse relationship with household wealth status.

As shown in Table CP.7M, men are as likely to justify wife-beating as women. Overall, 8.7 per cent of men justify wife-beating for any of the five reasons, as compared with 8.6 per cent of women. In total, 6.1 per cent of men justify wife-beating if a wife neglects children, 2.7 per cent if she argues with the husband, and 2.0 per cent if she goes out without telling him. Men living in the Northeast (12.7 per cent), formerly married/in union (12.6 per cent), primary educated (11.4 per cent) and in the poorest households (13.8 per cent) are more likely to agree with one of the reasons.

Table CP.7: Attitudes toward domestic violence (women)							
Percentage of women age 15-49 years who believe a husband is justified in beating his wife in various circumstances, Thailand MICS, 2015-2016							
	Percentage of women age 15-49 years who believe a husband is justified in beating his wife:						Number of women age 15-49 years
	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 five reasons ¹	
Total	2.0	6.6	2.2	1.0	0.7	8.6	25,614
Region							
Bangkok	0.8	4.1	0.7	0.8	0.2	5.5	3,998
Central	1.2	4.4	0.9	0.4	0.5	5.5	8,415
North	2.8	9.3	4.6	1.7	1.3	13.0	3,815
Northeast	3.0	8.7	2.6	1.3	0.9	11.4	5,937
South	3.0	7.8	3.5	1.7	1.0	10.4	3,450
Area							
Urban	1.7	5.3	1.9	0.7	0.5	7.0	12,599
Rural	2.3	7.8	2.5	1.3	1.0	10.3	13,015
Age							
15-19	1.8	6.8	2.8	0.6	0.6	9.1	3,359
20-24	1.3	5.5	1.3	0.8	0.1	7.3	2,878
25-29	1.3	5.0	2.0	1.3	0.5	6.3	3,089
30-34	1.7	4.9	1.8	0.6	0.4	6.6	3,437
35-39	1.7	6.0	1.4	1.1	1.0	8.3	4,084
40-44	2.2	7.9	2.3	1.4	0.9	10.3	4,141
45-49	3.5	8.6	3.2	1.3	1.2	11.0	4,626
Marital/Union status							
Currently married/in union	2.3	7.4	2.3	1.2	0.9	9.5	16,756
Formerly married/in union	2.8	7.2	3.4	1.3	0.5	10.6	1,883
Never married/in union	1.3	4.3	1.5	0.6	0.5	6.0	6,975
Education							
None	2.0	5.8	3.0	1.5	0.9	7.8	829
Primary	3.5	10.6	3.4	1.3	1.4	13.5	7,281
Secondary	1.6	6.0	2.1	1.0	0.5	7.9	11,043
Higher	1.0	3.1	0.9	0.7	0.3	4.5	6,453
Missing/DK	2.8	5.7	4.1	0.0	2.7	9.5	8
Wealth index quintile							
Poorest	4.1	11.1	3.9	1.5	1.1	14.7	3,655
Second	2.6	8.7	2.8	1.7	0.9	11.6	4,747
Middle	1.9	6.5	2.1	0.7	0.8	8.5	5,522
Fourth	1.4	5.4	1.8	0.9	0.7	6.6	5,820
Richest	1.0	3.1	1.1	0.6	0.3	4.6	5,870
Language of household head							
Thai	2.1	6.7	2.2	1.1	0.8	8.8	23,755
Non-Thai	1.9	4.5	2.1	0.5	0.5	6.6	1,859

¹ MICS indicator 8.12 - Attitudes towards domestic violence

Table CP.7M: Attitudes toward domestic violence (men)							
Percentage of men age 15-49 years who believe a husband is justified in beating his wife in various circumstances, Thailand MICS, 2015-2016							
	Percentage of men age 15-49 years who believe a husband is justified in beating his wife:						Number of men age 15-49 years
	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 five reasons ¹	
Total	2.0	6.1	2.7	0.9	0.6	8.7	23,183
Region							
Bangkok	2.4	5.7	2.1	1.0	1.1	8.0	3,460
Central	0.4	3.8	1.6	0.3	0.2	5.0	7,663
North	2.2	5.8	3.2	1.6	0.7	9.2	3,358
Northeast	3.8	9.3	3.0	1.5	0.5	12.7	5,547
South	2.4	6.9	4.9	0.8	1.1	11.0	3,155
Area							
Urban	1.8	5.7	2.0	0.9	0.6	7.8	11,216
Rural	2.3	6.5	3.4	1.0	0.6	9.6	11,967
Age							
15-19	2.2	4.6	3.3	0.5	0.7	8.5	3,400
20-24	1.8	5.6	2.4	1.2	0.9	8.1	2,797
25-29	1.2	5.7	2.8	0.5	0.2	7.7	2,524
30-34	1.5	6.1	2.4	0.6	0.6	8.4	3,267
35-39	2.3	6.4	3.0	1.0	0.8	8.9	3,666
40-44	2.0	7.1	2.2	0.9	0.3	9.2	3,678
45-49	3.0	6.8	2.8	1.7	0.8	9.8	3,850
Marital/Union status							
Currently married/in union	2.0	6.2	2.4	0.9	0.6	8.5	13,346
Formerly married/in union	2.0	9.0	5.2	1.1	0.5	12.6	1,489
Never married/in union	2.1	5.5	2.7	1.0	0.7	8.4	8,342
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	6
Education							
None	1.1	3.3	1.3	0.7	1.1	4.2	728
Primary	3.0	8.2	3.4	1.5	0.9	11.4	6,870
Secondary	1.8	6.2	3.0	0.8	0.5	9.1	10,713
Higher	1.3	3.4	1.2	0.4	0.4	4.9	4,865
Missing/DK	0.0	0.0	7.1	0.0	0.0	7.1	7
Wealth index quintile							
Poorest	4.2	9.6	4.4	2.1	1.1	13.8	4,155
Second	1.9	6.5	2.5	1.0	0.5	8.8	4,757
Middle	2.3	7.0	3.0	1.0	0.5	9.8	4,875
Fourth	1.0	4.7	2.6	0.5	0.7	7.1	4,937
Richest	1.1	2.9	1.2	0.2	0.2	4.6	4,460
Language of household head							
Thai	2.0	6.1	2.6	0.9	0.6	8.7	21,325
Non-Thai	2.9	6.4	3.5	1.7	1.0	9.2	1,858
¹ MICS indicator 8.12 - Attitudes towards domestic violence ^[M]							
(*) Figures that are based on fewer than 25 unweighted cases							

Children's Living Arrangements

The CRC recognizes that “the child, for the full and harmonious development of his or her personality, should grow up in a family environment, in an atmosphere of happiness, love and understanding”. Millions of children around the world grow up with or without the care of their parents for several reasons, including due to the premature death of the parents or their migration for work. In most cases, these children are cared for by members of their extended families, while in others, children may be living in households other than their own, as live-in domestic workers for instance. Understanding the children's living arrangements, including the composition of the households where they live and the relationships with their primary caregivers, is key to the design of targeted interventions aimed at promoting children's care and well-being.

Table CP.8 presents information on the living arrangements and orphan-hood status of children under age 18. In total, 56.7 per cent of children aged 0-17 years in Thailand live with both their parents, 16.1 per cent live with mothers only and 4.0 per cent live with their fathers only. Around one in five (21.2 per cent) children lives with neither of their biological parents while both of them are alive and 14.3 per cent live with their mothers only while the biological father is alive.

Very few children have lost one or both parents (3.5 per cent). Among children living with neither of their biological parents, 1.0 per cent have only their mother alive and 0.4 per cent have only their father alive.

As expected, older children are less likely than younger children to live with both parents and slightly more likely than younger children to have lost one or both parents. Among children having one or both parents dead, 8.2 per cent are in the 15-17 age group, 4.6 per cent are in the North region and 4.0 per cent in the middle and poorest wealth quintile. Table CP.8 also shows that the percentage of children living with both parents is highest in the South region (66.6 per cent), the 0-4 age group (62.5 per cent) and the richest wealth quintile (70.1 per cent) and lowest in the poorest quintile (48.7 per cent) and the Northeast region (47.4 per cent). Overall, 34.0 per cent of all children under age 18 in the poorest households live with neither of their biological parents.

Table CP.8: Children's living arrangements and orphanhood

Per cent distribution of children age 0-17 years according to living arrangements, percentage of children age 0-17 years not living with a biological parent and percentage of children who have one or both parents dead, Thailand MICS, 2015-2016

	Living with both parents	Living with neither biological parent			Living with mother only		Living with father only		Missing information on father/mother	Total	Living with neither biological parent ¹	One or both parents dead ²	Number of children age 0-17 years
		Only father alive	Only Mother Alive	Both alive	Both Dead	Father alive	Father dead	Mother alive					
Total	56.7	0.4	1.0	21.2	0.1	14.3	1.8	3.8	0.2	100.0	22.7	3.5	21,705
Sex													
Male	55.8	0.3	0.9	21.4	0.1	15.1	1.9	3.8	0.1	100.0	22.8	3.4	11,055
Female	57.7	0.5	1.1	20.9	0.1	13.6	1.6	3.8	0.2	100.0	22.7	3.6	10,649
Region													
Bangkok	66.2	0.3	0.7	10.2	0.0	14.9	1.4	5.5	0.2	100.0	11.2	2.7	2,096
Central	60.6	0.6	0.9	15.6	0.3	15.2	1.7	4.2	0.2	100.0	17.4	3.7	5,977
North	53.0	0.4	1.2	24.1	0.2	14.5	2.6	3.5	0.2	100.0	25.8	4.6	3,460
Northeast	47.4	0.4	1.2	31.6	0.1	14.4	1.4	3.2	0.1	100.0	33.2	3.1	6,813
South	66.6	0.2	0.8	14.0	0.1	12.3	2.0	3.5	0.3	100.0	15.0	3.4	3,360
Area													
Urban	57.5	0.5	0.9	17.3	0.1	16.1	2.1	4.6	0.1	100.0	18.9	3.7	8,877
Rural	56.2	0.4	1.0	23.8	0.1	13.1	1.6	3.2	0.2	100.0	25.4	3.3	12,827
Age													
0-4	62.5	0.1	0.3	18.2	0.0	15.7	0.6	2.5	0.1	100.0	18.6	1.1	5,462
5-9	54.0	0.2	0.9	23.9	0.0	14.7	1.1	4.8	0.0	100.0	25.0	2.2	6,072
10-14	55.4	0.6	1.1	22.0	0.3	14.0	1.8	3.9	0.2	100.0	24.0	4.1	6,422
15-17	54.9	0.9	2.0	19.7	0.2	12.5	4.5	4.1	0.5	100.0	22.8	8.2	3,748
Wealth index quintile													
Poorest	48.7	0.5	1.3	32.0	0.1	11.6	1.8	3.1	0.2	100.0	34.0	4.0	4,463
Second	50.4	0.3	1.3	27.1	0.1	14.3	2.0	3.9	0.2	100.0	28.8	3.9	4,579
Middle	54.6	0.7	1.0	22.4	0.1	14.7	2.0	3.7	0.2	100.0	24.2	4.0	4,600
Fourth	62.2	0.3	0.5	13.3	0.3	16.7	1.7	4.7	0.2	100.0	14.3	2.9	4,258
Richest	70.1	0.1	1.0	8.7	0.0	14.7	1.3	3.7	0.0	100.0	9.8	2.5	3,804
Language of household head													
Thai	55.9	0.4	1.0	21.5	0.1	14.6	1.8	3.9	0.2	100.0	23.2	3.5	20,083
Non-Thai	67.2	0.1	0.5	16.6	0.1	10.8	2.1	2.1	0.0	100.0	17.3	2.8	1,622

¹ MICS indicator 8.13 - Children's living arrangements
² MICS indicator 8.14 - Prevalence of children with one or both parents dead

The Thailand MICS included a simple measure of one particular aspect of migration related to what are termed 'children left behind', i.e. for whom one or both parents have moved abroad. While the body of literature on this subject is growing, the long-term effects of the benefits of remittances versus the potential adverse psychosocial effects are not yet conclusive, as there is somewhat conflicting evidence regarding the impacts on children.

Besides presenting simple prevalence rates, the results of the Thailand MICS shown in Table CP.9 will greatly help to fill the data gap on the topic of migration. As expected, only 1.6 per cent of children aged 0-17 have one or both parents living abroad. There are notable differences between groups of children, however, as the percentage of at least one parent living abroad is much higher in the Northeast (2.7 per cent) and among children in the second poorest households (2.1 per cent) and children in households headed by a non-Thai speaker (3.5 per cent). Children aged 5-9 are also more likely to have one or both parents abroad (2.2 per cent). Children in households headed by a non-Thai speaker were somewhat more likely to have their mother or both parents abroad compared to any other background characteristics (0.8 per cent and 2.2 per cent respectively).

Table CP.9: Children with parents living abroad							
Per cent distribution of children age 0-17 years by residence of parents in another country, Thailand MICS, 2015-2016							
	Percent distribution of children age 0-17 years:				Total	Percentage of children age 0-17 years with at least one parent living abroad ¹	Number of children age 0-17 years
	With at least one parent living abroad			With neither parent living abroad			
	Only mother abroad	Only father abroad	Both mother and father abroad				
Total	0.3	0.8	0.4	98.4	100.0	1.6	21,705
Sex							
Male	0.5	0.9	0.3	98.2	100.0	1.8	11,055
Female	0.2	0.7	0.6	98.6	100.0	1.4	10,649
Region							
Bangkok	0.4	1.1	0.0	98.4	100.0	1.6	2,096
Central	0.2	0.3	0.3	99.2	100.0	0.8	5,977
North	0.1	0.7	0.3	98.9	100.0	1.1	3,460
Northeast	0.6	1.3	0.7	97.3	100.0	2.7	6,813
South	0.2	0.7	0.4	98.6	100.0	1.4	3,360
Area							
Urban	0.2	0.7	0.2	98.8	100.0	1.2	8,877
Rural	0.4	0.9	0.6	98.1	100.0	1.9	12,827
Age group							
0-4	0.1	1.1	0.3	98.6	100.0	1.4	5,462
5-9	0.5	1.1	0.6	97.8	100.0	2.2	6,072
10-14	0.3	0.8	0.3	98.6	100.0	1.4	6,422
15-17	0.4	0.2	0.8	98.6	100.0	1.4	3,748
Wealth index quintile							
Poorest	0.5	0.5	0.2	98.7	100.0	1.3	4,463
Second	0.2	0.9	0.9	97.9	100.0	2.1	4,579
Middle	0.4	1.1	0.4	98.1	100.0	1.9	4,600
Fourth	0.1	0.7	0.4	98.7	100.0	1.3	4,258
Richest	0.4	0.8	0.2	98.6	100.0	1.4	3,804
Language of household head							
Thai	0.3	0.8	0.3	98.5	100.0	1.5	20,083
Non-Thai	0.8	0.5	2.2	96.5	100.0	3.5	1,622

¹ MICS indicator 8.15 - Children with at least one parent living abroad

XI. HIV/AIDS



XI. HIV/AIDS

Knowledge about HIV Transmission and Misconceptions about HIV

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 adolescents and young people the tools to protect themselves from infection. Misconceptions about HIV are common and can confuse adolescents and young people and hinder prevention efforts. 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 module(s) were administered to women and men 15-49 years of age. Please note that the questions in this module often refer to “the AIDS virus”. This terminology is used strictly as a method of data collection to aid respondents, preferred over the correct terminology of “HIV” that is used here in reporting the results, where appropriate.

One indicator that is both an MDG and the Global AIDS Response Progress Reporting (GARPR; formerly UNGASS) indicator is the percentage of young people who have comprehensive and correct knowledge of HIV prevention and transmission. This is defined as 1) knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, 2) knowing that a healthy looking person can have HIV, and 3) rejecting the two most common local misconceptions about transmission/prevention of HIV. In the Thailand MICS all women and men who have heard of AIDS were asked questions on all three components and the results are detailed in Tables HA.1 and HA.1M.

In Thailand, a large majority of women and men aged 15-49 years have heard of AIDS (96.2 per cent and 95.2 per cent, respectively). However, the percentage of those who know of both main ways of preventing HIV transmission – having only one faithful uninfected partner and using a condom every time – is 83.0 per cent for women and 83.6 per cent for men. About 88.7 per cent of women and men know about having one faithful uninfected sex partner and 87.5 per cent of women and 87.6 per cent of men know about using a condom every time as main ways of preventing HIV transmission.

Tables HA.1 and HA.1M also present the percentage of women and men who can correctly identify misconceptions concerning HIV. The indicator is based on the two most common and relevant misconceptions in Thailand, that HIV can be transmitted by mosquito bites means and sharing food. The tables also provide information on whether women and men know that HIV cannot be transmitted by supernatural. Overall, 54.1 per cent of women and 53.6 per cent of men reject the two most common misconceptions and know that a healthy looking person can be HIV-positive. About 92.8 per cent of women and 91.7 per cent of men know that HIV cannot be transmitted by supernatural means, and 76.5 per cent of women and 76.6 per cent of men know that HIV cannot be transmitted by mosquito bites, while 83.8 per cent of women and 82.9 per cent of men know that a healthy looking person can be HIV-positive.

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

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 be HIV-positive, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Thailand MICS, 2015-2016											
	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:			Percentage who know that a healthy looking person can be HIV-positive	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 be HIV-positive	Percentage with comprehensive knowledge ¹	Number of women age 15-49
		Having only one faithful uninfected sex partner	Using a condom every time	Both		Mosquito bites	Supernatural means	Sharing food with someone with HIV			
Total	96.2	88.7	87.5	83.0	83.8	76.5	92.8	72.0	54.1	48.8	25,614
Region											
Bangkok	98.7	85.8	87.1	79.8	86.2	81.3	95.1	75.4	59.5	50.7	3,998
Central	95.4	89.1	85.5	81.7	82.1	79.6	92.4	68.7	54.2	48.6	8,415
North	95.2	90.7	89.3	85.8	85.3	70.7	90.9	77.9	56.9	53.1	3,815
Northeast	97.5	90.0	91.2	86.5	84.8	75.6	94.2	75.4	54.1	50.3	5,937
South	94.2	86.6	84.3	80.6	82.0	71.1	90.6	63.2	44.4	39.7	3,450
Area											
Urban	97.3	89.5	88.3	83.7	85.5	80.2	94.0	73.3	57.7	51.7	12,599
Rural	95.2	88.0	86.7	82.3	82.2	72.8	91.6	70.6	50.6	46.0	13,015
Age											
15-24 ¹	96.1	88.4	87.2	82.7	84.1	74.8	92.5	67.6	51.3	46.0	6,236
15-19	96.4	89.1	88.9	83.7	84.7	75.6	92.1	67.8	51.4	46.5	3,359
20-24	95.7	87.6	85.1	81.4	83.5	73.7	93.0	67.4	51.1	45.5	2,878
25-29	96.0	88.7	88.8	84.2	85.7	77.3	93.0	70.4	56.0	51.7	3,089
30-39	96.6	89.4	88.6	84.2	84.7	80.4	93.1	76.2	58.8	53.5	7,522
40-49	96.0	88.3	86.3	81.8	82.2	74.0	92.6	72.0	51.4	45.7	8,767
Marital status											
Ever married/ in union	96.1	88.9	87.9	83.5	83.7	75.1	92.4	72.0	53.2	48.2	18,639
Never married/ in union	96.5	88.2	86.2	81.6	84.3	80.1	93.8	71.9	56.6	50.3	6,975

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

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 be HIV-positive, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Thailand MICS, 2015-2016											
	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:			Percentage who know that a healthy looking person can be HIV-positive	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 be HIV-positive	Percentage with comprehensive knowledge ¹	Number of women age 15-49
		Having only one faithful uninfected sex partner	Using a condom every time	Both		Mosquito bites	Supernatural means	Sharing food with Someone with HIV			
Education											
None	66.9	51.9	54.4	47.4	46.1	35.4	56.1	39.4	18.1	14.8	829
Primary	95.0	85.6	84.3	79.2	77.4	67.6	90.5	67.2	43.0	38.3	7,281
Secondary	97.4	91.1	89.1	85.0	86.6	78.4	94.3	72.0	55.6	50.2	11,043
Higher	99.3	92.7	92.6	88.6	91.3	88.4	97.4	81.4	68.6	62.6	6,453
Missing/DK	66.1	58.2	56.8	53.8	43.2	41.9	56.0	27.2	8.9	8.9	8
Wealth index quintile											
Poorest	92.1	83.7	82.9	78.2	76.8	62.6	86.0	68.1	43.8	40.0	3,655
Second	94.7	86.1	85.1	80.6	79.9	69.8	90.6	69.1	47.2	42.7	4,747
Middle	96.0	88.1	87.1	81.9	83.9	74.9	92.5	68.1	51.6	46.3	5,522
Fourth	98.1	90.9	90.0	85.4	87.4	81.3	95.8	73.6	56.8	51.0	5,820
Richest	98.4	92.3	90.2	86.6	87.8	87.1	96.0	78.7	65.7	59.4	5,870
Language of household head											
Thai	97.3	90.5	89.3	84.9	85.8	78.3	94.2	73.5	56.0	50.7	23,755
Non-Thai	82.2	65.9	64.8	59.0	59.2	53.3	74.7	52.4	29.2	24.6	1,859

¹MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young women

Table HA.1M: Knowledge about HIV transmission, misconceptions about HIV, and comprehensive knowledge about HIV transmission (men)

Percentage of men age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can be HIV-positive, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Thailand MICS, 2015-2016											
	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:			Percentage who know that a healthy looking person can be HIV-positive	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 be HIV-positive	Percentage with comprehensive knowledge ¹	Number of men age 15-49
		Having only one faithful uninfected sex partner	Using a condom every time	Both		Mosquito bites	Supernatural means	Sharing food with Someone with HIV			
Total	95.2	88.7	87.6	83.6	82.9	76.6	91.7	70.6	53.6	49.0	23,183
Region											
Bangkok	98.0	86.1	88.5	81.4	83.9	80.8	95.1	75.2	59.5	52.5	3,460
Central	93.9	88.7	85.3	82.1	80.7	78.7	90.5	68.6	53.3	48.8	7,663
North	95.4	91.1	90.1	87.1	86.0	74.3	92.7	76.6	58.5	54.0	3,358
Northeast	96.8	91.5	91.1	87.7	85.2	76.8	92.4	72.4	53.9	50.8	5,547
South	92.2	84.2	83.4	79.0	79.8	68.8	88.6	60.8	41.8	37.0	3,155
Area											
Urban	96.3	89.2	88.6	84.3	83.6	79.6	93.0	72.1	56.6	51.4	11,216
Rural	94.1	88.3	86.7	83.0	82.2	73.8	90.5	69.1	50.7	46.7	11,967
Age											
15-24 ¹	94.1	87.1	87.6	82.9	81.1	73.3	90.6	64.8	49.1	45.1	6,197
15-19	94.9	88.0	89.0	84.6	81.6	75.8	92.3	63.1	48.6	45.0	3,400
20-24	93.1	85.9	85.9	81.0	80.4	70.4	88.5	66.8	49.6	45.2	2,797
25-29	93.4	86.7	86.3	81.6	81.5	74.8	89.6	70.3	52.8	47.6	2,524
30-39	95.7	89.7	87.7	84.4	83.6	78.2	92.0	72.6	56.1	51.5	6,933
40-49	96.2	89.8	87.9	84.1	84.2	78.3	93.0	73.6	55.1	50.3	7,529
Marital status											
Ever married/in union	96.1	90.2	88.6	85.1	84.2	76.9	92.6	72.4	54.6	50.1	14,835
Never married/in union	93.7	86.1	85.9	81.1	80.6	75.9	90.2	67.3	51.7	46.9	8,342
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6

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

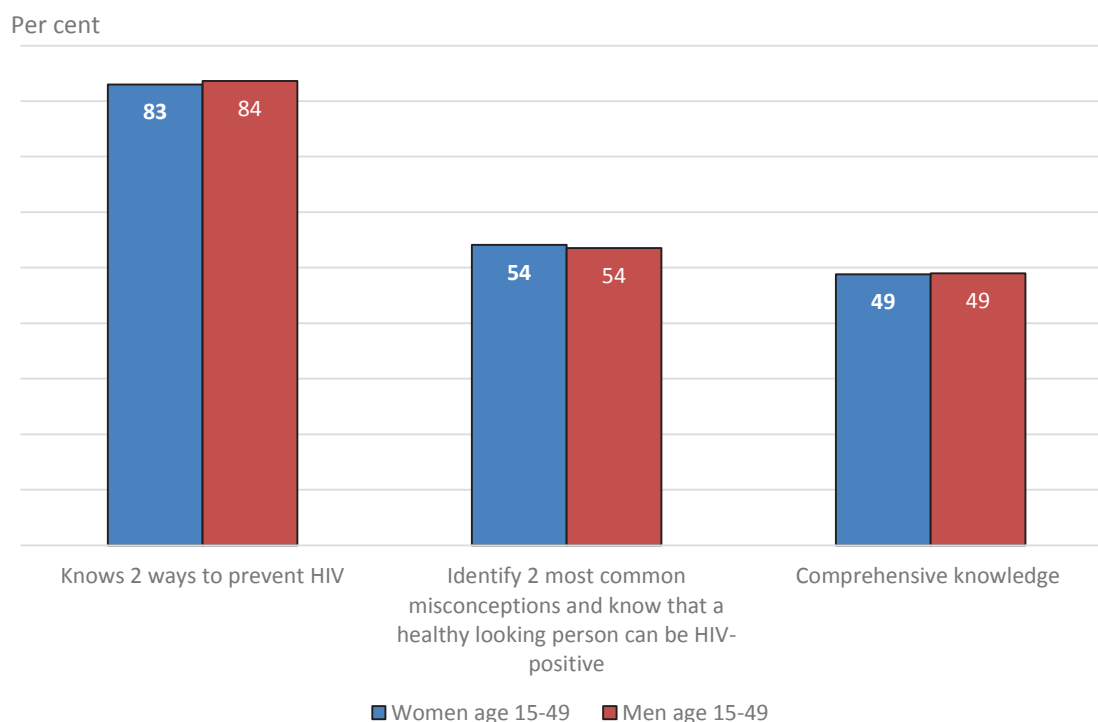
Percentage of men age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can be HIV-positive, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Thailand MICS, 2015-2016

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:			Percentage who know that a healthy looking person can be HIV-positive	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 be HIV-positive	Percentage with comprehensive knowledge ¹	Number of men age 15-49
		Having only one faithful uninfected sex partner	Using a condom every time	Both		Mosquito bites	Supernatural means	Sharing food with Someone with HIV			
Education											
None	55.0	45.6	43.0	40.2	36.4	26.5	46.6	31.4	13.1	10.6	728
Primary	94.0	86.4	85.3	81.1	77.6	68.9	89.7	65.1	43.0	39.1	6,870
Secondary	97.1	91.0	89.8	85.8	85.5	79.1	94.0	72.3	55.9	51.1	10,713
Higher	98.8	93.5	92.7	88.9	91.5	89.4	96.3	80.4	69.4	64.0	4,865
Missing/DK	56.5	52.4	44.3	44.3	41.9	34.2	51.9	29.9	17.2	17.2	7
Wealth index quintile											
Poorest	91.8	83.8	84.5	79.7	75.5	63.8	86.6	65.3	42.3	38.9	4,155
Second	91.2	83.5	82.4	78.2	77.8	67.3	86.8	65.2	44.7	41.0	4,757
Middle	96.5	91.3	88.7	85.7	83.2	78.3	93.5	70.3	52.8	48.2	4,875
Fourth	97.6	91.4	90.7	86.4	87.1	84.4	95.5	75.4	61.3	55.4	4,937
Richest	98.6	93.0	91.3	87.7	90.3	87.7	95.5	76.2	65.7	60.5	4,460
Language of household head											
Thai	96.5	90.8	89.7	85.9	85.0	78.7	93.4	72.3	55.6	51.1	21,325
Non-Thai	79.7	64.1	63.2	57.5	58.4	51.9	72.4	51.3	30.0	24.5	1,858

¹MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young men^[M]

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

Figure HA.1: Women and men with comprehensive knowledge of HIV transmission, Thailand MICS, 2015-2016



People who have comprehensive knowledge about HIV prevention include those who know of the two main ways of preventing HIV (having only one faithful uninfected partner and using a condom every time), who know that a healthy looking person can be HIV-positive, and who reject the two most common misconceptions. In Thailand, comprehensive knowledge of HIV prevention methods and transmission is fairly low. Overall, 48.8 per cent of women and 49.0 per cent of men were found to have comprehensive knowledge, with levels slightly higher in urban areas (51.7 per cent for women and 51.4 per cent for men, respectively). As expected, the percentage of women and men with comprehensive knowledge increases with their education level and household wealth index quintile.

About 14.8 per cent of women with no education have comprehensive knowledge compared to 62.6 per cent of women with higher education. Approximately 40.0 per cent of women in the poorest households have comprehensive knowledge compared to 59.4 in the richest households. Similarly, 10.6 per cent of men with no education have comprehensive knowledge compared to 64.0 per cent of men with higher education. Four in 10 men (38.9 per cent) in the poorest households have comprehensive knowledge about HIV prevention compared to 6 in 10 (60.5 per cent) in the richest households. The percentage of women (50.7 per cent) and men (51.1 per cent) living in households headed by a Thai-speaking household head who have comprehensive knowledge is twice as high as for women and men in households headed by a non-Thai speaker (24.6 per cent and 24.5 per cent respectively).

Table HA.2: Knowledge of mother-to-child transmission of HIV (women)							
Percentage of women age 15-49 years who correctly identify means of HIV transmission from mother to child, Thailand MICS, 2015-2016							
	Percentage of women age 15-49 who have heard of AIDS and:						Number of women age 15-49
	Know HIV can be transmitted from mother to child:					Do not know any of the specific means of HIV transmission from mother to child	
	During pregnancy	During delivery	By breast-feeding	By at least one of the three means	By all three means ¹		
Total	87.8	74.1	80.2	91.9	66.4	4.3	25,614
Region							
Bangkok	90.4	73.7	78.0	94.2	63.1	4.6	3,998
Central	87.7	74.3	76.7	90.5	66.3	4.9	8,415
North	83.0	71.1	82.7	90.4	65.3	4.8	3,815
Northeast	91.1	78.9	88.9	95.2	73.4	2.4	5,937
South	84.3	68.9	73.7	88.9	59.6	5.3	3,450
Area							
Urban	89.0	74.7	79.6	92.8	65.9	4.5	12,599
Rural	86.5	73.5	80.8	91.1	66.8	4.1	13,015
Age group							
15-24	86.9	72.9	79.7	91.1	66.0	5.0	6,236
15-19	86.7	72.3	79.6	91.1	65.5	5.3	3,359
20-24	87.2	73.5	79.8	91.1	66.7	4.6	2,878
25-29	88.0	77.4	81.6	91.4	69.2	4.7	3,089
30-39	90.1	77.1	80.5	93.7	68.0	3.0	7,522
40-49	86.3	71.2	79.8	91.2	64.3	4.8	8,767
Marital status							
Ever married/in union	87.9	74.5	81.0	92.2	67.2	3.9	18,639
Never married/ in union	87.4	73.0	78.0	91.2	64.3	5.3	6,975
Education							
None	45.1	39.6	44.8	49.9	37.3	17.0	829
Primary	85.3	69.3	79.2	89.9	62.9	5.1	7,281
Secondary	89.7	76.5	82.7	93.6	69.3	3.8	11,043
Higher	92.8	79.8	81.7	96.8	69.1	2.5	6,453
Missing/DK	64.0	62.0	60.4	65.6	57.3	0.5	8
Wealth index quintile							
Poorest	82.8	70.7	80.7	87.4	65.5	4.7	3,655
Second	84.0	69.4	78.9	88.6	63.5	6.0	4,747
Middle	86.8	73.6	80.6	91.7	65.9	4.3	5,522
Fourth	91.5	77.2	80.8	94.7	68.9	3.4	5,820
Richest	91.0	77.4	80.0	94.9	67.3	3.5	5,870
Language of household head							
Thai	89.5	75.4	81.7	93.6	67.6	3.8	23,755
Non-Thai	65.9	56.7	61.7	71.3	50.4	10.9	1,859

¹ MICS indicator 9.2 - Knowledge of mother-to-child transmission of HIV

Table HA.2M: Knowledge of mother-to-child transmission of HIV (men)							
Percentage of men age 15-49 years who correctly identify means of HIV transmission from mother to child, Thailand MICS, 2015-2016							
	Percentage of men age 15-49 who have heard of AIDS and:						Number of men age 15-49
	Know HIV can be transmitted from mother to child:					Do not know any of the specific means of HIV transmission from mother to child	
	During pregnancy	During delivery	By breast-feeding	By at least one of the three means	By all three means ¹		
Total	81.4	66.4	70.8	86.0	57.4	9.2	23,183
Region							
Bangkok	83.7	66.2	69.6	88.2	54.5	9.8	3,460
Central	79.2	63.8	63.1	82.3	53.5	11.6	7,663
North	76.3	64.3	73.0	86.0	54.9	9.4	3,358
Northeast	87.6	74.4	83.8	91.2	69.1	5.6	5,547
South	79.0	61.2	65.7	83.4	51.7	8.8	3,155
Area							
Urban	81.4	66.6	69.7	85.9	56.8	10.4	11,216
Rural	81.5	66.2	71.9	86.1	57.9	8.0	11,967
Age group							
15-24	78.0	65.2	70.7	83.3	57.1	10.8	6,197
15-19	77.2	64.9	72.0	83.2	57.5	11.7	3,400
20-24	78.8	65.7	69.1	83.4	56.5	9.7	2,797
25-29	80.7	64.9	69.2	84.5	56.9	8.9	2,524
30-39	82.9	68.1	71.4	87.1	58.6	8.6	6,933
40-49	83.1	66.3	71.0	87.6	56.7	8.6	7,529
Marital status							
Ever married/in union	83.1	67.2	71.5	87.7	57.8	8.4	14,835
Never married/ in union	78.4	65.0	69.6	83.0	56.6	10.6	8,342
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	6
Education							
None	31.9	31.3	31.9	36.1	27.4	18.8	728
Primary	77.1	61.6	68.4	82.7	53.7	11.3	6,870
Secondary	83.7	67.7	72.6	88.1	58.8	9.0	10,713
Higher	89.9	75.6	76.1	93.6	64.0	5.2	4,865
Missing/DK	51.7	41.8	48.2	55.4	36.8	1.1	7
Wealth index quintile							
Poorest	76.6	62.9	71.8	81.9	56.7	9.9	4,155
Second	76.7	63.4	68.7	81.3	55.9	9.9	4,757
Middle	80.1	64.8	69.6	85.5	55.2	11.0	4,875
Fourth	86.9	70.5	72.8	90.4	60.0	7.3	4,937
Richest	86.4	70.1	71.3	90.5	59.0	8.0	4,460
Language of household head							
Thai	83.7	68.0	72.4	88.1	58.6	8.4	21,325
Non-Thai	55.0	48.3	53.2	61.4	43.5	18.3	1,858

¹ MICS indicator 9.2 - Knowledge of mother-to-child transmission of HIV^(M)

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

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

presented in Tables HA.2 and HA.2M. Overall, 91.9 per cent of women and 86.0 per cent of men know that HIV can be transmitted from mother to child. The percentage of women and men who know all three ways of mother-to-child transmission is 66.4 per cent and 57.4 per cent respectively, while 4.3 per cent of women and 9.2 per cent of men do not know of any specific way. The percentage of women who know HIV can be transmitted from mother to child by all three means varies across regions. The highest percentage of women who know all three means of mother-to-child transmission of HIV is in the Northeast (73.4 per cent) compared to the lowest (59.6 per cent) in the South. Women's educational background is positively related to the percentage of women who know HIV can be transmitted from mother to child by all three means. Similar trends were observed for men as well.

Accepting Attitudes towards People Living with HIV

The indicators on attitudes towards people living with HIV measure stigma and discrimination in the community. Stigma and discrimination are considered low if respondents report an accepting attitude on the following four questions: 1) would care for a family member with AIDS in own home; 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 it a secret if a family member is HIV-positive.

Tables HA.3 and HA.3M present the attitudes of women and men towards people living with HIV. In Thailand, 97.5 per cent of women and 97.3 per cent of men who have heard of AIDS agree with at least one accepting statement. The most common accepting attitude is care for a family member with AIDS in own home (92.0 per cent and 90.6 per cent respectively). One in three women and men express accepting attitudes on all four indicators (31.6 per cent and 33.0 per cent respectively). Primary educate men and women are more likely to have accepting attitude towards people with HIV compared to men and women with other educational background. Similarly, poorest men and women also express accepting attitude towards people living with HIV. One in four women (23.5 per cent) and men (23.5 per cent) living in households headed by a non-Thai speaker express accepting attitudes on all four indicators compared to one in three women (32.2 per cent) and men (33.7 per cent) in households headed by a Thai-speaker.

Table HA.3: Accepting attitudes toward people living with HIV (women)

Percentage of women age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV, Thailand MICS, 2015-2016		Percentage of women who:					Number of women age 15-49 who have heard of AIDS		
	Are willing to care for a family member with AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who is HIV-positive	Believe that a female teacher who is HIV-positive and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member is HIV-positive	Express accepting attitudes on all four indicators ¹	Believe that a child living with HIV should be able to attend school	Agree with at least one accepting attitude	Express accepting attitudes on all five indicators	
Total	92.0	64.1	80.8	47.1	31.6	84.9	97.5	30.7	24,647
Region									
Bangkok	89.8	50.2	76.8	30.0	16.0	79.4	94.9	15.6	3,948
Central	91.6	63.5	78.7	37.1	25.0	81.6	96.7	24.4	8,029
North	94.3	73.2	83.8	58.7	43.6	91.0	99.3	41.8	3,631
Northeast	92.5	71.8	86.4	65.4	45.8	90.4	99.2	44.6	5,791
South	92.4	58.9	77.5	47.1	28.1	83.2	97.6	27.3	3,249
Area									
Urban	91.2	61.2	80.7	41.1	27.5	82.9	96.7	26.7	12,256
Rural	92.9	67.1	80.9	53.1	35.6	86.9	98.3	34.7	12,390
Age									
15-24	90.7	53.7	76.8	41.3	23.5	82.8	97.0	22.9	5,992
15-19	90.2	50.9	78.2	43.3	23.5	82.3	98.1	23.0	3,238
20-24	91.3	57.0	75.2	39.0	23.6	83.3	95.8	22.7	2,754
25-29	90.7	65.3	81.2	46.5	31.7	84.0	97.2	30.6	2,966
30-39	92.0	67.2	83.1	45.4	32.7	84.9	97.5	31.6	7,269
40-49	93.4	68.5	81.5	53.0	36.4	86.8	97.9	35.4	8,420
Marital status									
Ever married/ in union	92.9	67.4	81.4	50.9	34.9	85.8	98.0	33.9	17,915
Never married/ in union	89.7	55.5	79.2	36.9	22.8	82.4	96.0	22.1	6,732

Table HA.3: Accepting attitudes toward people living with HIV (women) (continued)

Percentage of women age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV, Thailand MICS, 2015-2016										
	Percentage of women who:									Number of women age 15-49 who have heard of AIDS
	Are willing to care for a family member with AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who is HIV-positive	Believe that a female teacher who is HIV-positive and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member is HIV-positive	Express accepting attitudes on all four indicators ¹	Believe that a child living with HIV should be able to attend school	Agree with at least one accepting attitude	Express accepting attitudes on all five indicators		
Education										
None	84.7	56.0	59.9	41.3	20.6	69.0	93.4	20.1	555	
Primary	92.5	65.0	78.6	54.6	36.2	84.1	97.4	35.1	6,918	
Secondary	92.2	64.2	82.2	47.1	32.2	85.3	97.9	31.3	10,761	
Higher	91.9	63.9	82.7	39.5	26.7	86.5	97.2	25.8	6,408	
Missing/DK	(97.4)	(23.1)	(68.0)	(61.8)	(12.5)	(64.1)	(100.0)	(11.0)	5	
Wealth index quintile										
Poorest	91.1	67.0	80.5	60.7	39.9	87.7	98.3	39.0	3,368	
Second	93.0	66.8	79.3	55.9	38.8	86.3	98.1	37.9	4,495	
Middle	91.9	61.9	80.1	46.9	29.7	84.3	97.3	28.8	5,300	
Fourth	92.7	63.8	81.0	43.0	28.9	83.1	97.3	27.5	5,710	
Richest	91.2	62.8	82.6	36.6	25.7	84.5	96.9	25.1	5,773	
Language of household head										
Thai	92.6	65.0	81.8	47.2	32.2	86.1	97.8	31.2	23,119	
Non-Thai	83.4	50.7	65.1	45.7	23.5	66.0	93.2	22.6	1,528	

¹ MICS indicator 9.3 - Accepting attitudes towards people living with HIV

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

Table HA.3M: Accepting attitudes toward people living with HIV (men)

Percentage of men age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV, Thailand MICS, 2015-2016									
	Percentage of men who:							Number of men age 15-49 who have heard of AIDS	
	Are willing to care for a family member with AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who is HIV-positive	Believe that a female teacher who is HIV-positive and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member is HIV-positive	Express accepting attitudes on all four indicators ¹	Believe that a child living with HIV should be able to attend school	Agree with at least one accepting attitude		Express accepting attitudes on all five indicators
Total	90.6	65.4	81.0	49.2	33.0	84.5	97.3	31.6	22,069
Region									
Bangkok	88.2	54.0	76.4	34.2	17.3	77.8	95.8	16.1	3,389
Central	89.3	63.9	80.0	39.7	26.5	81.3	96.4	24.9	7,197
North	90.6	73.4	81.1	61.8	44.5	89.9	98.0	43.0	3,202
Northeast	93.7	74.4	87.5	64.4	47.4	90.3	99.1	45.7	5,371
South	90.7	57.0	76.4	48.6	28.0	83.8	97.0	27.4	2,910
Area									
Urban	89.6	63.2	79.7	43.4	28.6	82.0	96.3	27.3	10,805
Rural	91.6	67.5	82.2	54.9	37.2	86.8	98.2	35.6	11,264
Age									
15-24	88.6	58.2	77.6	44.6	27.7	82.7	96.7	26.5	5,832
15-19	87.0	57.2	78.1	44.8	27.4	83.0	96.7	26.2	3,227
20-24	90.6	59.4	77.1	44.3	28.0	82.5	96.7	26.9	2,605
25-29	91.2	65.8	81.3	45.8	30.8	82.7	97.1	28.8	2,359
30-39	91.4	68.6	81.8	50.0	35.4	84.4	96.7	33.9	6,636
40-49	91.2	68.1	82.8	53.4	35.8	86.6	98.4	34.4	7,242
Marital status									
Ever married/ in union	91.6	67.6	81.7	52.1	35.3	84.9	97.9	33.8	14,250
Never married/ in union	88.7	61.4	79.7	44.1	28.8	83.7	96.2	27.6	7,813
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6

Table HA.3M: Accepting attitudes toward people living with HIV (men) (continued)

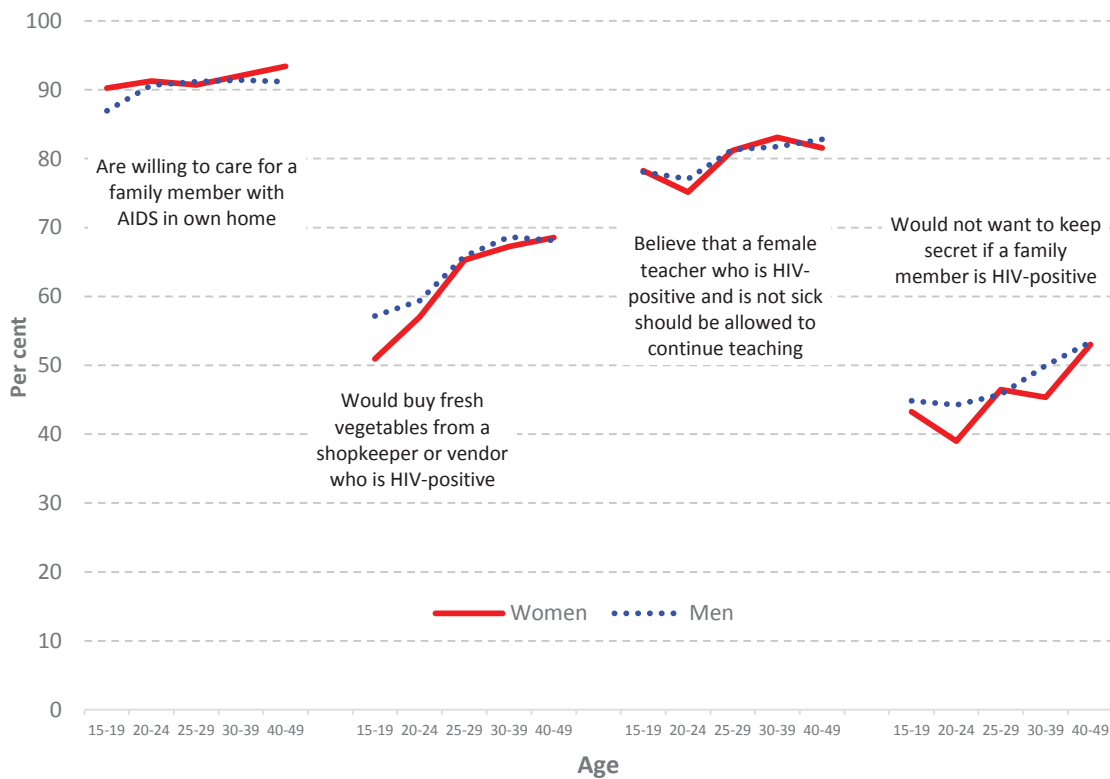
Percentage of men age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV, Thailand MICS, 2015-2016		Percentage of men who:					Number of men age 15-49 who have heard of AIDS		
	Are willing to care for a family member with AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who is HIV-positive	Believe that a female teacher who is HIV-positive and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member is HIV-positive	Express accepting attitudes on all four indicators ¹	Believe that a child living with HIV should be able to attend school	Agree with at least one accepting attitude	Express accepting attitudes on all five indicators	
Education									
None	82.4	56.2	64.0	47.5	25.2	79.3	93.0	23.9	400
Primary	91.2	64.5	78.5	53.0	34.4	84.3	97.0	32.7	6,455
Secondary	89.6	64.4	81.0	49.2	32.9	84.4	97.1	31.3	10,403
Higher	92.6	69.5	85.7	44.3	31.9	85.5	98.3	31.2	4,806
Missing/DK	(98.0)	(49.9)	(61.7)	(55.8)	(24.1)	(65.2)	(100.0)	(22.3)	4
Wealth index quintile									
Poorest	92.0	67.0	78.5	62.7	41.8	86.4	97.6	40.3	3,813
Second	89.7	67.7	80.7	53.4	36.3	85.3	97.7	34.5	4,338
Middle	89.3	62.6	78.9	47.2	31.0	83.2	96.2	30.0	4,702
Fourth	91.6	65.7	83.2	46.3	30.7	85.3	97.6	28.9	4,820
Richest	90.5	64.3	83.1	38.9	26.7	82.6	97.5	25.7	4,396
Language of household head									
Thai	91.3	66.6	82.2	49.6	33.7	85.5	97.6	32.2	20,587
Non-Thai	80.1	49.1	64.2	43.9	23.5	70.8	93.3	22.0	1,482

¹ MICS indicator 9.3 - Accepting attitudes towards people living with HIV

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

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

Figure HA.2: Accepting attitudes toward people living with HIV/AIDS, Thailand MICS, 2015-2016



Knowledge of a Place for HIV Testing, Counselling and Testing during Antenatal Care

Another important indicator is the knowledge of where to be tested for HIV and use of such services. In order to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of own status is also a critical factor in the decision to seek treatment.

Questions related to knowledge of a facility for HIV testing and whether a person has ever been tested are presented in Tables HA.4 and HA.4M. Overall, 84.7 per cent of women and 80.3 per cent of men knew where to be tested, while 54.4 per cent and 41.8 per cent respectively have actually been tested. Fewer – 52.6 per cent of women and 40.6 per cent of men – knew the result of their most recent test.

Almost 1 in 10 has been tested within the last 12 months (9.6 per cent of women and 8.8 per cent of men), while a similar proportion has been tested within the last 12 months and knows the result (9.3 per cent and 8.5 per cent respectively). The percentage of women tested in the last 12 months who know the result ranges from 6.1 per cent in the Northeast to 12.8 per cent in the Central region. Women in the 25-29-year age group are more likely (14.1 per cent) to be tested in the last 12 months and know the result compared to women in the 40-49 year age group (5.6 per cent). Women with primary education (4.9 per cent) and women in the poorest quintile are less likely (5.0 per cent) to be tested in the last 12 months and know the result compared to women with other educational and wealth backgrounds. Similarly, the percentage of men tested in the last 12 months who know the result ranged from 5.5 per cent in the Northeast to 12.2 per cent in the Central region. Urban men are more likely to be tested and know the result compared to their rural counterparts. Testing for HIV and knowing the results is more common (12.1 per cent) among men in the 30-39-year age group compared to other men. Education

and wealth status is positively related to the percentage of men tested for HIV in the last 12 months who know the test result.

Table HA.4: Knowledge of a place for HIV testing (women)						
Percentage of women age 15-49 years who know where to get an HIV test, percentage who have ever been tested, percentage who have ever been tested and know the result of the most recent test, percentage who have been tested in the last 12 months, and percentage who have been tested in the last 12 months and know the result, Thailand MICS, 2015-2016						
	Percentage of women who:					Number of women age 15-49
	Know a place to get tested ¹	Have ever been tested	Have ever been tested and know the result of the most recent test	Have been tested in the last 12 months	Have been tested in the last 12 months and know the result ²	
Total	84.7	54.4	52.6	9.6	9.3	25,614
Region						
Bangkok	85.1	46.7	45.4	7.3	7.1	3,998
Central	84.1	56.6	54.1	13.4	12.8	8,415
North	86.7	59.8	58.8	9.4	9.2	3,815
Northeast	84.1	52.2	50.9	6.2	6.1	5,937
South	84.3	55.4	53.2	9.0	8.5	3,450
Area						
Urban	86.0	54.4	53.1	9.7	9.5	12,599
Rural	83.4	54.4	52.1	9.4	9.0	13,015
Age						
15-24	79.3	27.4	25.7	9.7	8.8	6,236
15-19	74.5	15.3	14.5	6.7	6.3	3,359
20-24	85.0	41.5	38.7	13.2	11.7	2,878
25-29	89.2	59.8	58.5	14.3	14.1	3,089
30-39	89.5	69.3	67.5	12.1	11.9	7,522
40-49	82.8	58.8	56.8	5.7	5.6	8,767
Marital status						
Ever married/in union	87.0	69.0	66.9	11.1	10.8	18,639
Never married/in union	78.4	15.2	14.3	5.4	5.1	6,975
Education						
None	51.4	39.2	37.0	9.0	9.0	829
Primary	78.3	56.6	54.0	5.3	4.9	7,281
Secondary	85.9	55.1	53.3	10.1	9.8	11,043
Higher	93.9	52.6	51.8	13.5	13.4	6,453
Missing/DK	50.6	48.7	48.7	16.4	16.4	8
Wealth index quintile						
Poorest	77.3	50.5	48.1	6.0	5.0	3,655
Second	80.4	52.2	50.2	9.3	9.0	4,747
Middle	82.6	52.3	50.3	8.5	8.1	5,522
Fourth	89.1	58.3	56.6	10.4	10.2	5,820
Richest	90.3	56.5	55.5	12.3	12.3	5,870
Language of household head						
Thai	86.2	55.4	53.7	9.5	9.3	23,755
Non-Thai	65.5	41.5	38.0	10.8	9.3	1,859

¹ MICS indicator 9.4 - Women who know where to be tested for HIV

² MICS indicator 9.5 - Women who have been tested for HIV and know the results

Table HA.4M: Knowledge of a place for HIV testing (men)						
Percentage of men age 15-49 years who know where to get an HIV test, percentage who have ever been tested, percentage who have ever been tested and know the result of the most recent test, percentage who have been tested in the last 12 months, and percentage who have been tested in the last 12 months and know the result, Thailand MICS, 2015-2016						
	Percentage of men who:					Number of men age 15-49
	Know a place to get tested ¹	Have ever been tested	Have ever been tested and know the result of the most recent test	Have been tested in the last 12 months	Have been tested in the last 12 months and know the result ²	
Total	80.3	41.8	40.6	8.8	8.5	23,183
Region						
Bangkok	82.6	43.5	42.0	9.5	9.2	3,460
Central	80.7	42.6	41.3	12.5	12.2	7,663
North	82.1	45.6	44.9	6.9	6.8	3,358
Northeast	80.0	40.0	38.7	5.8	5.5	5,547
South	75.1	36.7	35.7	6.2	6.0	3,155
Area						
Urban	83.0	44.5	43.2	9.8	9.6	11,216
Rural	77.7	39.2	38.0	7.8	7.5	11,967
Age						
15-24	73.3	17.8	16.7	6.2	5.9	6,197
15-19	69.2	9.3	8.4	3.7	3.5	3,400
20-24	78.2	28.2	26.8	9.3	8.8	2,797
25-29	81.7	42.6	41.6	11.3	11.3	2,524
30-39	84.4	53.0	51.8	12.3	12.1	6,933
40-49	81.7	50.8	49.5	6.8	6.5	7,529
Marital status						
Ever married/in union	83.7	55.1	53.7	10.5	10.2	14,835
Never married/in union	74.2	18.0	17.2	5.7	5.5	8,342
Missing/DK	(*)	(*)	(*)	(*)	(*)	6
Education						
None	33.0	22.1	21.7	7.4	7.4	728
Primary	72.3	39.3	38.1	5.6	5.4	6,870
Secondary	82.0	38.5	37.2	7.5	7.2	10,713
Higher	94.9	55.5	54.3	16.3	16.1	4,865
Missing/DK	43.0	26.5	26.5	3.4	3.4	7
Wealth index quintile						
Poorest	69.0	31.0	30.0	4.5	4.1	4,155
Second	72.4	36.5	35.0	7.6	7.2	4,757
Middle	79.3	38.1	36.7	7.6	7.4	4,875
Fourth	86.8	48.5	47.4	10.9	10.8	4,937
Richest	93.0	54.0	53.0	13.0	12.8	4,460
Language of household head						
Thai	82.7	43.4	42.2	8.8	8.7	21,325
Non-Thai	52.3	23.0	21.5	8.0	7.1	1,858
¹ MICS indicator 9.4 - Men who know where to be tested for HIV ^[M]						
² MICS indicator 9.5 - Men who have been tested for HIV and know the results ^[M]						
(*) Figures that are based on fewer than 25 unweighted cases						

Among women who had given birth within the two years preceding the survey, the percentage who received counselling and HIV testing during antenatal care is presented in Table HA.5. In Thailand, 69.4 per cent of women who had given birth within the last two years preceding the survey received HIV counselling during antenatal care. About 77.0 per cent were offered an HIV test and were tested for HIV during antenatal care and 75.5 per cent were offered an HIV test, were tested for HIV during antenatal

care and received the results. However, 62.3 per cent of women received HIV counselling, were offered an HIV test and accepted and received the results. Women in the Northeast were more likely to receive HIV counselling during antenatal care (75.9 per cent) while women in the Central region were more likely to be offered an HIV test and to be tested for HIV during antenatal care and receive the results (82.3 per cent). This indicator appears to be positively related to women's educational background. Women in households headed by a non-Thai speaker are the least likely to receive HIV counselling during antenatal care (48.5 per cent) and are also least likely to be offered the test, tested for HIV during antenatal care and given the result (49.8 per cent) compared to women in households headed by a Thai speaker (71.8 per cent and 78.4 per cent respectively).

Table HA.5: HIV counselling and testing during antenatal care						
Percentage of women age 15-49 with a live birth in the last 2 years who received antenatal care from a health professional during the last pregnancy, percentage who received HIV counselling, percentage who were offered and tested for HIV, percentage who were offered, tested and received the results of the HIV test, and percentage who received counselling and were offered, accepted and received the results of the HIV test, Thailand MICS, 2015-2016						
	Percentage of women who:					Number of women age 15-49 with a live birth in the last 2 years
	Received antenatal care from a health care professional for last pregnancy	Received HIV counselling during antenatal care ¹	Were offered an HIV test and were tested for HIV during antenatal care	Were offered an HIV test and were tested for HIV during antenatal care, and received the results ²	Received HIV Counselling, were offered an HIV test, accepted and received the results	
Total	98.1	69.4	77.0	75.5	62.3	2,092
Region						
Bangkok	99.8	64.8	68.5	66.5	52.0	231
Central	97.7	73.5	83.2	82.3	69.1	713
North	96.4	63.5	75.3	75.1	59.5	354
Northeast	99.1	75.9	78.0	76.9	66.8	437
South	98.3	62.4	70.7	66.8	53.0	359
Area						
Urban	97.7	67.7	76.8	75.5	59.6	932
Rural	98.5	70.9	77.2	75.6	64.5	1,160
Age						
15-24	97.8	66.3	71.8	69.7	57.4	703
15-19	99.2	67.1	72.2	71.7	61.3	243
20-24	97.1	65.8	71.5	68.6	55.4	460
25-29	98.2	70.7	76.7	75.5	62.2	519
30-39	98.2	72.0	82.2	81.1	67.2	787
40-49	99.7	64.8	73.9	73.2	58.6	82
Marital status						
Ever married/in union	98.1	69.5	77.0	75.6	62.3	2,092
Never married/in union	(*)	(*)	(*)	(*)	(*)	0
Education						
None	85.6	46.7	49.4	49.2	46.2	103
Primary	97.4	69.0	68.4	62.1	54.3	300
Secondary	98.7	70.4	78.7	78.1	64.1	1,173
Higher	99.7	72.2	83.8	82.9	66.2	514
Missing/DK	(*)	(*)	(*)	(*)	(*)	1
Wealth index quintile						
Poorest	97.5	64.6	72.7	71.1	57.8	305
Second	95.5	65.2	69.3	67.1	56.9	491
Middle	98.2	74.4	80.3	77.9	67.6	425
Fourth	99.7	64.7	78.2	77.5	57.1	540
Richest	100.0	81.7	86.2	85.9	76.2	331
Language of household head						
Thai	98.7	71.8	79.8	78.4	64.6	1,881
Non-Thai	92.6	48.5	52.3	49.8	41.8	211
¹ MICS indicator 9.7 - HIV counselling during antenatal care						
² MICS indicator 9.8 - HIV testing during antenatal care						
(*) Figures that are based on fewer than 25 unweighted cases						

HIV Indicators for Young Women and Young Men

In many countries, over half of new adult HIV infections are among young people aged 15-24 years; thus a change in behaviour among members of this age group is especially important to reduce new infections. The next two tables present specific information on this age group.

Tables HA.6 and HA.6M summarize information on key HIV indicators for young women and young men. Results with respect to comprehensive knowledge (46.0 per cent of young women and 45.1 per cent of young men), knowledge of mother-to-child transmission (66.0 per cent of young women and 57.1 per cent of young men), and knowledge of a place to get tested (79.3 per cent of young women and 73.3 per cent of young men) are generally more similar in this age group than in the population aged 15-49 years as a whole. Accepting attitudes towards people living with HIV with respect to the same four indicators that were previously discussed are also comparable in this age group (23.5 per cent of young women and 27.7 per cent of young men). Overall, 8.8 per cent of young women and 5.9 per cent of young men in this age group have been tested for HIV in the last 12 months and know the result. Women aged 15-24 years in the South have the least comprehensive knowledge about HIV and AIDS (34.4 per cent) compared to women in other regions. Comprehensive knowledge among young women is slightly higher in urban areas (48.5 per cent) compared to their rural counterparts (43.8 per cent). Similarly, ever married/in union women aged 15-24 years are least likely (41.2 per cent) to have comprehensive knowledge compared to never married/in union women (48.3 per cent). Educational and wealth backgrounds for young women show a very strong positive relation with comprehensive knowledge. Barely 3.9 per cent of young women with no education have comprehensive knowledge compared to 56.1 per cent of young women with higher education. Similarly, 42.0 per cent of young women in the poorest households have comprehensive knowledge compared to 53.0 per cent in the richest households. Table HA.6 also shows that almost two in four young women living in households headed by a Thai speaker are likely to have comprehensive knowledge compared to one in four young women living in households headed by a non-Thai speaker (48.3 per cent and 24.2 per cent respectively).

Almost one in four young women (23.5 per cent) in Thailand express accepting attitudes towards people living with HIV on all four indicators. This percentage is seen highest among young women in the Northeast region (34.6 per cent) followed by the North (33.1 per cent). Young women in the Bangkok region are the least likely (15.1 per cent) to express accepting attitudes towards people living with HIV on all four indicators compared to young women in other regions. Similarly, young women in urban areas (21.9 per cent), never married/in union (22.1 per cent), women with no education (1.6 per cent), women in the richest households (17.2 per cent) and women living in households headed by a non-Thai speaker (16.0 per cent) are least likely to express accepting attitude towards people living with HIV on all four indicators.

Interestingly, a higher percentage of young women in households headed by a non-Thai speaker were tested for HIV in the last 12 months and know the results (12.6 per cent) compared to young women in households headed by a Thai speaker (8.4 per cent). Similar trends were observed for men as well.

Table HA.6: Key HIV and AIDS indicators (young women)

Percentage of women age 15-24 years by key HIV and AIDS indicators, Thailand MICS, 2015-2016									
	Percentage of women age 15-24 years who:								
	Have comprehensive knowledge ¹	Know all three means of HIV transmission from mother to child	Know a place to get tested for HIV	Have ever been tested and know the result of the most recent test	Have been tested for HIV in the last 12 months and know the result	Number of women age 15-24 years	Percentage who express attitudes towards people living with HIV on all four indicators ^a	Number of women age 15-24 years who have heard of AIDS	
Total	46.0	66.0	79.3	25.7	8.8	6,236	23.5	5,992	
Region									
Bangkok	45.7	65.7	76.0	22.2	5.6	920	15.1	892	
Central	46.0	60.9	79.5	26.7	10.2	2,033	17.3	1,939	
North	51.1	68.2	83.3	28.3	10.1	884	33.1	847	
Northeast	50.3	75.9	79.4	23.0	8.3	1,503	34.6	1,480	
South	34.4	59.3	78.6	28.8	8.7	896	17.7	835	
Area									
Urban	48.5	65.7	81.3	24.9	7.4	2,961	21.9	2,869	
Rural	43.8	66.4	77.6	26.4	10.1	3,276	25.0	3,123	
Age									
15-19	46.5	65.5	74.5	14.5	6.3	3,359	23.5	3,238	
15-17	47.3	64.2	73.2	8.6	3.7	2,037	23.3	1,967	
18-19	45.2	67.6	76.6	23.7	10.4	1,322	23.8	1,271	
20-24	45.5	66.7	85.0	38.7	11.7	2,878	23.6	2,754	
20-22	46.4	65.4	85.7	38.1	11.8	1,666	24.7	1,604	
23-24	44.4	68.4	84.1	39.5	11.6	1,211	22.0	1,150	
Marital status									
Ever married/in union	41.2	69.6	86.0	61.5	20.5	1,988	26.6	1,890	
Never married/in union	48.3	64.4	76.2	8.9	3.4	4,248	22.1	4,102	
Education									
None	3.9	14.5	38.3	14.6	9.0	148	1.6	83	
Primary	24.3	52.7	63.4	38.6	18.4	390	18.9	338	
Secondary	45.9	67.9	78.9	27.4	8.3	4,188	25.3	4,080	
Higher	56.1	69.5	88.7	18.7	7.7	1,508	21.0	1,490	
Missing/DK	(*)	(*)	(*)	(*)	(*)	2	(*)	2	

Table HA.6: Key HIV and AIDS indicators (young women) (continued)

Percentage of women age 15-24 years by key HIV and AIDS indicators, Thailand MICS, 2015-2016									
Percentage of women age 15-24 years who:									
	Have comprehensive knowledge ¹	Know all three means of HIV transmission from mother to child	Know a place to get tested for HIV	Have ever been tested and know the result of the most recent test	Have been tested for HIV in the last 12 months and know the result	Number of women age 15-24 years	Percentage who express attitudes towards people living with HIV on all four indicators ^a	Number of women age 15-24 years who have heard of AIDS	
Wealth index quintile									
Poorest	42.0	66.6	75.5	26.6	8.0	937	29.4	889	
Second	44.0	66.8	75.6	28.2	12.0	1,279	29.0	1,208	
Middle	46.5	64.5	80.5	26.7	10.6	1,481	22.9	1,435	
Fourth	44.3	70.1	83.4	28.3	7.8	1,372	20.7	1,331	
Richest	53.0	61.9	80.2	17.8	5.1	1,168	17.2	1,127	
Language of household head									
Thai	48.3	68.0	81.2	26.3	8.4	5,655	24.2	5,493	
Non-Thai	24.2	47.0	61.4	19.5	12.6	581	16.0	498	
¹ MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young women									

^a Refer to Table HA.3 for the four indicators.

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

Table HA.6M: Key HIV and AIDS indicators (young men)

Percentage of men age 15-24 years by key HIV and AIDS indicators, Thailand MICS, 2015-2016									
	Percentage of men age 15-24 years who:								
	Have Comprehensive knowledge ¹	Know all three of HIV transmission from mother to child	Know a place to get tested for HIV	Have ever been tested and know the result of the most recent test	Have been tested for HIV in the last 12 months and know the result	Number of men age 15-24 years	Percentage who express attitudes towards people living with HIV on all four indicators ^a	Number of men age 15-24 years who have heard of AIDS	
Total	45.1	57.1	73.3	16.7	5.9	6,197	27.7	5,832	
Region									
Bangkok	43.3	50.7	70.4	14.7	7.8	881	13.6	861	
Central	44.2	53.6	73.9	18.7	6.6	2,005	22.4	1,848	
North	50.1	55.6	78.7	19.2	6.9	915	31.4	865	
Northeast	51.4	69.7	75.1	15.3	4.8	1,515	43.8	1,476	
South	33.0	51.1	66.2	14.0	3.2	882	21.1	782	
Area									
Urban	47.6	55.6	74.9	17.8	6.3	2,967	24.7	2,822	
Rural	42.8	58.4	71.8	15.7	5.5	3,230	30.5	3,010	
Age									
15-19	45.0	57.5	69.2	8.4	3.5	3,400	27.4	3,227	
15-17	45.2	59.7	67.8	6.5	2.1	2,077	28.7	1,992	
18-19	44.6	54.1	71.5	11.4	5.7	1,323	25.4	1,235	
20-24	45.2	56.5	78.2	26.8	8.8	2,797	28.0	2,605	
20-22	47.1	59.3	79.2	24.2	9.5	1,548	26.5	1,470	
23-24	43.0	53.1	77.0	29.9	8.0	1,249	29.9	1,135	
Marital status									
Ever married/in union	42.4	58.2	78.6	44.0	14.1	1,200	27.9	1,112	
Never married/in union	45.7	56.8	72.0	10.2	3.9	4,997	27.6	4,720	
Education									
None	7.2	14.0	24.5	11.8	3.1	151	(0.9)	49	
Primary	27.9	47.0	58.5	21.3	9.6	817	20.1	726	
Secondary	46.8	59.1	73.4	15.1	5.0	4,217	29.3	4,067	
Higher	57.7	63.2	92.1	20.5	7.2	1,010	27.8	989	
Missing/DK	(*)	(*)	(*)	(*)	(*)	1	(*)	1	

Table HA.6M: Key HIV and AIDS indicators (young men) (continued)

Percentage of men age 15-24 years by key HIV and AIDS indicators, Thailand MICS, 2015-2016									
Percentage of men age 15-24 years who:									
	Have comprehensive knowledge ¹	Know all three means of HIV transmission from mother to child	Know a place to get tested for HIV	Have ever been tested and know the result of the most recent test	Have been tested for HIV in the last 12 months and know the result	Number of men age 15-24 years	Percentage who express attitudes towards people living with HIV on all four indicators ^a	Number of men age 15-24 years who have heard of AIDS	
Wealth index quintile									
Poorest	37.1	56.5	64.6	13.9	4.6	1,197	35.2	1,085	
Second	41.0	52.7	64.9	14.7	6.6	1,375	30.9	1,222	
Middle	44.7	56.0	73.3	19.2	6.5	1,436	23.8	1,385	
Fourth	51.9	64.8	80.0	21.6	6.9	1,167	24.1	1,132	
Richest	52.7	56.2	87.2	13.6	4.6	1,022	24.9	1,007	
Language of household head									
Thai	47.4	58.6	76.0	17.2	5.8	5,545	28.5	5,305	
Non-Thai	25.2	43.6	50.1	12.3	6.7	652	19.7	527	
¹ MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young men ^[M]									

^a Refer to Table HA.3M for the four indicators.

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

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

Appendices

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 Thailand Multiple Indicator Cluster Survey was to produce statistically reliable estimates of most indicators, at the national level, for urban and rural areas, and for five regions (Bangkok, Central, North, Northeast and South) of the country. Urban and rural areas in each of the provinces were defined as the sampling strata (Bangkok had only urban areas). The Thailand MICS sample also included over sampling for fourteen equity provinces. Data for these equity provinces will be separated and analysed to produce equity provinces' report. These provinces are Ratchaburi, Kanchanaburi, Mae Hong Son, Tak, Buri Ram, Si Sa Ket, Yasothon, Kalasin, Nakhon Phanom, Songkhla, Satun, Pattani, Yala, and Narathiwat.

A multi-stage, stratified cluster sampling approach was used for the selection of the survey sample.

Sample Size and Sample Allocation

The sample size for the Thailand MICS was calculated as 31,580 households. For the calculation of the sample size, the key indicator used was the stunting prevalence among children age 0-4 years. The following formula was used to estimate the required sample size for this indicator:

$$n = \frac{[4(r)(1-r)(deff)]}{[(0.12r)^2(pb)(AveSize)(RR)]}$$

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 value of the indicator, expressed in the form of a proportion
- $deff$ is the design effect for the indicator, estimated from a previous survey or using a default value of 2
- $0.12r$ is the margin of error to be tolerated at the 95 per cent level of confidence, defined as 12 per cent of r (relative margin of error of r)
- pb is the proportion of the total population upon which the indicator, r , is based
- $AveSize$ is the average household size (number of persons per household)
- RR is the predicted response rate

For the calculation, r (stunting prevalence) was assumed to be 16 per cent. The value of $deff$ (design effect) was taken as 2 based on estimates from previous surveys, pb (percentage of children age 0-4 years in the total population) was taken as 11 per cent, $AveSize$ (average household size) was taken as 3.69 households, and the response rate was assumed to be 90 per cent, based on experience from previous surveys.

The resulting number of households from this exercise was 3,000 households, which is the sample size needed in each region. The survey also provided estimates for 14 provinces, so the number of households in these 14 provinces was 1,320 households per province (Except Songkhla 1,560 households) – thus yielding 31,580 in total.

The number of households selected per cluster for the Thailand MICS was determined as 20 households, based on a number of considerations, including the design effect, the budget available, and the time that would be needed per team to complete one cluster. Dividing the total number of households by the number of sample households per cluster, it was calculated that 150 sample clusters would need to be selected in each region and 66 sample clusters would need to be selected in each of the 14 province except Songkhla, with 78 sample clusters.

Equal allocation of the total sample size to five regions was used. Therefore, 150 clusters were allocated to each region (150 clusters * 5 regions * 20 sample households per cluster), 66 clusters each to 13 provinces, and 78 clusters in 1 province (66 clusters * 13 provinces * 20 sample households per cluster and 78 clusters * 1 province * 20 sample households per cluster) with the final sample size calculated as 31,580 households. In each region, the clusters (primary sampling units) were distributed to the urban and rural domains proportionally to the size of urban and rural populations in that region. The table below shows the allocation of clusters to the sampling strata.

Table SD.1: Allocation of Sample Clusters (Primary Sampling Units) to Sampling Strata				
	Number of Clusters			Remark
	Total	Urban	Rural	
Total	1,579	775	804	
Region				
Bangkok	150	150	-	
Central	271	129	142	2 provinces: Ratchaburi and Kanchanaburi
North	272	113	159	2 provinces: Mae Hong Son and Tak
Northeast	447	187	260	5 provinces: Buri Ram, Si Sa Ket, Yasothon, Kalasin and Nakhon Phanom
South	439	196	243	5 provinces: Songkhla, Satun, Pattani, Yala and Narathiwat

Sampling Frame, Selection of Clusters and Listing activities

The sampling frame which was used for the selection of PSUs was from the 2015 Household Information Survey (HIS) (the master sampling frame) which was prepared in Oct-Dec 2014. This survey is carried out every year, and provided an up-to-date listing of 2,985 PSUs per year, taken from the 2010 census. It was the frame that was used for several national surveys (e.g. Labor Force Survey and Socio Economic Survey). The sample design for the HIS was stratified, single-stage cluster sampling. The Enumeration Area (EA) was the sampling unit and Probability proportional to size (PPS) was applied for selecting the EAs in each stratum. The measure of size was the number of households in each EA.

In the 14 provinces where provincial estimates were required the sample of EAs from the HIS sample was not sufficient, so additional EAs were selected from another sampling frame. The sampling frame for the selection of additional EAs was derived from the 2010 Population and Housing Census (PHC), which was conducted by the National Statistical Office (NSO) of Thailand. The census frame information has been updated for the EAs selected for HIS every year by the Provincial Statistical Office (PSO) staff. Before selecting the additional EAs, the selected EAs from the HIS were excluded from the sampling frame and then the Probability Proportional to Size (PPS) systematic sampling was used for the selection of additional EAs in each stratum. Moreover, in each EA selected for Thailand MICS, fresh household listing were prepared.

The primary sampling units (PSUs) at the first stage were enumeration areas (EAs). The Probability Proportional to Size (PPS) systematic method was applied to draw samples from each stratum for the Household Information Survey. The size measure used was the total number of households in a PSU. The HIS sample of EAs constituted a household master sampling frame. The sample of EAs for MICS were selected as a subsample from the HIS sample using systematic equal probability sampling within each stratum.

Selection of Households

For each EA selected, a new list of households was used as the sampling frame for the selection of households in the second stage sampling. Enumerators from the Field Administration Bureau and provincial statistical office listed all dwellings and recorded the number of all households located in sampled EAs. The listing information included the identification number of building, identification number of household, address, name of the head of household, the total number of household members and the identification of households with children aged under 5 years.

After completing the household listing for each selected EA, all households were divided into 2 groups:

- 1st group consists of households with children aged under 5 years.
- 2nd group consists of the rest of households.

Systematic random sampling was then applied to select 10 households within each group. Therefore a total of 20 households were selected in each sample EA.

Calculation of Sample Weights

The Thailand Multiple Indicator Cluster Survey sample is not self-weighting. Essentially, by allocating an equal number of households to each province, different sampling fractions were used in each province since the size of the provinces varied. For this reason, sample weights were calculated and these were used in the subsequent analyses of the survey data.

The major component of the weight is the reciprocal of the sampling fraction employed in selecting the number of sample households in that particular sampling stratum (h), PSU (i) and group (j), where the groups correspond to households with and without children under age 5 years:

$$W_{hij} = \frac{1}{f_{hij}}$$

The term f_{hij} , the sampling fraction for the j -th group in the i -th sample PSU of the h -th stratum, is the product of probabilities of selection at every stage in each sampling stratum:

$$f_{hij} = p_{1hi} \times p_{2hij}$$

where p_{shij} is the probability of selection of the sampling unit at stage s for the j -th group in the i -th sample PSU of the h -th sampling stratum.

Since the estimated number of households in each enumeration area (PSU) in the sampling frame used for the first stage selection, the updated number of households in the enumeration area from the listing were different, and the number of households with and without children varied by EA, individual sampling fractions for households in each sample enumeration area (cluster) were calculated separately for the groups of households with and without children under age 5. The sampling fractions for households in each enumeration area (cluster) therefore included the first stage probability of selection of the enumeration area in that particular sampling stratum and the second stage probability of selection of a household in the sample enumeration area (cluster), separately for households with and without children.

A second component in the calculation of sample weights takes into account the level of non-response for the household and individual interviews. The adjustment for household non-response is equal to the inverse value of:

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

After the completion of fieldwork, response rates were calculated for each sampling stratum, separately for the groups of households with and without children under age 5. These were used to adjust the sample weights calculated for each cluster by group. Response rates in the Thailand Multiple Indicator Cluster Survey are shown in Table HH.1 in this report.

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

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

These response rates were also calculated separately for the groups of households with and without children. The non-response adjustment factors for women's, men's and under-5's questionnaires are applied to the adjusted household weights. The numbers of eligible women, men and under-5 children were obtained from the roster of household members in the Household Questionnaire for households where interviews were completed.

The design weights for the households were calculated by multiplying the above factors for each enumeration area, separately for the groups of households with and without children. These weights were then standardized (or normalized), one purpose of which is to make the weighted sum of the interviewed sample units equal to the total sample size at the national level. Normalization is achieved by dividing the full sample weights (adjusted for nonresponse) by the average of these weights across all households at the national level. This is performed by multiplying the sample weights by a constant

factor equal to the 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 normalization procedure was followed in obtaining standardized weights for the women's, men's and under-5's questionnaires. In the 1,579 sample enumeration areas (clusters) the normalized household weights varied between 0.002912 and 16.191260; the normalized women weights varied from 0.003287 to 18.207244; the normalized men weights varied from 0.003129 to 17.401282 and the normalized children weights varied from 0.006530 to 33.906927.

Appendix B. Estimates of Sampling Errors

The sample of respondents selected in the Thailand 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)*: Standard error is the square root of the variance of the estimate. For survey indicators that are means, proportions or ratios, the Taylor series linearization method is used for the estimation of standard errors. For more complex statistics, such as fertility and mortality rates, the Jackknife repeated replication method is used for standard error estimation.
- *Coefficient of variation (se/r)* is the ratio of the standard error to the value (r) 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 based on the same sample size. 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 of the survey is as efficient as a simple random sample for a particular indicator, 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 per cent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, programs developed in CSPro Version 5.0, SPSS Version 21 Complex Samples module and CMRJack⁶⁰ have 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. Given the use of normalized weights, by comparing the weighted and unweighted counts it is possible to determine whether a particular domain has been under-sampled or over-sampled compared to the average sampling rate. If the weighted count is smaller than the unweighted count, this means that the particular domain had been over-sampled. As explained later in the footnote of Table SE.1, there is an exception in the case of indicators 4.1 and 4.3, for which the unweighted count represents the number of sample households, and the weighted counts reflect the total population.

⁶⁰ CMRJack is a software developed by FAFO, an independent and multidisciplinary research foundation. CMRJack produces mortality estimates and standard errors for surveys with complete birth histories or summary birth histories. See http://www.fafo.no/ais/child_mortality/index.html

Sampling errors are calculated for indicators of primary interest, for the national level, for urban and rural areas, and for all regions. Seven of the selected indicators are based on households members, 17 are based on women, 5 are based on men, and 15 are based on children under 5. 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.10 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, Thailand MICS, 2015-2016	
MICS5 Indicator	Base Population
Household	
4.1 Use of improved drinking water sources	All household members ^a
4.3 Use of improved sanitation	All household members ^a
2.19 Iodized salt consumption	All household members ^a
8.3 Violent discipline	Children age 1-14 years ^b
7.4 Primary school net attendance ratio (adjusted)	Children of primary school age
8.13 Children's living arrangements	Children age 0-17 years
8.14 Prevalence of children with one or both parents dead	Children age 0-17 years
Women	
5.3 Contraceptive prevalence rate	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 (1+ times, skilled provider)	Women age 15-49 years with a live birth in the last 2 years
5.5b Antenatal care coverage (4+ times, any provider)	Women age 15-49 years with a live birth in the last 2 years
5.7 Skilled attendant at delivery	Women age 15-49 years with a live birth in the last 2 years
7.1 Literacy rate (young women)	Women age 15-24 years
9.1 Knowledge about HIV prevention (young women)	Women age 15-24 years
2.6 Early initiation of breastfeeding	Women age 15-49 years with a live birth in the last 2 years
5.2 Early childbearing	Women age 20-24 years who had at least one live birth before age 18
5.9 Caesarean section	Women age 15-49 years with a live birth in the last 2 years
8.5 Percentage married before age 18	Women age 20-49 years who were first married or in union before age 18
8.12 Attitudes towards domestic violence	Women age 15-49 years
9.2 Knowledge of mother-to-child transmission of HIV	Women age 15-49 years
9.3 Accepting attitudes towards people living with HIV	Women age 15-49 years
9.5 Women who have been tested for HIV and know the results	Women age 15-49 years
9.7 HIV counselling during antenatal care	Women age 15-49 years with a live birth in the last 2 years
9.8 HIV testing during antenatal care	Women age 15-49 years with a live birth in the last 2 years

Table SE.1: Indicators selected for sampling error calculations (continued)

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Thailand MICS, 2015-2016

MICS5 Indicator	Base Population
Men	
7.1 Literacy rate (young men)	Men age 15-24 years
9.1 Knowledge about HIV prevention (young men)	Men age 15-24 years
8.12 Attitudes towards domestic violence	Men age 15-24 years
9.2 Knowledge of mother-to-child transmission of HIV	Men age 15-24 years
9.3 Accepting attitudes towards people living with HIV	Men age 15-24 years
Under-5s	
2.1a Underweight prevalence (moderate and severe)	Children under age 5 years
2.2a Stunting prevalence (moderate and severe)	Children under age 5 years
2.3a Wasting prevalence (moderate and severe)	Children under age 5 years
2.4 Overweight prevalence	Children under age 5 years
- Fever in last two weeks	Children under age 5 years
2.7 Exclusive breastfeeding under 6 months	Infants under 6 months of age
2.8 Predominantly breastfeeding under 6 months	Infants under 6 months of age
2.12 Age-appropriate breastfeeding	Children age 0-23 months
6.1 Attendance in early childhood education	Children age 36-59 months
6.2 Support for learning	Children age 36-59 months
6.3 Father's support for learning	Children age 36-59 months
6.4 Mother's support for learning	Children age 36-59 months
6.5 Have 3 or more children's books	Children under age 5 years
6.6 Play with two or more types of playthings	Children under age 5 years
- Play with electronic devices	Children under age 5 years
<p>^a To calculate the weighted results of MICS Indicators 4.1 and 4.3, the household weight is multiplied by the number of household members in each household. Therefore the unweighted base population presented in the SE tables reflects the unweighted number of households, whereas the weighted numbers reflect the household population.</p> <p>^b Random selection of one child age 1-14 years per household is carried out during fieldwork for administering the child discipline module. To account for the random selection and calculate MICS Indicators 8.3, the household sample weight is multiplied by the total number of children in the age range in each household. Therefore the unweighted base population presented in the SE tables reflects the unweighted number of households with children in the age range, whereas the weighted numbers reflect the number of children in the age range.</p>	

Table SE.2: Sampling errors: Total sample

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (se)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2se	Upper bound <i>r</i> + 2se
Household											
Use of improved drinking water sources	4.1	7.8	0.9801	0.0021	0.002	6.780	2.604	92,073	28,652	0.976	0.984
Use of improved sanitation	4.3	7.9	0.9724	0.0023	0.002	5.409	2.326	92,073	28,652	0.968	0.977
Iodized salt consumption	2.19		0.7326	0.0070	0.010	7.042	2.654	28,273	28,452	0.719	0.747
Violent discipline	8.3		0.7521	0.0098	0.013	8.936	2.989	27,738	17,304	0.732	0.772
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9483	0.0042	0.004	3.625	1.904	7,772	10,291	0.940	0.957
Children's living arrangements	8.13		0.2272	0.0060	0.026	6.847	2.617	21,705	33,667	0.215	0.239
Prevalence of children with one or both parents dead	8.14		0.0349	0.0026	0.073	6.543	2.558	21,705	33,667	0.030	0.040
Women											
Contraceptive prevalence rate	5.3	5.3	0.7837	0.0071	0.009	5.365	2.316	16,756	18,147	0.770	0.798
Unmet need	5.4	5.6	0.0618	0.0038	0.061	4.411	2.100	16,756	18,147	0.054	0.069
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9813	0.0054	0.005	5.346	2.312	2,092	3,382	0.970	0.992
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9084	0.0113	0.012	5.208	2.282	2,092	3,382	0.886	0.931
Skilled attendant at delivery	5.7	5.2	0.9912	0.0035	0.004	4.795	2.190	2,092	3,382	0.984	0.998
Literacy rate (young women)	7.1	2.3	0.9538	0.0072	0.008	7.459	2.731	6,236	6,293	0.939	0.968
Knowledge about HIV prevention (young women)	9.1	6.3	0.4604	0.0145	0.031	5.295	2.301	6,236	6,293	0.431	0.489
Early initiation of breastfeeding	2.6		0.3994	0.0195	0.049	5.359	2.315	2,092	3,382	0.360	0.438
Early childbearing	5.2		0.0944	0.0083	0.088	2.436	1.561	2,878	3,016	0.078	0.111
Caesarean section	5.9		0.3274	0.0179	0.055	4.911	2.216	2,092	3,382	0.292	0.363
Percentage married before age 18	8.5		0.2130	0.0059	0.028	4.620	2.149	22,255	22,337	0.201	0.225
Attitudes towards domestic violence	8.12		0.0864	0.0044	0.051	6.184	2.487	25,614	25,614	0.078	0.095
Knowledge of mother-to-child transmission of HIV	9.2		0.6639	0.0083	0.012	7.851	2.802	25,614	25,614	0.647	0.680
Accepting attitudes towards people living with HIV	9.3		0.3162	0.0097	0.031	10.572	3.252	24,647	24,335	0.297	0.336
Women who have been tested for HIV and know the results	9.5		0.0926	0.0055	0.060	9.292	3.048	25,614	25,614	0.082	0.104
HIV counselling during antenatal care	9.7		0.6945	0.0172	0.025	4.696	2.167	2,092	3,382	0.660	0.729
HIV testing during antenatal care	9.8		0.7554	0.0165	0.022	4.986	2.233	2,092	3,382	0.722	0.788

Table SE.2: Sampling errors: Total sample (continued)

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Men											
	Literacy rate (young men)	7.1	2.3	0.9472	0.0077	6.841	2.615	6,197	5,802	0.932	0.963
	Knowledge about HIV prevention (young men)	9.1	6.3	0.4508	0.0145	4.912	2.216	6,197	5,802	0.422	0.480
	Attitudes towards domestic violence	8.12		0.0873	0.0043	5.343	2.311	23,183	23,183	0.079	0.096
	Knowledge of mother-to-child transmission of HIV	9.2		0.5737	0.0100	9.439	3.072	23,183	23,183	0.554	0.594
	Accepting attitudes towards people living with HIV	9.3		0.3298	0.0099	9.610	3.100	22,069	21,698	0.310	0.350
Under-5s											
	Underweight prevalence (moderate and severe)	2.1a	1.8	0.0665	0.0055	5.414	2.327	11,189	11,313	0.056	0.077
	Stunting prevalence (moderate and severe)	2.2a		0.1052	0.0065	5.098	2.258	11,008	11,221	0.092	0.118
	Wasting prevalence (moderate and severe)	2.3a		0.0539	0.0058	7.305	2.703	10,942	11,141	0.042	0.065
	Overweight prevalence	2.4		0.0821	0.0055	4.421	2.103	10,942	11,141	0.071	0.093
	Fever in last two weeks	-		0.1895	0.0079	4.952	2.225	12,250	12,250	0.174	0.205
	Exclusive breastfeeding under 6 months	2.7		0.2313	0.0262	2.553	1.598	1,138	661	0.179	0.284
	Predominantly breastfeeding under 6 months	2.8		0.4214	0.0258	1.807	1.344	1,138	661	0.370	0.473
	Age-appropriate breastfeeding	2.12		0.2803	0.0155	4.602	2.145	4,622	3,883	0.249	0.311
	Attendance in early childhood education	6.1		0.8465	0.0103	4.586	2.142	5,079	5,603	0.826	0.867
	Support for learning	6.2		0.9267	0.0064	3.379	1.838	5,079	5,603	0.914	0.940
	Father's support for learning	6.3		0.3399	0.0136	4.608	2.147	5,079	5,603	0.313	0.367
	Mother's support for learning	6.4		0.6279	0.0138	4.557	2.135	5,079	5,603	0.600	0.655
	Have 3 or more children's books	6.5		0.4123	0.0117	6.870	2.621	12,250	12,250	0.389	0.436
	Play with two or more types of playthings	6.6		0.7561	0.0104	7.119	2.668	12,250	12,250	0.735	0.777
	Play with electronic devices	-		0.5091	0.0111	6.041	2.458	12,250	12,250	0.487	0.531

Table SE.3: Sampling errors: Urban

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Household											
	4.1	7.8	0.9922	0.0022	0.002	8.154	2.856	42,713	13,504	0.988	0.996
Use of improved drinking water sources											
Use of improved sanitation	4.3	7.9	0.9679	0.0040	0.004	7.048	2.655	42,713	13,504	0.960	0.976
Iodized salt consumption	2.19		0.7480	0.0091	0.012	5.839	2.416	13,328	13,344	0.730	0.766
Violent discipline	8.3		0.7437	0.0134	0.018	7.216	2.686	11,136	7,706	0.717	0.770
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9474	0.0064	0.007	3.669	1.915	3,191	4,460	0.935	0.960
Children's living arrangements	8.13		0.1886	0.0082	0.044	6.539	2.557	8,877	14,769	0.172	0.205
Prevalence of children with one or both parents dead	8.14		0.0375	0.0044	0.117	7.835	2.799	8,877	14,769	0.029	0.046
Women											
Contraceptive prevalence rate	5.3	5.3	0.7677	0.0095	0.012	4.175	2.043	7,649	8,329	0.749	0.787
Unmet need	5.4	5.6	0.0650	0.0058	0.089	4.569	2.138	7,649	8,329	0.053	0.077
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9768	0.0099	0.010	6.883	2.624	932	1,583	0.957	0.997
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9217	0.0135	0.015	3.998	2.000	932	1,583	0.895	0.949
Skilled attendant at delivery	5.7	5.2	0.9865	0.0077	0.008	7.085	2.662	932	1,583	0.971	1.000
Literacy rate (young women)	7.1	2.3	0.9465	0.0103	0.011	6.048	2.459	2,961	2,865	0.926	0.967
Knowledge about HIV prevention (young women)	9.1	6.3	0.4850	0.0203	0.042	4.708	2.170	2,961	2,865	0.444	0.526
Early initiation of breastfeeding	2.6		0.3702	0.0276	0.074	5.161	2.272	932	1,583	0.315	0.425
Early childbearing	5.2		0.0816	0.0113	0.138	2.483	1.576	1,547	1,458	0.059	0.104
Caesarean section	5.9		0.3759	0.0262	0.070	4.640	2.154	932	1,583	0.323	0.428
Percentage married before age 18	8.5		0.1742	0.0084	0.048	5.267	2.295	11,185	10,844	0.157	0.191
Attitudes towards domestic violence	8.12		0.0697	0.0051	0.073	4.829	2.198	12,599	12,251	0.060	0.080
Knowledge of mother-to-child transmission of HIV	9.2		0.6595	0.0123	0.019	8.311	2.883	12,599	12,251	0.635	0.684
Accepting attitudes towards people living with HIV	9.3		0.2754	0.0147	0.053	12.668	3.559	12,256	11,770	0.246	0.305
Women who have been tested for HIV and know the results	9.5		0.0954	0.0083	0.087	9.681	3.111	12,599	12,251	0.079	0.112
HIV counselling during antenatal care	9.7		0.6768	0.0254	0.038	4.678	2.163	932	1,583	0.626	0.728
HIV testing during antenatal care	9.8		0.7550	0.0243	0.032	5.055	2.248	932	1,583	0.706	0.804

Table SE.3: Sampling errors: Urban (continued)

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Men											
	Literacy rate (young men)	7.1	2.3	0.9405	0.0109	0.012	5.599	2,967	2,645	0.919	0.962
	Knowledge about HIV prevention (young men)	9.1	6.3	0.4757	0.0221	0.047	5.198	2,967	2,645	0.431	0.520
	Attitudes towards domestic violence	8.12		0.0779	0.0056	0.072	4.737	11,216	10,912	0.067	0.089
	Knowledge of mother-to-child transmission of HIV	9.2		0.5679	0.0142	0.025	8.914	11,216	10,912	0.540	0.596
	Accepting attitudes towards people living with HIV	9.3		0.2858	0.0157	0.055	12.546	10,805	10,361	0.254	0.317
Under-5s											
	Underweight prevalence (moderate and severe)	2.1a	1.8	0.0490	0.0066	0.135	4.583	4,403	4,920	0.036	0.062
	Stunting prevalence (moderate and severe)	2.2a		0.0978	0.0097	0.100	5.252	4,292	4,877	0.078	0.117
	Wasting prevalence (moderate and severe)	2.3a		0.0441	0.0071	0.161	5.825	4,278	4,847	0.030	0.058
	Overweight prevalence	2.4		0.0854	0.0095	0.111	5.612	4,278	4,847	0.066	0.104
	Fever in last two weeks	-		0.1713	0.0107	0.063	4.432	4,988	5,472	0.150	0.193
	Exclusive breastfeeding under 6 months	2.7		0.1878	0.0309	0.165	1.911	476	306	0.126	0.250
	Predominantly breastfeeding under 6 months	2.8		0.3736	0.0353	0.094	1.620	476	306	0.303	0.444
	Age-appropriate breastfeeding	2.12		0.2583	0.0228	0.088	4.651	1,889	1,721	0.213	0.304
	Attendance in early childhood education	6.1		0.8159	0.0156	0.019	4.083	2,093	2,533	0.785	0.847
	Support for learning	6.2		0.9598	0.0039	0.004	1.003	2,093	2,533	0.952	0.968
	Father's support for learning	6.3		0.3707	0.0202	0.054	4.421	2,093	2,533	0.330	0.411
	Mother's support for learning	6.4		0.7205	0.0169	0.023	3.580	2,093	2,533	0.687	0.754
	Have 3 or more children's books	6.5		0.4780	0.0182	0.038	7.279	4,988	5,472	0.442	0.514
	Play with two or more types of playthings	6.6		0.7185	0.0177	0.025	8.482	4,988	5,472	0.683	0.754
	Play with electronic devices	-		0.5525	0.0188	0.034	7.790	4,988	5,472	0.515	0.590

Table SE.4: Sampling errors: Rural

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (se)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2se	Upper bound <i>r</i> + 2se
Household											
Use of improved drinking water sources	4.1	7.8	0.9697	0.0035	0.004	6.378	2.525	49,360	15,148	0.963	0.977
Use of improved sanitation	4.3	7.9	0.9763	0.0023	0.002	3.476	1.864	49,360	15,148	0.972	0.981
Iodized salt consumption	2.19		0.7189	0.0094	0.013	6.666	2.582	14,946	15,108	0.700	0.738
Violent discipline	8.3		0.7579	0.0137	0.018	9.884	3.144	16,627	9,598	0.730	0.785
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9489	0.0052	0.006	3.279	1.811	4,581	5,831	0.938	0.959
Children's living arrangements	8.13		0.2538	0.0074	0.029	5.512	2.348	12,827	18,898	0.239	0.269
Prevalence of children with one or both parents dead	8.14		0.0332	0.0030	0.090	5.199	2.280	12,827	18,898	0.027	0.039
Women											
Contraceptive prevalence rate	5.3	5.3	0.7971	0.0097	0.012	5.673	2.382	9,106	9,818	0.778	0.816
Unmet need	5.4	5.6	0.0590	0.0045	0.076	3.549	1.884	9,106	9,818	0.050	0.068
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9848	0.0056	0.006	3.814	1.953	1,160	1,799	0.974	0.996
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.8977	0.0169	0.019	5.590	2.364	1,160	1,799	0.864	0.932
Skilled attendant at delivery	5.7	5.2	0.9949	0.0013	0.001	0.649	0.805	1,160	1,799	0.992	0.998
Literacy rate (young women)	7.1	2.3	0.9605	0.0101	0.010	9.158	3.026	3,276	3,428	0.940	0.981
Knowledge about HIV prevention (young women)	9.1	6.3	0.4381	0.0186	0.043	4.834	2.199	3,276	3,428	0.401	0.475
Early initiation of breastfeeding	2.6		0.4228	0.0273	0.065	5.491	2.343	1,160	1,799	0.368	0.477
Early childbearing	5.2		0.1093	0.0122	0.111	2.372	1.540	1,331	1,558	0.085	0.134
Caesarean section	5.9		0.2884	0.0231	0.080	4.690	2.166	1,160	1,799	0.242	0.335
Percentage married before age 18	8.5		0.2523	0.0080	0.032	3.941	1.985	11,071	11,493	0.236	0.268
Attitudes towards domestic violence	8.12		0.1026	0.0068	0.066	6.696	2.588	13,015	13,363	0.089	0.116
Knowledge of mother-to-child transmission of HIV	9.2		0.6682	0.0105	0.016	6.685	2.586	13,015	13,363	0.647	0.689
Accepting attitudes towards people living with HIV	9.3		0.3565	0.0126	0.035	8.675	2.945	12,390	12,565	0.331	0.382
Women who have been tested for HIV and know the results	9.5		0.0899	0.0067	0.075	7.363	2.713	13,015	13,363	0.076	0.103
HIV counselling during antenatal care	9.7		0.7087	0.0216	0.030	4.069	2.017	1,160	1,799	0.665	0.752
HIV testing during antenatal care	9.8		0.7558	0.0221	0.029	4.751	2.180	1,160	1,799	0.712	0.800

Table SE.4: Sampling errors: Rural (continued)

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Men											
Literacy rate (young men)	7.1	2.3	0.9533	0.0094	0.010	6.319	2.514	3,230	3,157	0.934	0.972
Knowledge about HIV prevention (young men)	9.1	6.3	0.4279	0.0183	0.043	4.321	2.079	3,230	3,157	0.391	0.464
Attitudes towards domestic violence	8.12		0.0962	0.0060	0.063	5.114	2.262	11,967	12,271	0.084	0.108
Knowledge of mother-to-child transmission of HIV	9.2		0.5792	0.0130	0.022	8.538	2.922	11,967	12,271	0.553	0.605
Accepting attitudes towards people living with HIV	9.3		0.3720	0.0116	0.031	6.580	2.565	11,264	11,337	0.349	0.395
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0779	0.0077	0.099	5.320	2.307	6,786	6,393	0.062	0.093
Stunting prevalence (moderate and severe)	2.2a		0.1099	0.0088	0.080	4.987	2.233	6,716	6,344	0.092	0.127
Wasting prevalence (moderate and severe)	2.3a		0.0602	0.0082	0.136	7.455	2.730	6,664	6,294	0.044	0.077
Overweight prevalence	2.4		0.0800	0.0064	0.080	3.515	1.875	6,664	6,294	0.067	0.093
Fever in last two weeks	-		0.2019	0.0109	0.054	5.012	2.239	7,262	6,778	0.180	0.224
Exclusive breastfeeding under 6 months	2.7		0.2626	0.0385	0.147	2.711	1.647	662	355	0.186	0.340
Predominantly breastfeeding under 6 months	2.8		0.4557	0.0358	0.079	1.830	1.353	662	355	0.384	0.527
Age-appropriate breastfeeding	2.12		0.2954	0.0209	0.071	4.529	2.128	2,732	2,162	0.254	0.337
Attendance in early childhood education	6.1		0.8680	0.0135	0.016	4.864	2.205	2,986	3,070	0.841	0.895
Support for learning	6.2		0.9035	0.0105	0.012	3.870	1.967	2,986	3,070	0.883	0.924
Father's support for learning	6.3		0.3183	0.0181	0.057	4.620	2.149	2,986	3,070	0.282	0.354
Mother's support for learning	6.4		0.5629	0.0191	0.034	4.534	2.129	2,986	3,070	0.525	0.601
Have 3 or more children's books	6.5		0.3671	0.0149	0.041	6.467	2.543	7,262	6,778	0.337	0.397
Play with two or more types of playthings	6.6		0.7818	0.0124	0.016	6.133	2.477	7,262	6,778	0.757	0.807
Play with electronic devices	-		0.4793	0.0130	0.027	4.622	2.150	7,262	6,778	0.453	0.505

Table SE.5: Sampling errors: Bangkok

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Household											
Use of improved drinking water sources	4.1	7.8	0.9996	0.0004	0.000	0.799	0.894	12,517	2,261	0.999	1.000
Use of improved sanitation	4.3	7.9	0.9465	0.0068	0.007	2.041	1.429	12,517	2,261	0.933	0.960
Iodized salt consumption	2.19		0.7018	0.0178	0.025	3.244	1.801	3,701	2,147	0.666	0.737
Violent discipline	8.3		0.6846	0.0282	0.041	4.242	2.060	2,457	1,149	0.628	0.741
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9468	0.0133	0.014	2.284	1.511	753	649	0.920	0.973
Children's living arrangements	8.13		0.1120	0.0149	0.133	4.750	2.180	2,096	2,134	0.082	0.142
Prevalence of children with one or both parents dead	8.14		0.0270	0.0066	0.245	3.563	1.888	2,096	2,134	0.014	0.040
Women											
Contraceptive prevalence rate	5.3	5.3	0.7327	0.0182	0.025	2.353	1.534	2,097	1,393	0.696	0.769
Unmet need	5.4	5.6	0.0881	0.0134	0.152	3.102	1.761	2,097	1,393	0.061	0.115
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9983	0.0017	0.002	0.377	0.614	231	225	0.995	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9549	0.0181	0.019	1.710	1.308	231	225	0.919	0.991
Skilled attendant at delivery	5.7	5.2	0.9885	0.0114	0.012	2.578	1.606	231	225	0.966	1.000
Literacy rate (young women)	7.1	2.3	0.9482	0.0144	0.015	2.134	1.461	920	504	0.919	0.977
Knowledge about HIV prevention (young women)	9.1	6.3	0.4571	0.0332	0.073	2.240	1.497	920	504	0.391	0.524
Early initiation of breastfeeding	2.6		0.2792	0.0451	0.162	2.263	1.504	231	225	0.189	0.369
Early childbearing	5.2		0.0875	0.0229	0.262	1.845	1.358	535	281	0.042	0.133
Caesarean section	5.9		0.4648	0.0550	0.118	2.721	1.650	231	225	0.355	0.575
Percentage married before age 18	8.5		0.1370	0.0099	0.073	1.720	1.312	3,612	2,060	0.117	0.157
Attitudes towards domestic violence	8.12		0.0548	0.0095	0.172	3.940	1.985	3,998	2,283	0.036	0.074
Knowledge of mother-to-child transmission of HIV	9.2		0.6308	0.0249	0.039	6.066	2.463	3,998	2,283	0.581	0.681
Accepting attitudes towards people living with HIV	9.3		0.1603	0.0183	0.114	5.625	2.372	3,948	2,252	0.124	0.197
Women who have been tested for HIV and know the results	9.5		0.0715	0.0084	0.118	2.435	1.560	3,998	2,283	0.055	0.088
HIV counselling during antenatal care	9.7		0.6477	0.0512	0.079	2.569	1.603	231	225	0.545	0.750
HIV testing during antenatal care	9.8		0.6649	0.0508	0.076	2.598	1.612	231	225	0.563	0.767

Table SE.5: Sampling errors: Bangkok (continued)

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Men											
Literacy rate (young men)	7.1	2.3	0.9500	0.0301	0.032	8.934	2.989	881	470	0.890	1.000
Knowledge about HIV prevention (young men)	9.1	6.3	0.4325	0.0348	0.080	2.310	1.520	881	470	0.363	0.502
Attitudes towards domestic violence	8.12		0.0803	0.0129	0.161	4.615	2.148	3,460	2,044	0.054	0.106
Knowledge of mother-to-child transmission of HIV	9.2		0.5454	0.0261	0.048	5.614	2.369	3,460	2,044	0.493	0.598
Accepting attitudes towards people living with HIV	9.3		0.1727	0.0217	0.126	6.653	2.579	3,389	2,012	0.129	0.216
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0443	0.0123	0.278	1.876	1.369	806	523	0.020	0.069
Stunting prevalence (moderate and severe)	2.2a		0.0792	0.0173	0.219	2.076	1.441	756	506	0.045	0.114
Wasting prevalence (moderate and severe)	2.3a		0.0359	0.0078	0.218	0.888	0.942	746	504	0.020	0.051
Overweight prevalence	2.4		0.0914	0.0205	0.224	2.533	1.592	746	504	0.051	0.132
Fever in last two weeks	-		0.1862	0.0278	0.149	3.743	1.935	1,146	737	0.131	0.242
Exclusive breastfeeding under 6 months	2.7		(0.06)	(0.01)	(0.12)	(0.05)	(0.22)	133	49	(0.05)	(0.08)
Predominantly breastfeeding under 6 months	2.8		(0.17)	(0.01)	(0.06)	(0.03)	(0.18)	133	49	(0.15)	(0.19)
Age-appropriate breastfeeding	2.12		0.2065	0.0398	0.193	2.161	1.470	425	225	0.127	0.286
Attendance in early childhood education	6.1		0.6345	0.0392	0.062	2.369	1.539	500	359	0.556	0.713
Support for learning	6.2		0.9692	0.0067	0.007	0.540	0.735	500	359	0.956	0.983
Father's support for learning	6.3		0.4728	0.0411	0.087	2.420	1.556	500	359	0.391	0.555
Mother's support for learning	6.4		0.7571	0.0343	0.045	2.286	1.512	500	359	0.689	0.826
Have 3 or more children's books	6.5		0.5965	0.0398	0.067	4.832	2.198	1,146	737	0.517	0.676
Play with two or more types of playthings	6.6		0.6534	0.0306	0.047	3.044	1.745	1,146	737	0.592	0.715
Play with electronic devices	-		0.5596	0.0384	0.069	4.412	2.100	1,146	737	0.483	0.636

Table SE.6: Sampling errors: Central

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (se)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2se	Upper bound <i>r</i> + 2se
Household											
	4.1	7.8	0.9854	0.0040	0.004	5.478	2.341	27,739	4,906	0.977	0.993
Use of improved drinking water sources											
Use of improved sanitation	4.3	7.9	0.9709	0.0053	0.005	4.938	2.222	27,739	4,906	0.960	0.982
Iodized salt consumption	2.19		0.8113	0.0126	0.016	5.029	2.243	8,618	4,862	0.786	0.836
Violent discipline	8.3		0.6996	0.0274	0.039	10.138	3.184	7,263	2,832	0.645	0.754
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9558	0.0096	0.010	3.458	1.859	2,096	1,596	0.937	0.975
Children's living arrangements	8.13		0.1739	0.0104	0.060	3.954	1.988	5,977	5,283	0.153	0.195
Prevalence of children with one or both parents dead	8.14		0.0374	0.0062	0.167	5.724	2.392	5,977	5,283	0.025	0.050
Women											
Contraceptive prevalence rate	5.3	5.3	0.7890	0.0169	0.021	5.488	2.343	5,438	3,212	0.755	0.823
Unmet need	5.4	5.6	0.0516	0.0074	0.144	3.603	1.898	5,438	3,212	0.037	0.066
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9773	0.0107	0.011	3.015	1.736	713	584	0.956	0.999
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9038	0.0265	0.029	4.694	2.167	713	584	0.851	0.957
Skilled attendant at delivery	5.7	5.2	0.9992	0.0007	0.001	0.390	0.624	713	584	0.998	1.000
Literacy rate (young women)	7.1	2.3	0.9146	0.0205	0.022	5.913	2.432	2,033	1,103	0.874	0.956
Knowledge about HIV prevention (young women)	9.1	6.3	0.4596	0.0337	0.073	5.030	2.243	2,033	1,103	0.392	0.527
Early initiation of breastfeeding	2.6		0.3333	0.0414	0.124	4.496	2.120	713	584	0.251	0.416
Early childbearing	5.2		0.0708	0.0125	0.176	1.387	1.178	1,075	587	0.046	0.096
Caesarean section	5.9		0.3187	0.0367	0.115	3.622	1.903	713	584	0.245	0.392
Percentage married before age 18	8.5		0.1907	0.0121	0.064	3.812	1.952	7,457	4,008	0.167	0.215
Attitudes towards domestic violence	8.12		0.0549	0.0082	0.149	5.843	2.417	8,415	4,524	0.039	0.071
Knowledge of mother-to-child transmission of HIV	9.2		0.6628	0.0172	0.026	5.988	2.447	8,415	4,524	0.628	0.697
Accepting attitudes towards people living with HIV	9.3		0.2503	0.0228	0.091	11.964	3.459	8,029	4,308	0.205	0.296
Women who have been tested for HIV and know the results	9.5		0.1283	0.0150	0.117	9.053	3.009	8,415	4,524	0.098	0.158
HIV counselling during antenatal care	9.7		0.7350	0.0356	0.048	3.801	1.950	713	584	0.664	0.806
HIV testing during antenatal care	9.8		0.8225	0.0286	0.035	3.260	1.805	713	584	0.765	0.880

Table SE.6: Sampling errors: Central (continued)

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Men											
Literacy rate (young men)	7.1	2.3	0.9138	0.0173	0.019	4.111	2.027	2,005	1,081	0.879	0.948
Knowledge about HIV prevention (young men)	9.1	6.3	0.4415	0.0338	0.076	4.995	2.235	2,005	1,081	0.374	0.509
Attitudes towards domestic violence	8.12		0.0504	0.0062	0.123	3.372	1.836	7,663	4,216	0.038	0.063
Knowledge of mother-to-child transmission of HIV	9.2		0.5355	0.0221	0.041	8.242	2.871	7,663	4,216	0.491	0.580
Accepting attitudes towards people living with HIV	9.3		0.2647	0.0239	0.090	11.562	3.400	7,197	3,937	0.217	0.313
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0680	0.0143	0.211	5.737	2.395	3,219	1,767	0.039	0.097
Stunting prevalence (moderate and severe)	2.2a		0.1179	0.0167	0.142	4.718	2.172	3,165	1,752	0.084	0.151
Wasting prevalence (moderate and severe)	2.3a		0.0523	0.0152	0.291	8.125	2.850	3,162	1,735	0.022	0.083
Overweight prevalence	2.4		0.0876	0.0129	0.147	3.598	1.897	3,162	1,735	0.062	0.113
Fever in last two weeks	-		0.1370	0.0151	0.110	3.796	1.948	3,546	1,964	0.107	0.167
Exclusive breastfeeding under 6 months	2.7		0.2744	0.0735	0.268	2.605	1.614	321	97	0.127	0.421
Predominantly breastfeeding under 6 months	2.8		0.5144	0.0690	0.134	1.827	1.352	321	97	0.376	0.652
Age-appropriate breastfeeding	2.12		0.3118	0.0363	0.117	3.823	1.955	1,382	622	0.239	0.384
Attendance in early childhood education	6.1		0.8236	0.0241	0.029	3.537	1.881	1,439	888	0.775	0.872
Support for learning	6.2		0.9576	0.0087	0.009	1.653	1.286	1,439	888	0.940	0.975
Father's support for learning	6.3		0.3390	0.0347	0.102	4.769	2.184	1,439	888	0.270	0.408
Mother's support for learning	6.4		0.7069	0.0302	0.043	3.915	1.979	1,439	888	0.646	0.767
Have 3 or more children's books	6.5		0.4700	0.0269	0.057	5.719	2.392	3,546	1,964	0.416	0.524
Play with two or more types of playthings	6.6		0.7421	0.0265	0.036	7.178	2.679	3,546	1,964	0.689	0.795
Play with electronic devices	-		0.4737	0.0245	0.052	4.708	2.170	3,546	1,964	0.425	0.523

Table SE.7: Sampling errors: North

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Household											
	4.1	7.8	0.9882	0.0037	0.004	5.902	2.429	15,301	5,059	0.981	0.996
Use of improved drinking water sources											
Use of improved sanitation	4.3	7.9	0.9754	0.0034	0.003	2.404	1.550	15,301	5,059	0.969	0.982
Iodized salt consumption	2.19		0.7892	0.0131	0.017	5.214	2.283	5,102	5,053	0.763	0.815
Violent discipline	8.3		0.808	0.0145	0.018	4.166	2.041	4,214	3,072	0.779	0.837
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9333	0.0115	0.012	3.514	1.875	1,256	1,649	0.910	0.956
Children's living arrangements	8.13		0.2580	0.0148	0.057	6.350	2.520	3,460	5,568	0.228	0.288
Prevalence of children with one or both parents dead	8.14		0.0456	0.0074	0.162	6.960	2.638	3,460	5,568	0.031	0.060
Women											
Contraceptive prevalence rate	5.30	5.3	0.7794	0.0145	0.019	3.880	1.970	2,718	3,155	0.750	0.808
Unmet need	5.40	5.6	0.0680	0.0095	0.140	4.520	2.126	2,718	3,155	0.049	0.087
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9640	0.0220	0.023	8.091	2.844	354	580	0.920	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.8881	0.0286	0.032	4.780	2.186	354	580	0.831	0.945
Skilled attendant at delivery	5.70	5.2	0.9742	0.0188	0.019	8.167	2.858	354	580	0.936	1.000
Literacy rate (young women)	7.10	2.3	0.9681	0.0082	0.008	1.976	1.406	884	916	0.952	0.984
Knowledge about HIV prevention (young women)	9.1	6.3	0.5107	0.0259	0.051	2.462	1.569	884	916	0.459	0.563
Early initiation of breastfeeding	2.6		0.5861	0.0507	0.086	6.129	2.476	354	580	0.485	0.687
Early childbearing	5.2		0.1005	0.0179	0.178	1.618	1.272	404	458	0.065	0.136
Caesarean section	5.9		0.3552	0.0437	0.123	4.817	2.195	354	580	0.268	0.443
Percentage married before age 18	8.5		0.2874	0.0178	0.062	5.649	2.377	3,335	3,651	0.252	0.323
Attitudes towards domestic violence	8.12		0.1304	0.0111	0.085	4.492	2.120	3,815	4,109	0.108	0.153
Knowledge of mother-to-child transmission of HIV	9.2		0.6530	0.0160	0.024	4.628	2.151	3,815	4,109	0.621	0.685
Accepting attitudes towards people living with HIV	9.3		0.4360	0.0174	0.040	4.695	2.167	3,631	3,816	0.401	0.471
Women who have been tested for HIV and know the results	9.5		0.0917	0.0090	0.098	4.000	2.000	3,815	4,109	0.074	0.110
HIV counselling during antenatal care	9.7		0.6354	0.0473	0.074	5.598	2.366	354	580	0.541	0.730
HIV testing during antenatal care	9.8		0.7512	0.0426	0.057	5.629	2.373	354	580	0.666	0.836

Table SE.7: Sampling errors: North (continued)

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Men											
	Literacy rate (young men)	7.10	2.3	0.9597	0.0125	0.013	1.833	915	833	0.935	0.985
	Knowledge about HIV prevention (young men)	9.1	6.3	0.5011	0.0281	0.056	1.619	915	833	0.445	0.557
	Attitudes towards domestic violence	8.12		0.0920	0.0092	0.100	3.676	3,358	3,600	0.074	0.110
	Knowledge of mother-to-child transmission of HIV	9.2		0.5492	0.0163	0.030	3.850	3,358	3,600	0.517	0.582
	Accepting attitudes towards people living with HIV	9.3		0.4449	0.0245	0.055	2.845	3,202	3,344	0.396	0.494
Under-5s											
	Underweight prevalence (moderate and severe)	2.1a	1.8	0.0693	0.0126	0.182	2.280	2,001	2,105	0.044	0.095
	Stunting prevalence (moderate and severe)	2.2a		0.0976	0.0138	0.141	2.119	1,975	2,087	0.070	0.125
	Wasting prevalence (moderate and severe)	2.3a		0.0520	0.0111	0.213	2.265	1,971	2,071	0.030	0.074
	Overweight prevalence	2.4		0.0824	0.0122	0.148	2.016	1,971	2,071	0.058	0.107
	Fever in last two weeks	-		0.2044	0.0157	0.077	1.831	2,084	2,201	0.173	0.236
	Exclusive breastfeeding under 6 months	2.7		0.3673	0.0368	0.100	0.619	205	107	0.294	0.441
	Predominantly breastfeeding under 6 months	2.8		0.5259	0.0344	0.065	0.502	205	107	0.457	0.595
	Age-appropriate breastfeeding	2.12		0.2756	0.0321	0.116	1.873	855	682	0.211	0.340
	Attendance in early childhood education	6.1		0.8917	0.0211	0.024	4.529	794	984	0.849	0.934
	Support for learning	6.2		0.8480	0.0266	0.031	2.322	794	984	0.795	0.901
	Father's support for learning	6.3		0.3287	0.0243	0.074	1.619	794	984	0.280	0.377
	Mother's support for learning	6.4		0.5389	0.0282	0.052	3.137	794	984	0.483	0.595
	Have 3 or more children's books	6.5		0.3701	0.0237	0.064	2.299	2,084	2,201	0.323	0.417
	Play with two or more types of playthings	6.6		0.7648	0.0205	0.027	2.264	2,084	2,201	0.724	0.806
	Play with electronic devices	-		0.4594	0.0227	0.049	2.132	2,084	2,201	0.414	0.505

Table SE.8: Sampling errors: Northeast

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Household											
	4.1	7.8	0.9773	0.0056	0.006	11.721	3.424	24,242	8,364	0.966	0.988
Use of improved drinking water sources											
Use of improved sanitation	4.3	7.9	0.9868	0.0027	0.003	4.566	2.137	24,242	8,364	0.981	0.992
Iodized salt consumption	2.19		0.5650	0.0181	0.032	11.057	3.325	7,147	8,340	0.529	0.601
Violent discipline	8.3		0.7895	0.0135	0.017	5.866	2.422	8,538	5,337	0.762	0.817
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9520	0.0064	0.007	2.715	1.648	2,474	3,054	0.939	0.965
Children's living arrangements	8.13		0.3316	0.0134	0.040	8.283	2.878	6,813	10,197	0.305	0.358
Prevalence of children with one or both parents dead	8.14		0.0305	0.0038	0.123	4.859	2.204	6,813	10,197	0.023	0.038
Women											
Contraceptive prevalence rate	5.3	5.3	0.8447	0.0084	0.010	2.720	1.649	4,191	5,105	0.828	0.861
Unmet need	5.4	5.6	0.0483	0.0059	0.123	3.923	1.981	4,191	5,105	0.036	0.060
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9910	0.0033	0.003	1.043	1.021	437	844	0.984	0.998
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9022	0.0171	0.019	2.787	1.669	437	844	0.868	0.936
Skilled attendant at delivery	5.7	5.2	0.9935	0.0024	0.002	0.756	0.869	437	844	0.989	0.998
Literacy rate (young women)	7.1	2.3	0.9919	0.0036	0.004	2.648	1.627	1,503	1,680	0.985	0.999
Knowledge about HIV prevention (young women)	9.1	6.3	0.5035	0.0263	0.052	4.658	2.158	1,503	1,680	0.451	0.556
Early initiation of breastfeeding	2.6		0.4411	0.0323	0.073	3.570	1.890	437	844	0.377	0.506
Early childbearing	5.2		0.1374	0.0212	0.154	2.667	1.633	445	704	0.095	0.180
Caesarean section	5.9		0.2511	0.0318	0.126	4.521	2.126	437	844	0.188	0.315
Percentage married before age 18	8.5		0.2453	0.0108	0.044	3.713	1.927	4,880	5,853	0.224	0.267
Attitudes towards domestic violence	8.12		0.1141	0.0092	0.081	5.729	2.393	5,937	6,829	0.096	0.132
Knowledge of mother-to-child transmission of HIV	9.2		0.7343	0.0130	0.018	5.952	2.440	5,937	6,829	0.708	0.760
Accepting attitudes towards people living with HIV	9.3		0.4583	0.0166	0.036	7.269	2.696	5,791	6,573	0.425	0.491
Women who have been tested for HIV and know the results	9.5		0.0614	0.0046	0.074	2.461	1.569	5,937	6,829	0.052	0.070
HIV counselling during antenatal care	9.7		0.7592	0.0178	0.023	1.456	1.207	437	844	0.724	0.795
HIV testing during antenatal care	9.8		0.7694	0.0271	0.035	3.496	1.870	437	844	0.715	0.824

Table SE.8: Sampling errors: Northeast (continued)

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICs, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>
Men											
Literacy rate (young men)	7.1	2.3	0.9859	0.0059	0.006	3.804	1.950	1,515	1,499	0.974	0.998
Knowledge about HIV prevention (young men)	9.1	6.3	0.5137	0.0247	0.048	3.667	1.915	1,515	1,499	0.464	0.563
Attitudes towards domestic violence	8.12		0.1270	0.0108	0.085	6.451	2.540	5,547	6,147	0.105	0.149
Knowledge of mother-to-child transmission of HIV	9.2		0.6913	0.0159	0.023	7.275	2.697	5,547	6,147	0.660	0.723
Accepting attitudes towards people living with HIV	9.3		0.4743	0.0132	0.028	4.106	2.026	5,371	5,835	0.448	0.501
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0559	0.0072	0.129	3.521	1.876	3,369	3,553	0.041	0.070
Stunting prevalence (moderate and severe)	2.2a		0.0872	0.0090	0.103	3.592	1.895	3,352	3,543	0.069	0.105
Wasting prevalence (moderate and severe)	2.3a		0.0477	0.0086	0.181	5.724	2.393	3,312	3,509	0.030	0.065
Overweight prevalence	2.4		0.0793	0.0088	0.111	3.710	1.926	3,312	3,509	0.062	0.097
Fever in last two weeks	-		0.2109	0.0138	0.065	4.281	2.069	3,545	3,738	0.183	0.239
Exclusive breastfeeding under 6 months	2.7		0.1754	0.0320	0.182	1.487	1.219	300	211	0.111	0.239
Predominantly breastfeeding under 6 months	2.8		0.3559	0.0435	0.122	1.735	1.317	300	211	0.269	0.443
Age-appropriate breastfeeding	2.12		0.2455	0.0233	0.095	3.372	1.836	1,217	1,149	0.199	0.292
Attendance in early childhood education	6.1		0.9281	0.0118	0.013	3.578	1.891	1,564	1,720	0.905	0.952
Support for learning	6.2		0.9202	0.0118	0.013	3.274	1.809	1,564	1,720	0.897	0.944
Father's support for learning	6.3		0.2666	0.0193	0.072	3.266	1.807	1,564	1,720	0.228	0.305
Mother's support for learning	6.4		0.5083	0.0241	0.047	3.980	1.995	1,564	1,720	0.460	0.556
Have 3 or more children's books	6.5		0.3384	0.0187	0.055	5.846	2.418	3,545	3,738	0.301	0.376
Play with two or more types of playthings	6.6		0.7833	0.0146	0.019	4.685	2.164	3,545	3,738	0.754	0.812
Play with electronic devices	-		0.5257	0.0196	0.037	5.737	2.395	3,545	3,738	0.487	0.565

Table SE.9: Sampling errors: South

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016											
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (se)	Coefficient of variation (se/ <i>r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits	
										Lower bound <i>r</i> - 2se	Upper bound <i>r</i> + 2se
Household											
	4.1	7.8	0.9440	0.0058	0.006	5.182	2.276	12,273	8,062	0.932	0.956
Use of improved drinking water sources											
Use of improved sanitation	4.3	7.9	0.9700	0.0071	0.007	13.785	3.713	12,273	8,062	0.956	0.984
Iodized salt consumption	2.19		0.8255	0.0076	0.009	3.201	1.789	3,706	8,050	0.810	0.841
Violent discipline	8.3		0.7523	0.0158	0.021	6.559	2.561	4,813	4,914	0.721	0.784
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9443	0.0074	0.008	3.438	1.854	1,193	3,343	0.930	0.959
Children's living arrangements	8.13		0.1502	0.0095	0.063	7.382	2.717	3,360	10,485	0.131	0.169
Prevalence of children with one or both parents dead	8.14		0.0335	0.0040	0.118	5.074	2.252	3,360	10,485	0.026	0.041
Women											
Contraceptive prevalence rate	5.3	5.3	0.7119	0.0158	0.022	6.413	2.532	2,311	5,282	0.680	0.743
Unmet need	5.4	5.6	0.0786	0.0072	0.091	3.765	1.940	2,311	5,282	0.064	0.093
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9834	0.0066	0.007	3.053	1.747	359	1,149	0.970	0.997
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9152	0.0138	0.015	2.825	1.681	359	1,149	0.888	0.943
Skilled attendant at delivery	5.7	5.2	0.9910	0.0031	0.003	1.254	1.120	359	1,149	0.985	0.997
Literacy rate (young women)	7.1	2.3	0.9707	0.0058	0.006	2.502	1.582	896	2,090	0.959	0.982
Knowledge about HIV prevention (young women)	9.1	6.3	0.3438	0.0230	0.067	4.898	2.213	896	2,090	0.298	0.390
Early initiation of breastfeeding	2.6		0.3729	0.0341	0.092	5.718	2.391	359	1,149	0.305	0.441
Early childbearing	5.2		0.1124	0.0213	0.190	4.501	2.122	418	986	0.070	0.155
Caesarean section	5.9		0.3220	0.0285	0.089	4.283	2.070	359	1,149	0.265	0.379
Percentage married before age 18	8.5		0.2250	0.0115	0.051	5.125	2.264	2,972	6,765	0.202	0.248
Attitudes towards domestic violence	8.12		0.1037	0.0084	0.081	5.925	2.434	3,450	7,869	0.087	0.120
Knowledge of mother-to-child transmission of HIV	9.2		0.5959	0.0184	0.031	11.078	3.328	3,450	7,869	0.559	0.633
Accepting attitudes towards people living with HIV	9.3		0.2812	0.0137	0.049	6.821	2.612	3,249	7,386	0.254	0.309
Women who have been tested for HIV and know the results	9.5		0.0845	0.0068	0.081	4.719	2.172	3,450	7,869	0.071	0.098
HIV counselling during antenatal care	9.7		0.6236	0.0286	0.046	4.014	2.003	359	1,149	0.566	0.681
HIV testing during antenatal care	9.8		0.6676	0.0369	0.055	7.058	2.657	359	1,149	0.594	0.741

Table SE.9: Sampling errors: South (continued)

Standard errors, coefficients of variation, design effects (<i>deff</i>), square root of design effects (<i>deff</i>), and confidence intervals for selected indicators, Thailand MICS, 2015-2016												
	MICS Indicator	MDG Indicator	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deff</i>)	Weighted count	Unweighted count	Confidence limits		
										Lower bound <i>r</i> - 2 <i>se</i>	Upper bound <i>r</i> + 2 <i>se</i>	
Men												
	Literacy rate (young men)	7.1	2.3	0.9410	0.0091	0.010	2.860	1.691	882	1,919	0.923	0.959
	Knowledge about HIV prevention (young men)	9.1	6.3	0.3298	0.0245	0.074	5.198	2.280	882	1,919	0.281	0.379
	Attitudes towards domestic violence	8.12		0.1100	0.0087	0.079	5.579	2.362	3,155	7,176	0.093	0.127
	Knowledge of mother-to-child transmission of HIV	9.2		0.5170	0.0234	0.045	15.749	3.968	3,155	7,176	0.470	0.564
	Accepting attitudes towards people living with HIV	9.3		0.2804	0.0126	0.045	5.168	2.273	2,910	6,570	0.255	0.306
Under-5s												
	Underweight prevalence (moderate and severe)	2.1a	1.8	0.0909	0.0089	0.098	3.259	1.805	1,795	3,365	0.073	0.109
	Stunting prevalence (moderate and severe)	2.2a		0.1362	0.0128	0.094	4.649	2.156	1,760	3,333	0.111	0.162
	Wasting prevalence (moderate and severe)	2.3a		0.0783	0.0108	0.138	5.383	2.320	1,751	3,322	0.057	0.100
	Overweight prevalence	2.4		0.0732	0.0095	0.130	4.461	2.112	1,751	3,322	0.054	0.092
	Fever in last two weeks	-		0.2323	0.0177	0.076	6.330	2.516	1,929	3,610	0.197	0.268
	Exclusive breastfeeding under 6 months	2.7		0.2161	0.0730	0.338	6.163	2.483	179	197	0.070	0.362
	Predominantly breastfeeding under 6 months	2.8		0.4295	0.0666	0.155	3.552	1.885	179	197	0.296	0.563
	Age-appropriate breastfeeding	2.12		0.3262	0.0358	0.110	7.009	2.647	742	1,205	0.255	0.398
	Attendance in early childhood education	6.1		0.8152	0.0210	0.026	4.849	2.202	781	1,652	0.773	0.857
	Support for learning	6.2		0.9358	0.0093	0.010	2.383	1.544	781	1,652	0.917	0.954
	Father's support for learning	6.3		0.4145	0.0301	0.073	6.174	2.485	781	1,652	0.354	0.475
	Mother's support for learning	6.4		0.7293	0.0248	0.034	5.163	2.272	781	1,652	0.680	0.779
	Have 3 or more children's books	6.5		0.3779	0.0207	0.055	6.558	2.561	1,929	3,610	0.337	0.419
	Play with two or more types of playthings	6.6		0.7833	0.0206	0.026	9.000	3.000	1,929	3,610	0.742	0.824
	Play with electronic devices	-		0.5673	0.0206	0.036	6.258	2.502	1,929	3,610	0.526	0.609

Appendix C. Thailand MICS, 2015-2016 Indicators: Numerators and Denominators

MICS INDICATOR [M]	Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
NUTRITION				
2.1a 2.1b	AN	Number of children under age 5 who fall below (a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for age of the WHO standard	Total number of children under age 5	MDG 1.8
2.2a 2.2b	AN	Number of children under age 5 who fall below (a) minus two standard deviations (moderate and severe) (b) below minus three standard deviations (severe) of the median height for age of the WHO standard	Total number of children under age 5	
2.3a 2.3b	AN	Number of children under age 5 who fall below (a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for height of the WHO standard	Total number of children under age 5	
2.4	AN	Number of children under age 5 who are above two standard deviations of the median weight for height of the WHO standard	Total number of children under age 5	
2.5	MN	Number of women with a live birth in the last 2 years who breastfed their last live-born child at any time	Total number of women with a live birth in the last 2 years	
2.6	MN	Number of women with a live birth in the last 2 years who put their last newborn to the breast within one hour of birth	Total number of women with a live birth in the last 2 years	
2.7	BD	Number of infants under 6 months of age who are exclusively breastfed ⁶³	Total number of infants under 6 months of age	

[M] The indicator is also calculated for men, for the same age group, in surveys where the Questionnaire for Individual Men has been included. Calculations are carried out by using modules in the Questionnaire for Individual Men

⁶¹ Some indicators are constructed by using questions in several modules in the MICS questionnaires. In such cases, only the module(s) which contains most of the necessary information is indicated.

⁶² Millennium Development Goals (MDG) indicators, effective 15 January 2008 - <http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/OfficialList.htm>, accessed 10 June 2013.

⁶³ Infants receiving breast milk, and not receiving any other fluids or foods, with the exception of oral rehydration solution, vitamins, mineral supplements and medicines

MICS INDICATOR [M]		Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
2.8	Predominant breastfeeding under 6 months	BD	Number of infants under 6 months of age who received breast milk as the predominant source of nourishment ⁶⁴ during the previous day	Total number of infants under 6 months of age	
2.9	Continued breastfeeding at 1 year	BD	Number of children age 12-15 months who received breast milk during the previous day	Total number of children age 12-15 months	
2.10	Continued breastfeeding at 2 years	BD	Number of children age 20-23 months who received breast milk during the previous day	Total number of children age 20-23 months	
2.11	Duration of breastfeeding	BD	The age in months when 50 per cent of children age 0-35 months did not receive breast milk during the previous day		
2.12	Age-appropriate breastfeeding	BD	Number of children age 0-23 months appropriately fed ⁶⁵ during the previous day	Total number of children age 0-23 months	
2.13	Introduction of solid, semi-solid or soft foods	BD	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	
2.14	Milk feeding frequency for non-breastfed children	BD	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	
2.15	Minimum meal frequency	BD	Number of children age 6-23 months who received solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum number of times ⁶⁶ or more during the previous day	Total number of children age 6-23 months	

⁶⁴ 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)

⁶⁵ Infants age 0-5 months who are exclusively breastfed, and children age 6-23 months who are breastfed and ate solid, semi-solid or soft foods

⁶⁶ Breastfeeding children: solid, semi-solid or soft foods, two times for infants age 6-8 months, and three 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

MICS INDICATOR [M]		Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
2.16	Minimum dietary diversity	BD	Number of children age 6-23 months who received foods from 4 or more food groups ⁶⁷ during the previous day	Total number of children age 6–23 months	
2.17a 2.17b	Minimum acceptable diet	BD	(a) Number of breastfed children age 6-23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day (b) Number of non-breastfed children age 6-23 months who received at least 2 milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day	(a) Number of breastfed children age 6–23 months (b) Number of non-breastfed children age 6–23 months	
2.18	Bottle feeding	BD	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	
2.19	Iodized salt consumption	SI	Number of households with salt testing 15 parts per million or more of iodide/iodate	Total number of households in which salt was tested or where there was no salt	
2.20	Low birth weight infants	MN	Number of most recent live births in the last 2 years weighing below 2,500 grams at birth	Total number of most recent live births in the last 2 years	
2.S20	Low birth weight infants	AN	Number of live births in the last 5 years weighing below 2,500 grams at birth	Total number of children under age 5	
2.21	Infants weighed at birth	MN	Number of most recent live births in the last 2 years who were weighed at birth	Total number of most recent live births in the last 2 years	
CHILD HEALTH					
3.1	Tuberculosis immunization coverage	IM	Number of children age 12-23 months who received BCG vaccine by 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 the third dose of OPV vaccine (OPV3) by their first birthday	Total number of children age 12-23 months	
3.3	Diphtheria, pertussis and tetanus (DPT) immunization coverage	IM	Number of children age 12-23 months who received the third dose of DPT vaccine (DPT3) by their first birthday	Total number of children age 12-23 months	

⁶⁷ The indicator is based on consumption of any amount of food from at least four out of the seven following food groups: 1) grains, roots and tubers, 2) legumes and nuts, 3) dairy products (milk, yoghurt, cheese), 4) flesh foods (meat, fish, poultry and liver/organ meats), 5) eggs, 6) vitamin-A rich fruits and vegetables, and 7) other fruits and vegetables

MICS INDICATOR [M]		Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
3.4	Measles immunization coverage ⁶⁸	IM	Number of children age 12-23 months who received measles vaccine (MMR1) by their first birthday	Total number of children age 12-23 months	MDG 4.3
3.5	Hepatitis B immunization coverage	IM	Number of children age 12-23 months who received the third dose of Hepatitis B vaccine (HepB3) by their first birthday	Total number of children age 12-23 months	
3.8	Full immunization coverage	IM	Number of children age 12-23 months who received all vaccinations recommended in the national immunization schedule by their first birthday	Total number of children age 12-23 months	
3.9	Neonatal tetanus protection	MN	Number of women age 15-49 years with a live birth in the last 2 years who were given at least two doses of tetanus toxoid vaccine within the appropriate interval ⁶⁹ prior to the most recent birth	Total number of women age 15-49 years with a live birth in the last 2 years	
3.10	Care-seeking for diarrhoea	CA	Number of children under age 5 with diarrhoea in the last 2 weeks for whom advice or treatment was sought from a health facility or provider	Total number of children under age 5 with diarrhoea in the last 2 weeks	
3.S11	Diarrhoea treatment with oral rehydration salts (ORS)	CA	Number of children under age 5 with diarrhoea in the last 2 weeks who received ORS	Total number of children under age 5 with diarrhoea in the last 2 weeks	
3.12	Diarrhoea treatment with oral rehydration therapy (ORT) and continued feeding	CA	Number of children under age 5 with diarrhoea in the last 2 weeks who received ORT (ORS packet, pre-packaged ORS fluid, 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 last 2 weeks	
3.13	Care-seeking for children with acute respiratory infection (ARI) symptoms	CA	Number of children under age 5 with ARI symptoms in the last 2 weeks for whom advice or treatment was sought from a health facility or provider	Total number of children under age 5 with ARI symptoms in the last 2 weeks	
3.14	Antibiotic treatment for children with ARI symptoms	CA	Number of children under age 5 with ARI symptoms in the last 2 weeks who received antibiotics	Total number of children under age 5 with ARI symptoms in the last 2 weeks	
3.15	Use of solid fuels for cooking	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	
3.20	Care-seeking for fever	CA	Number of children under age 5 with fever in the last 2 weeks for whom advice or treatment was sought from a health facility or provider	Total number of children under age 5 with fever in the last 2 weeks	

⁶⁸ In countries where measles vaccination is administered at or after 12 months of age according to the vaccination schedule, the indicator is calculated as the proportion of children age 24-35 months who received the measles vaccine by 24 months of age

⁶⁹ See the MICS tabulation plan for a detailed description

MICS INDICATOR [M]	Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
WATER AND SANITATION				
4.1	WS	Number of household members using improved sources of drinking water	Total number of household members	MDG 7.8
4.2	WS	Number of household members in households using unimproved drinking water who use an appropriate treatment method	Total number of household members in households using unimproved drinking water sources	
4.3	WS	Number of household members using improved sanitation facilities which are not shared	Total number of household members	MDG 7.9
4.4	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	HW	Number of households with a specific place for handwashing where water and soap or other cleansing agent are present	Total number of households	
4.6	HW	Number of households with soap or other cleansing agent	Total number of households	
REPRODUCTIVE HEALTH				
5.1	CM	Age-specific fertility rate for women age 15-19 years		MDG 5.4
5.2	CM	Number of women age 20-24 years who had at least one live birth before age 18	Total number of women age 20-24 years	
5.3	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	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

⁷⁰ When the Birth History module is used, the indicator is calculated for the last 3-year period. When estimated using the Fertility module only, the rate refers to the last one year

⁷¹ See the MICS tabulation plan for a detailed description

MICS INDICATOR [M]	Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
5.5a 5.5b	MN	Number of women age 15-49 years with a live birth in the last 2 years who were attended during their last pregnancy that led to a live birth (a) at least once by skilled health personnel (b) at least four times by any provider	Total number of women age 15-49 years with a live birth in the last 2 years	MDG 5.5
5.6	MN	Number of women age 15-49 years with a live birth in the last 2 years who had their blood pressure measured and gave urine and blood samples during the last pregnancy that led to a live birth	Total number of women age 15-49 years with a live birth in the last 2 years	
5.S6	MN	Number of women age 15-49 years with a live birth in the last 2 years who were tested for STIs (VDRL 1 st) with the results written in the health book	Total number of women age 15-49 years with a live birth in the last 2 years	
5.S7	MN	Number of women age 15-49 years with a live birth in the last 2 years who were tested for STIs (VDRL 2 nd) with the results written in the health book	Total number of women age 15-49 years with a live birth in the last 2 years	
5.S8	MN	Number of women age 15-49 years with a live birth in the last 2 years who were tested for thalassaemia with the results written in the health book	Total number of women age 15-49 years with a live birth in the last 2 years	
5.S9	MN	Number of women age 15-49 years with a live birth in the last 2 years whose husbands were tested for thalassaemia and results are written in the health book	Total number of women age 15-49 years with a live birth in the last 2 years	
5.7	MN	Number of women age 15-49 years with a live birth in the last 2 years who were attended by skilled health personnel during their most recent live birth	Total number of women age 15-49 years with a live birth in the last 2 years	MDG 5.2
5.8	MN	Number of women age 15-49 years with a live birth in the last 2 years whose most recent live birth was delivered in a health facility	Total number of women age 15-49 years with a live birth in the last 2 years	
5.9	MN	Number of women age 15-49 years whose most recent live birth in the last 2 years was delivered by caesarean section	Total number of women age 15-49 years with a live birth in the last 2 years	
5.S10	MN	Number of women age 15-49 years with a live birth in the last 2 years who had at least one post-natal health check within 42 days of delivery.	Total number of women age 15-49 years with a live birth in the last 2 years	

MICS INDICATOR ^[M]	Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
CHILD DEVELOPMENT				
6.1	EC	Attendance in early childhood education	Number of children age 36-59 months who are attending an early childhood education programme	Total number of children age 36-59 months
6.2	EC	Support for learning	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 last 3 days	Total number of children age 36-59 months
6.3	EC	Father's support for learning	Number of children age 36-59 months whose biological father has engaged in four or more activities to promote learning and school readiness in the last 3 days	Total number of children age 36-59 months
6.4	EC	Mother's support for learning	Number of children age 36-59 months whose biological mother has engaged in four or more activities to promote learning and school readiness in the last 3 days	Total number of children age 36-59 months
6.5	EC	Availability of children's books	Number of children under age 5 who have three or more children's books	Total number of children under age 5
6.6	EC	Availability of playthings	Number of children under age 5 who play with two or more types of playthings	Total number of children under age 5
6.S6	EC	Availability of playthings (mobile phones, tablets and game players)	Number of children under age 5 who play with mobile phones, tablets or game players	Total number of children under age 5
6.7	EC	Inadequate care	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 last week	Total number of children under age 5
6.8	EC	Early child development index	Number of children age 36-59 months who are developmentally on track in at least three of the following four domains: literacy-numeracy, physical, social-emotional, and learning	Total number of children age 36-59 months
LITERACY AND EDUCATION				
7.1	WB	Literacy rate among young women ^[M]	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
7.2	ED	School readiness	Number of children in first grade of primary school who attended preschool during the previous school year	Total number of children attending the first grade of primary school

MICS INDICATOR ^[M]	Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
7.3	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	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	ED	Number of children of secondary school age currently attending secondary school or higher	Total number of children of secondary school age	
7.6	ED	Proportion of children entering the first grade of primary school who eventually reach last grade	Total number of children who eventually reach last grade	MDG 2.2
7.7	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	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	ED	Primary school net attendance ratio (adjusted) for girls	Primary school net attendance ratio (adjusted) for boys	MDG 3.1
7.10	ED	Secondary school net attendance ratio (adjusted) for girls	Secondary school net attendance ratio (adjusted) for boys	MDG 3.1
CHILD PROTECTION				
8.1	BR	Number of children under age 5 whose births are reported registered	Total number of children under age 5	
8.3	CD	Number of children age 1-14 years who experienced psychological aggression or physical punishment during the last one month	Total number of children age 1-14 years	
8.4	MA	Number of women age 15-49 years who were first married or in union before age 15	Total number of women age 15-49 years	
8.5	MA	Number of women age 20-49 years who were first married or in union before age 18	Total number of women age 20-49 years	
8.6	MA	Number of women age 15-19 years who are married or in union	Total number of women age 15-19 years	
8.7	MA	Number of women age 15-49 years who are in a polygynous union	Total number of women age 15-49 years who are married or in union	

MICS INDICATOR ^[M]	Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
8.8a 8.8b	MA	Number of women who are married or in union and whose spouse is 10 or more years older, (a) among women age 15-19 years, (b) among women age 20-24 years	Total number of women who are married or in union (a) age 15-19 years, (b) age 20-24 years	
8.12	DV	Number of women who state that a husband 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	
8.13	HL	Number of children age 0-17 years living with neither biological parent	Total number of children age 0-17 years	
8.14	HL	Number of children age 0-17 years with one or both biological parents dead	Total number of children age 0-17 years	
8.15	HL	Number of children 0-17 years with at least one biological parent living abroad	Total number of children age 0-17 years	
HIV/AIDS				
9.1	HA	Number of women age 15-24 years who correctly identify ways of preventing the sexual transmission of HIV ⁷² , and who reject major misconceptions about HIV transmission	Total number of women age 15-24 years	MDG 6.3
9.2	HA	Number of women age 15-49 years who correctly identify all three means ⁷³ of mother-to-child transmission of HIV	Total number of women age 15-49 years	
9.3	HA	Number of women age 15-49 years expressing accepting attitudes on all four questions ⁷⁴ toward people living with HIV	Total number of women age 15-49 years who have heard of HIV	
9.4	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	
9.5	HA	Number of women age 15-49 years who have been tested for HIV in the last 12 months and who know their results	Total number of women age 15-49 years	

⁷² Using condoms and limiting sex to one faithful, uninfected partner

⁷³ Transmission during pregnancy, during delivery, and by breastfeeding

⁷⁴ 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

MICS INDICATOR [M]	Module ⁶¹	Numerator	Denominator	MDG Indicator Reference ⁶²
9.7 HIV counselling during antenatal care	HA	Number of women age 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they received counselling on HIV during antenatal care	Total number of women age 15-49 years who had a live birth in the last 2 years	
9.8 HIV testing during antenatal care	HA	Number of women age 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, 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 had a live birth in the last 2 years	

Appendix D. Data Quality Tables

Table DQ.1: Age distribution of household population									
Single-year age distribution of household population by sex, Thailand MICS, 2015-2016									
	Males		Females		Age	Males		Females	
	Number	Per cent	Number	Per cent		Number	Per cent	Number	Per cent
Age					Age				
0	529	1.2	429	0.9	45	709	1.6	736	1.5
1	619	1.4	508	1.1	46	675	1.5	903	1.9
2	562	1.3	570	1.2	47	710	1.6	758	1.6
3	587	1.3	578	1.2	48	734	1.7	807	1.7
4	549	1.2	531	1.1	49	756	1.7	887	1.8
5	555	1.3	560	1.2	50	658	1.5	765	1.6
6	603	1.4	564	1.2	51	703	1.6	825	1.7
7	600	1.4	624	1.3	52	686	1.6	747	1.6
8	608	1.4	687	1.4	53	592	1.3	828	1.7
9	658	1.5	614	1.3	54	677	1.5	711	1.5
10	708	1.6	596	1.2	55	721	1.6	824	1.7
11	687	1.6	693	1.4	56	631	1.4	754	1.6
12	657	1.5	691	1.4	57	561	1.3	617	1.3
13	635	1.4	585	1.2	58	595	1.4	751	1.6
14	561	1.3	610	1.3	59	587	1.3	688	1.4
15	559	1.3	600	1.2	60	499	1.1	668	1.4
16	720	1.6	612	1.3	61	441	1.0	512	1.1
17	660	1.5	596	1.2	62	478	1.1	539	1.1
18	720	1.6	717	1.5	63	531	1.2	503	1.0
19	512	1.2	459	1.0	64	480	1.1	476	1.0
20	494	1.1	452	0.9	65	483	1.1	528	1.1
21	492	1.1	516	1.1	66	384	0.9	449	0.9
22	459	1.0	501	1.0	67	306	0.7	441	0.9
23	567	1.3	581	1.2	68	335	0.8	446	0.9
24	587	1.3	511	1.1	69	258	0.6	273	0.6
25	529	1.2	574	1.2	70	321	0.7	359	0.7
26	434	1.0	549	1.1	71	241	0.5	293	0.6
27	455	1.0	524	1.1	72	188	0.4	297	0.6
28	473	1.1	560	1.2	73	220	0.5	329	0.7
29	479	1.1	540	1.1	74	221	0.5	341	0.7
30	645	1.5	611	1.3	75	184	0.4	263	0.5
31	546	1.2	551	1.1	76	156	0.4	230	0.5
32	590	1.3	600	1.2	77	155	0.4	218	0.5
33	649	1.5	684	1.4	78	194	0.4	197	0.4
34	590	1.3	631	1.3	79	132	0.3	131	0.3
35	801	1.8	713	1.5	80	105	0.2	188	0.4
36	651	1.5	741	1.5	81	59	0.1	124	0.3
37	631	1.4	699	1.5	82	63	0.1	188	0.4
38	720	1.6	749	1.6	83	100	0.2	114	0.2
39	635	1.4	734	1.5	84	49	0.1	140	0.3
40	638	1.4	726	1.5	85+	330	0.8	637	1.3
41	633	1.4	666	1.4					
42	733	1.7	744	1.5	DK/Missing	5	0.0	24	0.0
43	668	1.5	778	1.6					
44	729	1.7	769	1.6	Total	44,033	100.0	48,040	100.0

Figure DQ.1: Household population by single ages, Thailand MICS, 2015-2016

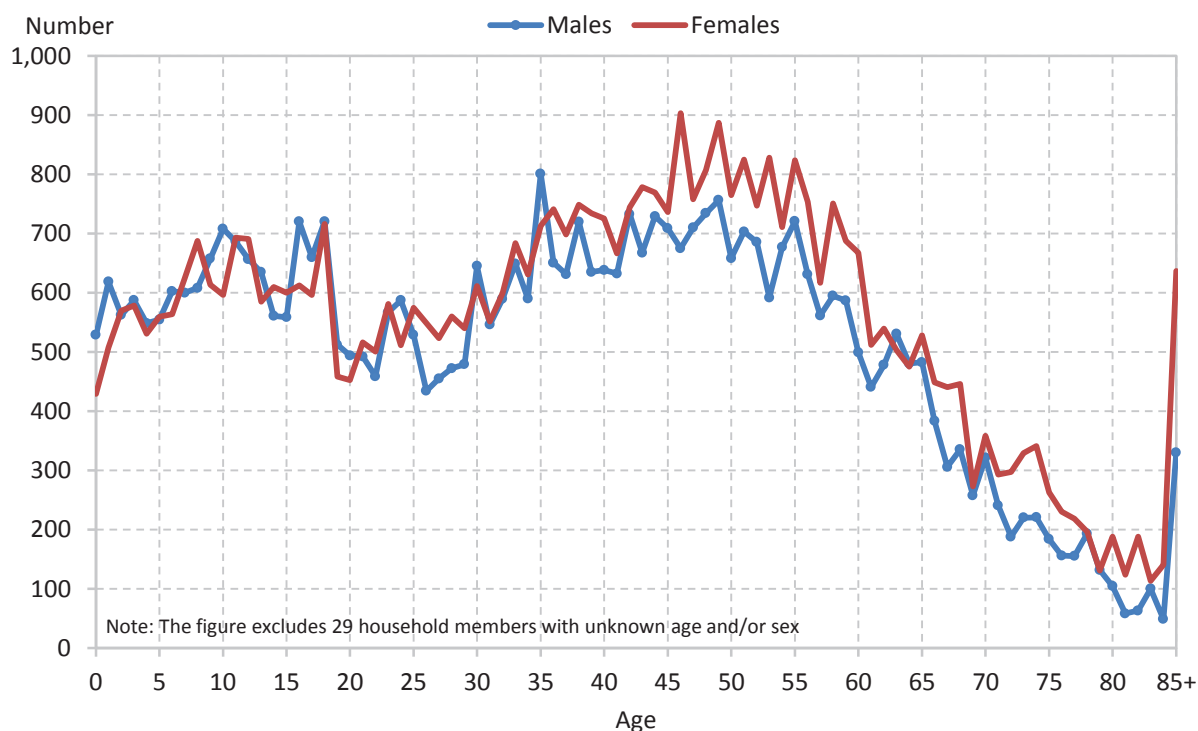


Table DQ.2: Age distribution of eligible and interviewed women				
Household population of women age 10-54 years, interviewed women age 15-49 years, and percentage of eligible women who were interviewed, by five-year age groups, Thailand MICS, 2015-2016				
Age	Household population of women age 10-54 years	Interviewed women age 15-49 years		Percentage of eligible women interviewed (Completion rate)
	Number	Number	Per cent	
10-14	3,175	na	na	na
15-19	2,984	2,923	13.2	98.0
20-24	2,562	2,491	11.2	97.2
25-29	2,747	2,674	12.0	97.4
30-34	3,077	2,985	13.4	97.0
35-39	3,636	3,550	16.0	97.6
40-44	3,684	3,597	16.2	97.6
45-49	4,091	4,007	18.0	97.9
50-54	3,877	na	na	na
Total (15-49)	22,781	22,228	100.0	97.6
Ratio of 50-54 to 45-49	0.95	na	na	na

na: not applicable

Table DQ.3: Age distribution of eligible and interviewed men				
Household population of men age 10-54 years, interviewed men age 15-49 years, and percentage of eligible men who were interviewed, by five-year age groups, Thailand MICS, 2015-2016				
	Household population of men age 10-54 years	Interviewed men age 15-49 years		Percentage of eligible men interviewed (Completion rate)
	Number	Number	Per cent	
Age				
10-14	3,248	na	na	na
15-19	3,172	3,086	14.7	97.3
20-24	2,600	2,533	12.1	97.4
25-29	2,370	2,296	10.9	96.9
30-34	3,021	2,955	14.1	97.8
35-39	3,439	3,315	15.8	96.4
40-44	3,401	3,329	15.8	97.9
45-49	3,585	3,489	16.6	97.3
50-54	3,316	na	na	na
Total (15-49)	21,586	21,004	100.0	97.3
Ratio of 50-54 to 45-49	0.93	na	na	na
na: not applicable				

Table DQ.4: Age distribution of children in household and under-5 questionnaires				
Household population of children age 0-7 years, children age 0-4 years whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed, by single years of age, Thailand MICS, 2015-2016				
	Household population of children 0-7 years	Under-5s with completed interviews		Percentage of eligible under-5s with completed interviews (Completion rate)
	Number	Number	Per cent	
Age				
0	958	956	17.6	99.8
1	1,126	1,122	20.7	99.7
2	1,132	1,130	20.8	99.8
3	1,166	1,155	21.3	99.0
4	1,080	1,067	19.7	98.8
5	1,114	na	na	na
6	1,167	na	na	na
7	1,225	na	na	na
Total (0-4)	5,462	5,430	100.0	99.4
Ratio of 5 to 4	1.03	na	na	na
na: not applicable				

Table DQ.5: Birth date reporting: Household population						
Per cent distribution of household population by completeness of date of birth information, Thailand MICS, 2015-2016						
	Completeness of reporting of month and year of birth				Total	Number of household members
	Year and month of birth	Year of birth only	Month of birth only	Both missing		
Total	89.0	10.0	0.1	0.9	100.0	92,073
Age						
0-4	99.4	0.5	0.0	0.0	100.0	5,462
5-14	96.1	3.4	0.0	0.4	100.0	12,495
15-24	95.5	3.9	0.0	0.6	100.0	11,317
25-49	95.7	3.9	0.0	0.4	100.0	33,050
50-64	82.0	16.9	0.1	1.1	100.0	19,049
65-84	62.3	34.4	0.3	3.0	100.0	9,703
85+	44.1	48.4	0.2	7.2	100.0	967
DK/Missing	na	na	1.5	48.4	100.0	29
Region						
Bangkok	89.8	7.7	0.3	2.2	100.0	12,517
Central	86.7	12.1	0.1	1.1	100.0	27,739
North	88.4	11.2	0.0	0.4	100.0	15,301
Northeast	91.2	8.3	0.0	0.5	100.0	24,242
South	90.0	9.6	0.0	0.4	100.0	12,273
Area						
Urban	89.8	8.9	0.1	1.2	100.0	42,713
Rural	88.3	11.0	0.0	0.7	100.0	49,360
na: not applicable						

Table DQ.6: Birth date and age reporting: Women							
Per cent distribution of women age 15-49 years by completeness of date of birth/age information, Thailand MICS, 2015-2016							
	Completeness of reporting of date of birth and age					Total	Number of women age 15-49 years
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/ Missing		
Total	97.7	2.2	0.0	0.1	0.0	100.0	25,614
Region							
Bangkok	98.7	1.3	0.0	0.0	0.0	100.0	3,998
Central	96.3	3.5	0.0	0.2	0.0	100.0	8,415
North	97.1	2.9	0.0	0.0	0.0	100.0	3,815
Northeast	98.7	1.3	0.0	0.0	0.0	100.0	5,937
South	98.7	1.1	0.0	0.2	0.0	100.0	3,450
Area							
Urban	97.9	2.0	0.0	0.0	0.0	100.0	12,599
Rural	97.4	2.4	0.0	0.2	0.0	100.0	13,015

Table DQ.7: Birth date and age reporting: Men							
Per cent distribution of men age 15-49 years by completeness of date of birth/age information, Thailand MICS, 2015-2016							
	Completeness of reporting of date of birth and age					Total	Number of men age 15-49 years
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/ Missing		
Total	97.0	2.9	0.0	0.1	0.0	100.0	23,183
Region							
Bangkok	98.9	1.1	0.0	0.0	0.0	100.0	3,460
Central	94.4	5.4	0.0	0.2	0.0	100.0	7,663
North	96.6	3.4	0.0	0.0	0.0	100.0	3,358
Northeast	98.8	1.2	0.0	0.0	0.0	100.0	5,547
South	98.4	1.3	0.0	0.2	0.0	100.0	3,155
Area							
Urban	97.2	2.8	0.0	0.0	0.0	100.0	11,216
Rural	96.8	3.0	0.0	0.2	0.0	100.0	11,967

Table DQ.8: Birth date and age reporting: Under-5s							
Per cent distribution children under 5 by completeness of date of birth/age information, Thailand MICS, 2015-2016							
	Completeness of reporting of date of birth and age					Total	Number of under-5 children
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/ Missing		
Total	99.8	0.2	0.0	0.0	0.0	100.0	12,250
Region							
Bangkok	99.9	0.1	0.0	0.0	0.0	100.0	1,146
Central	99.6	0.4	0.0	0.0	0.0	100.0	3,546
North	99.7	0.3	0.0	0.0	0.0	100.0	2,084
Northeast	99.9	0.1	0.0	0.0	0.0	100.0	3,545
South	99.8	0.2	0.0	0.0	0.0	100.0	1,929
Area							
Urban	99.5	0.5	0.0	0.0	0.0	100.0	4,988
Rural	99.9	0.1	0.0	0.0	0.0	100.0	7,262

Table DQ.9: Birth date reporting: Children, adolescents and young people						
Per cent distribution of children, adolescents and young people age 5-24 years by completeness of date of birth information, Thailand MICS, 2015-2016						
	Completeness of reporting of month and year of birth				Total	Number of children, adolescents and young people age 5-24 years
	Year and month of birth	Year of birth only	Month of birth only	Both missing		
Total	95.8	3.7	0.0	0.5	100.0	23,812
Region						
Bangkok	95.8	3.0	0.0	1.2	100.0	2,836
Central	93.7	6.0	0.0	0.3	100.0	7,030
North	97.7	2.0	0.0	0.3	100.0	3,571
Northeast	96.7	2.6	0.0	0.6	100.0	6,760
South	96.5	3.2	0.0	0.2	100.0	3,615
Area						
Urban	95.8	3.7	0.0	0.5	100.0	10,476
Rural	95.9	3.6	0.0	0.5	100.0	13,336

Table DQ.10: Birth date reporting: First and last births											
Per cent distribution of first and last births to women age 15-49 years by completeness of date of birth, Thailand MICS, 2015-2016											
	Completeness of reporting of date of birth										Number of last births
	Date of first birth				Total	Number of first births	Date of last birth			Total	
	Year and month of birth	Year of birth only	Completed years since first birth only	Other/DK/Missing			Year and month of birth	Year of birth only	Other/DK/Missing		
Total	96.7	3.1	0.2	0.1	100.0	16,272	98.5	1.4	0.0	100.0	10,329
Region											
Bangkok	96.9	2.3	0.5	0.3	100.0	1,928	98.0	2.0	0.0	100.0	1,101
Central	96.1	3.8	0.1	0.0	100.0	5,156	98.2	1.8	0.0	100.0	2,898
North	96.1	3.6	0.3	0.0	100.0	2,722	99.2	0.8	0.0	100.0	1,679
Northeast	97.4	2.6	0.0	0.0	100.0	4,193	98.8	1.2	0.0	100.0	3,056
South	97.1	2.6	0.3	0.0	100.0	2,272	98.5	1.5	0.0	100.0	1,595
Area											
Urban	96.5	3.1	0.3	0.1	100.0	7,332	98.4	1.6	0.0	100.0	4,455
Rural	96.7	3.1	0.1	0.0	100.0	8,940	98.6	1.4	0.0	100.0	5,874

Table DQ.11: Completeness of reporting			
Percentage of observations that are missing information for selected questions and indicators, Thailand MICS, 2015-2016			
Questionnaire and type of missing information	Reference group	Per cent with missing/incomplete information ^a	Number of cases
Household			
Salt test result	All households interviewed that have salt	0.0	28,652
Starting time of interview	All households interviewed	0.0	28,652
Ending time of interview	All households interviewed	0.0	28,652
Women			
Date of first marriage/union	All ever married women age 15-49		
Only month		36.1	18,639
Both month and year		8.1	18,639
Age at first marriage/union	All ever married women age 15-49 with year of first marriage not known	0.0	18,639
Starting time of interview	All women interviewed	0.0	25,614
Ending time of interview	All women interviewed	0.0	25,614
Men			
Date of first marriage/union	All ever married men age 15-49		
Only month		39.3	14,841
Both month and year		10.3	14,841
Age at first marriage/union	All ever married men age 15-49 with year of first marriage not known	0.0	14,841
Starting time of interview	All men interviewed	0.0	23,183
Ending time of interview	All men interviewed	0.0	23,183
Under-5			
Starting time of interview	All under-5 children	0.0	12,250
Ending time of interview	All under-5 children	0.0	12,250

^a Includes "Don't know" responses

Table DQ.12: Completeness of information for anthropometric indicators: Underweight								
Per cent distribution of children under 5 by completeness of information on date of birth and weight, Thailand MICS, 2015-2016								
	Valid weight and date of birth	Reason for exclusion from analysis				Total	Per cent of children excluded from analysis	Number of children under 5
		Weight not measured	Incomplete date of birth	Weight not measured and incomplete date of birth	Flagged cases (outliers)			
Total	91.3	8.0	0.2	0.1	0.4	100.0	8.7	12,250
Age								
<6 months	86.1	13.9	0.0	0.0	0.0	100.0	13.9	1,138
6-11 months	94.6	5.4	0.0	0.0	0.0	100.0	5.4	973
12-23 months	91.9	7.8	0.0	0.0	0.2	100.0	8.1	2,510
24-35 months	91.8	7.2	0.1	0.0	0.8	100.0	8.2	2,550
36-47 months	91.7	7.3	0.5	0.1	0.4	100.0	8.3	2,560
48-59 months	91.0	8.3	0.3	0.1	0.4	100.0	9.0	2,519

Table DQ.13: Completeness of information for anthropometric indicators: Stunting								
Per cent distribution of children under 5 by completeness of information on date of birth and length or height, Thailand MICS, 2015-2016								
	Valid length/height and date of birth	Reason for exclusion from analysis				Total	Per cent of children excluded from analysis	Number of children under 5
		Length/Height not measured	Incomplete date of birth	Length/Height not measured, incomplete date of birth	Flagged cases (outliers)			
Total	89.9	9.6	0.2	0.1	0.3	100.0	10.1	12,250
Age								
<6 months	80.8	19.2	0.0	0.0	0.0	100.0	19.2	1,138
6-11 months	91.9	8.0	0.0	0.0	0.1	100.0	8.1	973
12-23 months	89.2	10.2	0.0	0.0	0.5	100.0	10.8	2,510
24-35 months	91.1	8.3	0.1	0.0	0.4	100.0	8.9	2,550
36-47 months	91.3	8.1	0.5	0.1	0.1	100.0	8.7	2,560
48-59 months	91.1	8.3	0.3	0.2	0.2	100.0	8.9	2,519

Table DQ.14: Completeness of information for anthropometric indicators: Wasting								
Per cent distribution of children under 5 by completeness of information on weight and length or height, Thailand MICS, 2015-2016								
	Valid weight and length/height	Reason for exclusion from analysis				Total	Per cent of children excluded from analysis	Number of children under 5
		Weight not measured	Length/Height not measured	Weight and length/height not measured	Flagged cases (outliers)			
Total	89.3	0.0	1.6	8.1	1.0	100.0	10.7	12,250
Age								
<6 months	80.5	0.0	5.3	13.9	0.3	100.0	19.5	1,138
6-11 months	91.9	0.0	2.6	5.4	0.1	100.0	8.1	973
12-23 months	89.2	0.0	2.4	7.9	0.6	100.0	10.8	2,510
24-35 months	89.7	0.0	1.2	7.2	2.0	100.0	10.3	2,550
36-47 months	90.7	0.0	0.8	7.4	1.1	100.0	9.3	2,560
48-59 months	90.7	0.0	0.1	8.4	0.8	100.0	9.3	2,519

Table DQ.15: Heaping in anthropometric measurements				
Distribution of weight and height/length measurements by digits reported for the decimal points, Thailand MICS, 2015-2016				
	Weight		Height or length	
	Number	Per cent	Number	Per cent
Total	11,244	100.0	11,244	100.0
Digits				
0	1,486	13.2	2,389	21.2
1	1,165	10.4	1,184	10.5
2	1,235	11.0	1,302	11.6
3	1,093	9.7	1,188	10.6
4	985	8.8	1,029	9.2
5	1,127	10.0	1,323	11.8
6	1,195	10.6	964	8.6
7	912	8.1	715	6.4
8	1,092	9.7	510	4.5
9	954	8.5	639	5.7
0 or 5	2,612	23.2	3,712	33.0

Figure DQ.2: Weight and height/length measurements by digits reported for the decimal points, Thailand MICS, 2015-2016

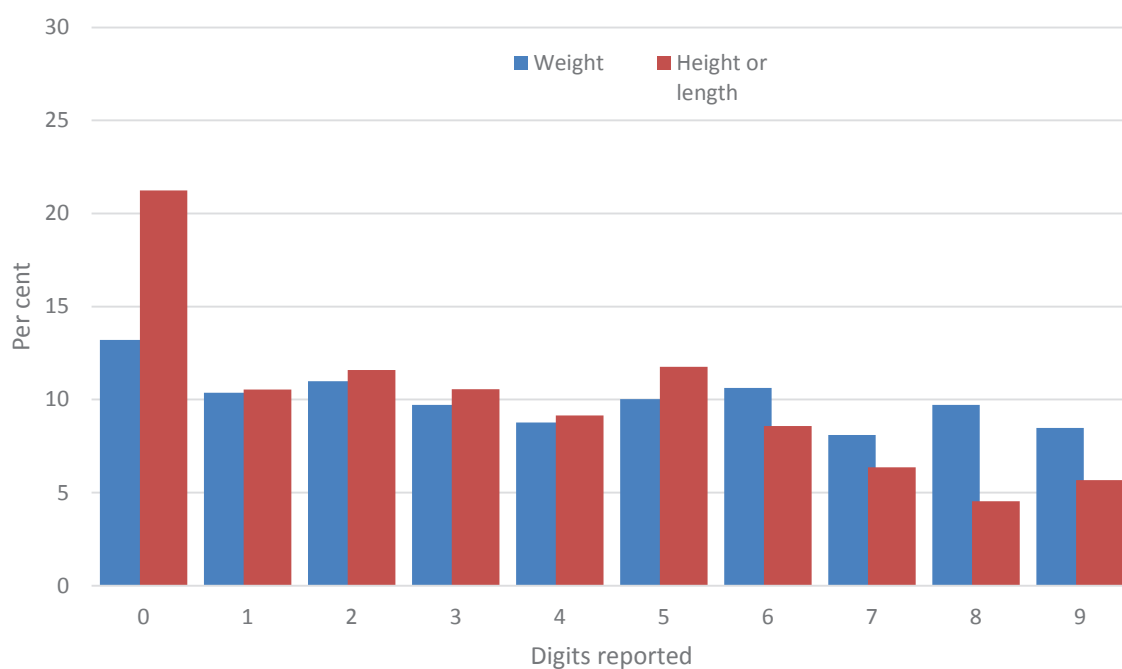


Table DQ.16: Observation of birth certificates							
Per cent distribution of children under 5 by presence of birth certificates, and percentage of birth certificates seen, Thailand MICS, 2015-2016							
	Child has birth certificate		Child does not have birth certificate	DK/Missing	Total	Percentage of birth certificates seen by the interviewer (1)/(1+2)*100	Number of children under age 5
	Seen by the interviewer (1)	Not seen by the interviewer (2)					
Total	72.8	26.1	1.0	0.1	100.0	73.6	12,250
Region							
Bangkok	56.5	42.2	0.7	0.6	100.0	57.3	1,146
Central	64.0	34.4	1.6	0.1	100.0	65.0	3,546
North	77.7	21.5	0.8	0.0	100.0	78.4	2,084
Northeast	76.9	22.6	0.3	0.1	100.0	77.3	3,545
South	85.7	12.6	1.5	0.1	100.0	87.1	1,929
Area							
Urban	65.9	32.2	1.7	0.3	100.0	67.2	4,988
Rural	77.5	21.9	0.5	0.1	100.0	78.0	7,262
Child's age							
0-5 months	72.9	25.0	1.1	1.1	100.0	74.4	1,138
6-11 months	79.0	19.1	1.3	0.6	100.0	80.6	973
12-23 months	71.8	27.4	0.8	0.0	100.0	72.4	2,510
24-35 months	71.6	27.1	1.3	0.0	100.0	72.5	2,550
36-47 months	73.1	25.7	1.2	0.0	100.0	74.0	2,560
48-59 months	72.2	27.4	0.4	0.0	100.0	72.5	2,519

Table DQ.17: Observation of vaccination cards								
Per cent distribution of children age 0-35 months by presence of a vaccination card, and the percentage of vaccination cards seen by the interviewers, Thailand MICS, 2015-2016								
	Child does not have vaccination card		Child has vaccination card		DK/Missing	Total	Percentage of vaccination cards seen by the interviewer $(1)/(1+2)*100$	Number of children age 0-35 months
	Had vaccination card previously	Never had vaccination card	Seen by the interviewer (1)	Not seen by the interviewer (2)				
Total	1.0	0.6	87.2	10.9	0.2	100.0	88.9	7,171
Region								
Bangkok	0.1	0.3	86.4	12.9	0.4	100.0	87.0	646
Central	2.8	1.4	77.9	17.4	0.6	100.0	81.7	2,107
North	0.1	0.9	93.1	5.8	0.1	100.0	94.2	1,291
Northeast	0.0	0.0	91.5	8.4	0.0	100.0	91.6	1,980
South	1.0	0.1	90.7	8.1	0.1	100.0	91.8	1,147
Area								
Urban	1.2	1.4	84.8	12.1	0.5	100.0	87.5	2,895
Rural	0.9	0.1	88.9	10.1	0.1	100.0	89.8	4,276
Child's age								
0-5 months	2.9	0.0	90.7	6.4	0.0	100.0	93.4	1,138
6-11 months	0.1	1.3	91.0	7.6	0.1	100.0	92.3	973
12-23 months	1.0	0.6	86.0	12.0	0.4	100.0	87.8	2,510
24-35 months	0.6	0.6	85.4	13.2	0.2	100.0	86.6	2,550

Table DQ.18: Observation of women's health cards							
Per cent 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, Thailand MICS, 2015-2016							
	Woman does not have health card	Woman has health card		DK/Missing	Total	Per cent of health cards seen by the interviewer $(1)/(1+2)*100$	Number of women with a live birth in the last two years
		Seen by the interviewer (1)	Not seen by the interviewer (2)				
Total	15.1	59.6	25.1	0.3	100.0	70.4	2,092
Region							
Bangkok	38.0	15.9	45.6	0.5	100.0	25.8	231
Central	22.9	42.5	34.6	0.0	100.0	55.1	713
North	9.5	74.9	15.6	0.0	100.0	82.8	354
Northeast	4.7	80.2	14.6	0.5	100.0	84.6	437
South	3.1	81.3	15.0	0.6	100.0	84.5	359
Area							
Urban	22.0	47.4	30.3	0.3	100.0	61.0	932
Rural	9.6	69.3	20.9	0.2	100.0	76.9	1,160
Age							
15-24	15.0	65.8	19.2	0.0	100.0	77.4	703
25-34	17.3	51.9	30.3	0.5	100.0	63.1	1,015
35-49	9.3	68.6	21.9	0.1	100.0	75.8	374

Table DQ.19: Observation of places for handwashing						
Per cent distribution of places for handwashing observed by the interviewers in all interviewed households, Thailand MICS, 2015-2016						
	Place for handwashing				Total	Number of households interviewed
	Observed	Not observed				
		Not in the dwelling, plot or yard	No permission to see	Other reason		
Total	83.2	7.1	9.3	0.4	100.0	28,652
Region						
Bangkok	51.0	11.2	37.2	0.5	100.0	3,932
Central	84.7	5.9	9.2	0.2	100.0	8,747
North	94.5	3.8	1.5	0.2	100.0	5,103
Northeast	91.5	7.0	1.3	0.2	100.0	7,161
South	81.8	10.4	6.3	1.5	100.0	3,708
Area						
Urban	76.1	7.9	15.6	0.4	100.0	13,638
Rural	89.6	6.4	3.7	0.3	100.0	15,014
Wealth index quintile						
Poorest	88.4	8.9	2.1	0.6	100.0	6,393
Second	86.1	7.6	5.7	0.6	100.0	5,952
Middle	85.6	6.6	7.5	0.4	100.0	5,728
Fourth	82.6	6.1	11.2	0.1	100.0	5,491
Richest	71.0	6.0	22.9	0.1	100.0	5,089

Table DQ.20: Respondent to the under-5 questionnaire								
Distribution of children under five by respondent to the under-5 questionnaire, Thailand MICS, 2015-2016								
	Mother in the household			Mother not in the household and primary caretaker identified:			Total	Number of children under 5
	Mother	Father	Other adult female	Father	Other adult female	Other adult male		
Total	78.7	0.0	0.1	1.1	18.5	1.5	100.0	5,462
Age								
0	86.2	0.0	0.1	0.3	12.6	0.9	100.0	958
1	78.7	0.0	0.4	0.4	19.0	1.5	100.0	1,126
2	79.0	0.0	0.1	1.8	17.8	1.3	100.0	1,132
3	73.7	0.1	0.0	1.3	23.1	1.9	100.0	1,166
4	76.9	0.0	0.1	1.7	19.2	2.1	100.0	1,080

Table DQ.21: School attendance by single age

Distribution of household population age 5-24 years by educational level and grade attended in the current (or most recent) school year, Thailand MICS, 2015-2016

Age at beginning of school year	Currently attending																	Total	Number of household members								
	Primary school Grade								Secondary school Grade								DK/Missing			Higher than secondary	Associate/Commercial college						
	Preschool	1	2	3	4	5	6	DK/Missing	1	2	3	4	5	6	DK/Missing												
5	1.4	93.4	5.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,082	
6	1.8	22.5	68.7	7.0	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	0.0	0.0	0.0	0.0	0.0	100.0	1,230
7	0.6	2.9	17.1	73.7	5.7	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	0.0	0.0	0.0	0.0	100.0	1,256
8	0.5	0.2	1.3	18.7	73.7	5.7	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	0.0	0.0	0.0	100.0	1,346
9	1.0	0.1	0.6	0.6	17.8	75.9	4.0	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	0.0	0.0	100.0	1,265
10	1.6	0.0	0.4	0.4	2.6	20.5	69.5	4.6	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	0.0	100.0	1,326
11	1.2	0.0	0.1	0.0	0.5	1.4	20.4	72.2	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	0.0	100.0	1,349
12	2.5	0.0	0.4	0.3	0.6	0.8	1.4	20.4	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	0.0	100.0	1,322
13	5.6	0.0	0.0	0.2	0.0	0.1	0.4	2.4	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	0.0	100.0	1,171
14	8.8	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	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	1,125
15	17.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,203
16	19.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	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	0.0	100.0	1,332
17	30.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	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	1,432
18	48.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,129
19	66.4	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	969
20	63.5	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,000
21	71.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	964
22	84.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,057
23	89.4	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,143
24 ^a	93.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	471

^a Those age 25 at the time of interview who were age 24 at beginning of school year are excluded as current attendance was only collected for those age 5-24 at the time of interview

Table DQ.22: 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, Thailand MICS, 2015-2016

	Children Ever Born			Children Living			Children Deceased			Number of women
	Sons	Daughters	Sex ratio at birth	Sons	Daughters	Sex ratio	Sons	Daughters	Sex ratio	
Total	15,583	14,857	1.05	15,287	14,652	1.04	297	205	1.45	25,614
Age										
15-19	187	131	1.42	185	129	1.43	2	2	0.88	3,359
20-24	595	668	0.89	588	666	0.88	7	2	3.97	2,878
25-29	1,431	1,293	1.11	1,421	1,289	1.10	10	3	3.16	3,089
30-34	2,215	1,862	1.19	2,198	1,852	1.19	17	10	1.61	3,437
35-39	3,230	2,901	1.11	3,191	2,861	1.12	39	41	0.96	4,084
40-44	3,577	3,676	0.97	3,502	3,625	0.97	75	51	1.47	4,141
45-49	4,350	4,326	1.01	4,203	4,230	0.99	147	96	1.54	4,626

Appendix E. Thailand MICS Questionnaires



HOUSEHOLD QUESTIONNAIRE Situation of women and children in Thailand, 2558

HOUSEHOLD INFORMATION PANEL		HH																
HH1. Cluster number: ___ ___ ___ ___	HH2. Household number: ___ ___																	
HH3. Interviewer's name and number: Name _____	HH4. Supervisor's name and number: Name _____																	
HH5. Day / Month / Year of interview: ___ ___ / ___ ___ / 2 0 1 ___	HH7. REGION: BANGKOK..... 1 CENTRAL..... 2 NORTH..... 3 NORTHEAST 4 SOUTH 5																	
HH6. AREA: Urban 1 Rural 2																		
HH7A. PROVINCE..... ___ ___																		
<p>WE ARE FROM NATIONAL STATISTICAL OFFICE. WE ARE CONDUCTING A SURVEY ABOUT THE SITUATION OF CHILDREN, FAMILIES AND HOUSEHOLDS. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 20. MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS. MAY I START NOW?</p> <p> <input type="checkbox"/> Yes, permission is given ⇒ Go to HH18 to record the time and then begin the interview. <input type="checkbox"/> No, permission is not given ⇒ Circle 04 in HH9. Discuss this result with your supervisor. </p>																		
HH9. Result of household interview: <table style="width: 100%; border-collapse: collapse;"> <tr><td>Completed</td><td style="text-align: right;">01</td></tr> <tr><td>No household member or no competent respondent at home at time of visit.....</td><td style="text-align: right;">02</td></tr> <tr><td>Entire household absent for extended period of time</td><td style="text-align: right;">03</td></tr> <tr><td>Refused.....</td><td style="text-align: right;">04</td></tr> <tr><td>Dwelling vacant / Address not a dwelling</td><td style="text-align: right;">05</td></tr> <tr><td>Dwelling destroyed</td><td style="text-align: right;">06</td></tr> <tr><td>Dwelling not found</td><td style="text-align: right;">07</td></tr> <tr><td>Other (<i>specify</i>) _____</td><td style="text-align: right;">96</td></tr> </table>			Completed	01	No household member or no competent respondent at home at time of visit.....	02	Entire household absent for extended period of time	03	Refused.....	04	Dwelling vacant / Address not a dwelling	05	Dwelling destroyed	06	Dwelling not found	07	Other (<i>specify</i>) _____	96
Completed	01																	
No household member or no competent respondent at home at time of visit.....	02																	
Entire household absent for extended period of time	03																	
Refused.....	04																	
Dwelling vacant / Address not a dwelling	05																	
Dwelling destroyed	06																	
Dwelling not found	07																	
Other (<i>specify</i>) _____	96																	
<i>After the household questionnaire has been completed, fill in the following information:</i>																		
HH10. Respondent to Household Questionnaire: Name _____																		
HH11. Total number of household members: ___ ___	<i>After all questionnaires for the household have been completed, fill in the following information:</i>																	
HH12. Number of women age 15-49 years: ___ ___																		
HH13A. Number of men age 15-49 years: ___ ___																		
HH14. Number of children under age 5: ___ ___																		
HH13. Number of women's questionnaires completed: ___ ___																		
HH13B. Number of men's questionnaires completed: ___ ___																		
HH15. Number of under-5 questionnaires completed: ___ ___																		

HH18. Record the time.
 Hour
 Minutes

LIST OF HOUSEHOLD MEMBERS **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 HL5 for each person at a time.
 Use an additional questionnaire if all rows in the List of Household Members have been used.

HL1. Line no.	HL2. Name	HL3. WHAT IS THE RELATIONSHIP OF (name) TO THE HEAD OF HOUSEHOLD?	HL4. IS (name) MALE OR FEMALE?		HL5. WHAT IS (name)'S DATE OF BIRTH?	HL6. HOW OLD IS (name)? Record in completed years. If age is 95 or above, record '95'	For women age 15-49 HL7. Circle line no. if woman age 15-49	For men age 15-49 HL7A. Circle line no. if man age 15-49	For children age 0-4 HL7B. Circle line no. if age 0-4
			M	F					
01		01	1	2	98 DK	9998 DK	01	01	0-4
02			1	2			02	02	02
03			1	2			03	03	03
04			1	2			04	04	04
05			1	2			05	05	05
06			1	2			06	06	06
07			1	2			07	07	07
08			1	2			08	08	08
09			1	2			09	09	09
10			1	2			10	10	10

Tick here if additional questionnaire used

* Codes for HL3: Relationship to head of household:	01 Head	04 Son-In-Law / Daughter-In-Law	07 Parent-In-Law	10 Uncle / Aunt	13 Adopted / Foster/ Stepchild	96 Other (Not related)
	02 Spouse/Partner	05 Grandchild	08 Brother / Sister	11 Niece /Nephew	14 Servant (Live-in)	98 DK
	03 Son / Daughter	06 Parent	09 Brother-In-Law / Sister-In-Law	12 Other relative		

HL1. Line no.	For children age 0-17 years						For children age 0-14	
	HL2. NAME	HL6. HOW OLD IS (name)? <i>Record in completed years. If age is 95 or above, record '95'</i>	HL11. IS (name)'S NATURAL MOTHER ALIVE? 1 Yes 2 No [Ⓢ] 8 DK [Ⓢ] HL13 HL13	HL12. DOES (name)'S NATURAL MOTHER LIVE IN THIS HOUSE-HOLD? <i>If "Yes", record line no. of mother and go to HL13. If "No", record 00.</i>	HL12A. WHERE DOES (name)'S NATURAL MOTHER LIVE? 1 In another household in this country 2 Institution in this country 3 Abroad 8 DK	HL13. IS (name)'S NATURAL FATHER ALIVE? 1 Yes 2 No [Ⓢ] 8 DK [Ⓢ] HL15 HL15	HL14. DOES (name)'S NATURAL FATHER LIVE IN THIS HOUSE-HOLD? <i>If "Yes", record line no. of father and go to HL15. If "No", record 00.</i>	HL14A. WHERE DOES (name)'S NATURAL FATHER LIVE? 1 In another household in this country 2 Institution in this country 3 Abroad 8 DK
Line	Name	Age	Y N DK	Mother	Y N DK	Father	Mother	
01		— —	1 2 8	— —	1 2 8	— —	— —	
02		— —	1 2 8	— —	1 2 8	— —	— —	
03		— —	1 2 8	— —	1 2 8	— —	— —	
04		— —	1 2 8	— —	1 2 8	— —	— —	
05		— —	1 2 8	— —	1 2 8	— —	— —	
06		— —	1 2 8	— —	1 2 8	— —	— —	
07		— —	1 2 8	— —	1 2 8	— —	— —	
08		— —	1 2 8	— —	1 2 8	— —	— —	
09		— —	1 2 8	— —	1 2 8	— —	— —	
10		— —	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 man age 15-49 years, write his name and line number and other identifying information in the information panel of a separate Individual Man'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, each eligible man, and each child under five in the household.

EDUCATION **ED**

		For household members age 5 and above				For household members age 5-24 years					
ED1. Line number	ED2. Name and age Copy from HL2 and HL6	ED3. HAS (name) EVER ATTENDED SCHOOL OR PRE-SCHOOL?	ED4A. WHAT IS THE HIGHEST LEVEL OF SCHOOL (name) HAS ATTENDED?	ED4B. WHAT IS THE HIGHEST GRADE (name) COMPLETED AT THIS LEVEL?	ED5. DURING THE 2015-16 SCHOOL YEAR, DID (name) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME?	ED6. DURING THIS/THAT SCHOOL YEAR, WHICH LEVEL AND GRADE IS/WAS (name) ATTENDING?	ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS 2014-15, DID (name) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME?	ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND GRADE DID (name) ATTEND?			
Line	Name	Age	Yes	No	Level*	Grade	Yes	No	DK	Level*	Grade
01			1	2			1	2	8		
02			1	2			1	2	8		
03			1	2			1	2	8		
04			1	2			1	2	8		
05			1	2			1	2	8		
06			1	2			1	2	8		
07			1	2			1	2	8		
08			1	2			1	2	8		
09			1	2			1	2	8		
10			1	2			1	2	8		

* Codes for ED4A, ED6, ED8:
 Level of education: 00 Pre-school, 01 Primary, 02 Secondary, 03 Associate / Commercial college degree, 04 Diploma, 05 Bachelor degree, 06 Master degree, 07 Doctoral degree, 98 DK

SELECTION OF ONE CHILD FOR CHILD DISCIPLINE

SL

SL1. Check HL6 in the List of Household Members and write the total number of children age 1-14 years.

Total number —

SL2. Check the number of children age 1-14 years in SL1:

- Zero ⇒ Go to HOUSEHOLD CHARACTERISTICS module.
- One ⇒ Go to SL9 and record the rank number as '1', enter the line number, child's name and age.
- Two or more ⇒ Continue with SL2A.

SL2A. List each of the children age 1-14 years below in the order they appear in the List of Household Members. Do not include other household members outside of the age range 1-14 years. Record the line number, name, sex, and age for each child.

SL3. Rank number	SL4. Line number from HL1	SL5. Name from HL2	SL6. Sex from HL4		SL7. 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	— —

SL8. 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 children age 1-14 years in SL1 above. This is the number of the column you should go to in the table below.

Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number (SL3) of the selected child.

Last Digit of Household Number (from HH2)	Total Number of Eligible Children in the Household (from SL1)						
	2	3	4	5	6	7	8+
0	2	2	4	3	6	5	4
1	1	3	1	4	1	6	5
2	2	1	2	5	2	7	6
3	1	2	3	1	3	1	7
4	2	3	4	2	4	2	8
5	1	1	1	3	5	3	1
6	2	2	2	4	6	4	2
7	1	3	3	5	1	5	3
8	2	1	4	1	2	6	4
9	1	2	1	2	3	7	5

SL9. Record the rank number (SL3), line number (SL4), name (SL5) and age (SL7) of the selected child.

Rank number —
 Line number — —
 Name _____
 Age — —

CHILD DISCIPLINE

CD

CD2. Write the line number and name of the child from SL9.

Line number _ _

Name _____

CD3. ADULTS USE CERTAIN WAYS TO TEACH CHILDREN THE RIGHT BEHAVIOUR OR TO ADDRESS A BEHAVIOUR PROBLEM. I WILL READ VARIOUS METHODS THAT ARE USED. PLEASE TELL ME IF YOU OR ANYONE ELSE IN YOUR HOUSEHOLD HAS USED THIS METHOD WITH *(name)* IN THE PAST MONTH.

Yes No

[A] TOOK AWAY PRIVILEGES, FORBADE SOMETHING *(name)* LIKED OR DID NOT ALLOW HIM/HER TO LEAVE THE HOUSE.

Took away privileges..... 1 2

[B] EXPLAINED WHY *(name)*'S BEHAVIOUR WAS WRONG.

Explained wrong behaviour..... 1 2

[C] SHOOK HIM/HER.

Shook him/her 1 2

[D] SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.

Shouted, yelled, screamed 1 2

[E] GAVE HIM/HER SOMETHING ELSE TO DO.

Gave something else to do 1 2

[F] SPANKED, HIT OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.

Spanked, hit, slapped on bottom with bare hand 1 2

[G] HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, HAIRBRUSH, STICK OR OTHER HARD OBJECT.

Hit with belt, hairbrush, stick, or other hard object 1 2

[H] CALLED HIM/HER DUMB, LAZY, OR ANOTHER NAME LIKE THAT.

Called dumb, lazy, or another name 1 2

[I] HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.

Hit / slapped on the face, head or ears 1 2

[J] HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.

Hit / slapped on hand, arm or leg 1 2

[K] BEAT HIM/HER UP, THAT IS HIT HIM/HER OVER AND OVER AS HARD AS ONE COULD.

Beat up, hit over and over as hard as one could..... 1 2

CD4. 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

DK / No opinion 8

HOUSEHOLD CHARACTERISTICS		HC
HC1A. WHAT IS THE RELIGION OF THE HEAD OF THIS HOUSEHOLD?	Buddhism.....1 Islam2 Christianity3 Other religion (<i>specify</i>) _____ 6 No religion7	
HC1B. WHAT IS THE MOTHER TONGUE/NATIVE LANGUAGE OF THE HEAD OF THIS HOUSEHOLD?	Thai (including local dialect).....01 Chinese02 Burmese03 Khmer/Kuy.....04 Malaysian/Yawee05 Lao06 English.....07 Other language (<i>specify</i>) _____ 96	
HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	Number of rooms.....__ __	
HC3. <i>Main material of the dwelling floor.</i> <i>Record observation.</i>	Natural floor Earth / Sand.....11 Rudimentary floor Wood planks21 Palm / Bamboo22 Finished floor Parquet or polished wood31 Vinyl or asphalt strips32 Ceramic tiles33 Cement34 Carpet35 Other (<i>specify</i>) _____ 96	
HC4. <i>Main material of the roof.</i> <i>Record observation.</i>	Natural roofing Thatch / Palm leaf.....12 Rudimentary roofing Wood planks23 Finished roofing Metal / Tin / Alloy31 Ceramic tiles34 Cement35 Other (<i>specify</i>) _____ 96	

<p>HC5. Main material of the exterior walls.</p> <p><i>Record observation.</i></p>	<p>Natural walls Cane / Palm / Trunks 12</p> <p>Rudimentary walls Bamboo with mud 21 Plywood 24 Reused wood 26</p> <p>Finished walls Cement 31 Stone with lime / cement 32 Bricks 33 Cement blocks 34 Wood planks / shingles 36</p> <p>Other (<i>specify</i>) 96</p>																																																				
<p>HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD MAINLY USE FOR COOKING?</p>	<p>Electricity 01 Liquefied Petroleum Gas (LPG) 02 Charcoal 07 Wood 08</p> <p>No food cooked in household 95</p> <p>Other (<i>specify</i>) 96</p>	<p>01⇒HC8 02⇒HC8</p> <p>95⇒HC8</p>																																																			
<p>HC7. IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS?</p> <p><i>If 'In the house', probe: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN?</i></p>	<p>In the house In a separate room used as kitchen 1 Elsewhere in the house 2</p> <p>In a separate building 3</p> <p>Outdoors 4</p> <p>Other (<i>specify</i>) 6</p>																																																				
<p>HC8. DOES YOUR HOUSEHOLD HAVE:</p> <p>[A] ELECTRICITY?</p> <p>[B] A RADIO?</p> <p>[D] A NON-MOBILE TELEPHONE?</p> <p>[E] A REFRIGERATOR?</p> <p>[F] AN ELECTRIC FAN?</p> <p>[G] A WASHING MACHINE?</p> <p>[H] AN OVEN/MICROWAVE OVEN?</p> <p>[I] A COMPUTER?</p> <p>[J] A TABLET?</p> <p>[K] A VCD/DVD PLAYER?</p> <p>[L] A BLU-RAY PLAYER?</p> <p>[M] AN AIR CONDITIONER?</p> <p>[N] A TELEVISION (PLAIN MONITOR)?</p> <p>[O] A TELEVISION (LCD/LED/PLASMA MONITOR)?</p> <p>[P] A CHARCOAL STOVE?</p> <p>[Q] A WATER COOLER?</p>	<table border="0"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Electricity</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Radio</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Non-mobile telephone</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Refrigerator.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Electric fan.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Washing machine</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Oven/Microwave oven</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Computer</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Tablet.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>VCD/DVD player.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BLU-RAY player</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Air conditioner.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Television (Plain).....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Television (LCD/LED/Plasma).....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Charcoal stove.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Water cooler</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		Yes	No	Electricity	1	2	Radio	1	2	Non-mobile telephone	1	2	Refrigerator.....	1	2	Electric fan.....	1	2	Washing machine	1	2	Oven/Microwave oven	1	2	Computer	1	2	Tablet.....	1	2	VCD/DVD player.....	1	2	BLU-RAY player	1	2	Air conditioner.....	1	2	Television (Plain).....	1	2	Television (LCD/LED/Plasma).....	1	2	Charcoal stove.....	1	2	Water cooler	1	2	
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<p>HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:</p> <p>[A] A WATCH?</p> <p>[C] A BICYCLE?</p> <p>[F] A CAR OR TRUCK?</p> <p>[G] A BOAT WITH A MOTOR?</p> <p>[H] TWO-WHEELED TRACTOR?</p> <p>[I] FOUR-WHEELED TRACTOR?</p> <p>[J] A TRADITIONAL MOBILE PHONE?</p> <p>[K] A SMART PHONE?</p> <p>[L] A MOTORCYCLE OR SCOOTER?</p> <p>[M] A SPORT MOTORCYCLE (BIG BIKE)?</p>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 10%; text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Watch</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Bicycle</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Car / Truck.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Boat with motor.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Two-wheeled tractor</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Four-wheeled tractor</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Mobile phone</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Smart phone</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Motorcycle / Scooter.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Sport motorcycle.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		Yes	No	Watch	1	2	Bicycle	1	2	Car / Truck.....	1	2	Boat with motor.....	1	2	Two-wheeled tractor	1	2	Four-wheeled tractor	1	2	Mobile phone	1	2	Smart phone	1	2	Motorcycle / Scooter.....	1	2	Sport motorcycle.....	1	2	
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<p>HC10. DO YOU OR SOMEONE LIVING IN THIS HOUSEHOLD OWN THIS DWELLING?</p> <p><i>If “No”, then ask: DO YOU RENT THIS DWELLING FROM SOMEONE NOT LIVING IN THIS HOUSEHOLD?</i></p> <p><i>If “Rented from someone else”, circle “2”. For other responses, circle “6”.</i></p>	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Own</td> <td style="text-align: center;">1</td> </tr> <tr> <td>Rent</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Other (<i>specify</i>) _____</td> <td style="text-align: center;">6</td> </tr> </tbody> </table>	Own	1	Rent	2	Other (<i>specify</i>) _____	6																												
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<p>HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?</p>	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Yes</td> <td style="text-align: center;">1</td> </tr> <tr> <td>No</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>	Yes	1	No	2	2⇒HC13																													
Yes	1																																		
No	2																																		
<p>HC12. HOW MANY RAIS OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN?</p> <p><i>If less than 1, record “00”. If 95 or more, record “95”. If unknown, record “98”.</i></p>	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Rais</td> <td style="text-align: center;">__ __</td> </tr> </tbody> </table>	Rais	__ __																																
Rais	__ __																																		
<p>HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?</p>	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Yes</td> <td style="text-align: center;">1</td> </tr> <tr> <td>No</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>	Yes	1	No	2	2⇒HC15																													
Yes	1																																		
No	2																																		
<p>HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD HAVE?</p> <p>[A] CATTLE, MILK COWS, OR BULLS?</p> <p>[B] HORSES, DONKEYS, OR MULES?</p> <p>[C] GOATS?</p> <p>[D] SHEEP?</p> <p>[E] CHICKENS?</p> <p>[F] PIGS?</p> <p>[G] DUCKS OR GEESE?</p> <p><i>If none, record “00”. If 95 or more, record “95”. If unknown, record “98”.</i></p>	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>Cattle, milk cows, or bulls</td> <td style="text-align: center;">__ __</td> </tr> <tr> <td>Horses, donkeys, or mules</td> <td style="text-align: center;">__ __</td> </tr> <tr> <td>Goats</td> <td style="text-align: center;">__ __</td> </tr> <tr> <td>Sheep</td> <td style="text-align: center;">__ __</td> </tr> <tr> <td>Chickens</td> <td style="text-align: center;">__ __</td> </tr> <tr> <td>Pigs.....</td> <td style="text-align: center;">__ __</td> </tr> <tr> <td>Ducks or geese.....</td> <td style="text-align: center;">__ __</td> </tr> </tbody> </table>	Cattle, milk cows, or bulls	__ __	Horses, donkeys, or mules	__ __	Goats	__ __	Sheep	__ __	Chickens	__ __	Pigs.....	__ __	Ducks or geese.....	__ __																				
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Ducks or geese.....	__ __																																		

HC15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT?	Yes	1	
	No	2	
HC16. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A CREDIT CARD?	Yes	1	
	No	2	

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

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

HANDWASHING		HW
<p>HW1. WE WOULD LIKE TO LEARN ABOUT THE PLACES THAT HOUSEHOLDS USE TO WASH THEIR HANDS.</p> <p>CAN YOU PLEASE SHOW ME WHERE MEMBERS OF YOUR HOUSEHOLD <u>MOST OFTEN</u> WASH THEIR HANDS?</p>	<p>Observed 1</p> <p>Not observed</p> <p>Not in dwelling / plot / yard 2</p> <p>No permission to see 3</p> <p>Other reason (specify) _____ 6</p>	<p>2 ⇨ HW4</p> <p>3 ⇨ HW4</p> <p>6 ⇨ HW4</p>
<p>HW2. Observe presence of water at the place for handwashing.</p> <p><i>Verify by checking the tap/pump, or basin, bucket, water container or similar objects for presence of water.</i></p>	<p>Water is available..... 1</p> <p>Water is not available 2</p>	
<p>HW3A. Is soap, detergent or ash/mud/sand present at the place for handwashing?</p>	<p>Yes, present..... 1</p> <p>No, not present 2</p>	<p>2⇨HW4</p>
<p>HW3B. Record your observation.</p> <p><i>Circle all that apply.</i></p>	<p>Bar soap..... A</p> <p>Detergent (Powder / Liquid / Paste)..... B</p> <p>Liquid soap..... C</p> <p>Ash / Mud / Sand D</p>	<p>A⇨HH19</p> <p>B⇨HH19</p> <p>C⇨HH19</p> <p>D⇨HH19</p>
<p>HW4. DO YOU HAVE ANY SOAP OR DETERGENT OR ASH/MUD/SAND IN YOUR HOUSE FOR WASHING HANDS?</p>	<p>Yes 1</p> <p>No 2</p>	<p>2⇨HH19</p>
<p>HW5A. CAN YOU PLEASE SHOW IT TO ME?</p>	<p>Yes, shown 1</p> <p>No, not shown 2</p>	<p>2⇨HH19</p>
<p>HW5B. Record your observation.</p> <p><i>Circle all that apply.</i></p>	<p>Bar soap..... A</p> <p>Detergent (Powder / Liquid / Paste)..... B</p> <p>Liquid soap..... C</p> <p>Ash / Mud / Sand D</p>	

HH19. <i>Record the time.</i>	Hour and minutes ____ : ____	
--------------------------------------	------------------------------------	--

SALT IODIZATION		SI
<p>WE WOULD LIKE TO CHECK WHETHER THE SALT USED IN YOUR HOUSEHOLD IS IODIZED. MAY I HAVE A SAMPLE OF THE SALT USED TO <u>COOK MEALS</u> IN YOUR HOUSEHOLD?</p> <p><i>Once you have tested the salt, circle number that corresponds to test outcome.</i></p>		
SI1. Result of the test using iodate reagent	Not iodized - 0 PPM 1 More than 0 PPM & less than 15 PPM..... 2 15 PPM or more 3 No salt in the house..... 4 Salt not tested <i>(specify reason)</i> _____ 5	2⇒HH20 3⇒HH20 4⇒HH20 5⇒HH20
SI2. Result of the test using iodide reagent	Not iodized - 0 PPM 1 More than 0 PPM & less than 15 PPM..... 2 15 PPM or more 3	

HH20. *Thank the respondent for his/her cooperation and check the List of Household Members:*

A separate QUESTIONNAIRE FOR INDIVIDUAL WOMEN has been issued for each woman age 15-49 years in the List of Household Members (HL7).

A separate Questionnaire for Individual Men has been issued for each man age 15-49 years in the List of Household Members (HL7A).

A separate QUESTIONNAIRE FOR CHILDREN UNDER FIVE has been issued for each child under age 5 years in the List of Household Members (HL7B).

Return to the cover page and make sure that the result of the household interview (HH9), the name and line number of the respondent to the household questionnaire (HH10), and the number of eligible women (HH12), men (HH13A), and under-5s (HH14) are entered.

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

Interviewer's Observations

Supervisor's Observations



QUESTIONNAIRE FOR INDIVIDUAL WOMEN

SITUATION OF WOMEN AND CHILDREN IN THAILAND, 2558

Thailand

WOMAN'S INFORMATION PANEL		WM
<p><i>This questionnaire is to be administered to all women age 15 through 49 (see List of Household Members, column HL7). A separate questionnaire should be used for each eligible woman.</i></p>		
WM1. Cluster number: _____	WM2. Household number: _____	
WM3. Woman's name: Name _____	WM4. Woman's line number: _____	
WM5. Interviewer's name and number: Name _____	WM6. Day / Month / Year of interview: _____ / _____ / 2 0 1 _	

<p><i>Repeat greeting if not already read to this woman:</i></p> <p>WE ARE FROM NATIONAL STATISTICAL OFFICE. WE ARE CONDUCTING A SURVEY ABOUT THE SITUATION OF CHILDREN, FAMILIES AND HOUSEHOLDS. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 15 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>	<p><i>If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:</i></p> <p>NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 15 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>
<p>MAY I START NOW?</p> <p><input type="checkbox"/> Yes, permission is given ⇒ Go to WM10 to record the time and then begin the interview.</p> <p><input type="checkbox"/> No, permission is not given ⇒ Circle "03" in WM7. Discuss this result with your supervisor.</p>	

WM7. Result of woman's interview	Completed 01 Not at home 02 Refused 03 Partly completed 04 Incapacitated 05 Other (specify) _____ 96
---	---

WM10. Record the time.	Hour and minutes__ : __	
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WOMAN'S BACKGROUND		WB
WB1. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth Month.....__ __ DK month.....98 Year__ __ __ __ DK year.....9998	
WB2. HOW OLD ARE YOU? <i>Probe: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?</i> <i>Compare and correct WB1 and/or WB2 if inconsistent.</i>	Age (in completed years)__ __	
WB3. HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL?	Yes 1 No 2	2⇒WB7
WB4. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Preschool00 Primary01 Secondary02 Associate / Commercial college degree03 Diploma04 Bachelor degree05 Master degree06 Doctoral degree07	00⇒WB7
WB5. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL? <i>If the first grade at this level is not completed, enter "00".</i>	Grade__ __	
WB6. Check WB4: <input type="checkbox"/> Secondary through doctoral degree (WB4=02 to 07) ⇒ Go to Next Module. <input type="checkbox"/> Primary (WB4=01) ⇒ Continue with WB7.		

<p>WB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME.</p> <p><i>Show sentence on the card to the respondent.</i></p> <p><i>If respondent cannot read whole sentence, probe:</i></p> <p>CAN YOU READ PART OF THE SENTENCE TO ME?</p>	<p>Cannot read at all 1</p> <p>Able to read only parts of sentence 2</p> <p>Able to read whole sentence 3</p> <p>No sentence in required language _____ 4 <i>(specify language)</i></p> <p>Blind / visually impaired 5</p>	
--	--	--

FERTILITY		CM
<p>CM1. NOW I WOULD LIKE TO ASK ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER GIVEN BIRTH?</p>	Yes 1 No 2	2⇒CM8
<p>CM2. WHAT WAS THE DATE OF YOUR FIRST BIRTH?</p> <p>I MEAN THE VERY FIRST TIME YOU GAVE BIRTH, EVEN IF THE CHILD IS NO LONGER LIVING, OR THE FATHER IS NOT YOUR CURRENT PARTNER.</p> <p><i>Skip to CM4 only if year of first birth is given. Otherwise, continue with CM3.</i></p>	Date of first birth Month..... __ __ DK month..... 98 Year __ __ __ __ DK year..... 9998	⇒CM4
<p>CM3. HOW MANY YEARS AGO DID YOU HAVE YOUR FIRST BIRTH?</p>	Completed years since first birth..... __ __	
<p>CM4. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?</p>	Yes 1 No 2	2⇒CM6
<p>CM5. HOW MANY SONS LIVE WITH YOU?</p> <p>HOW MANY DAUGHTERS LIVE WITH YOU?</p> <p><i>If none, record "00".</i></p>	Sons at home __ __ Daughters at home..... __ __	
<p>CM6. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?</p>	Yes 1 No 2	2⇒CM8
<p>CM7. HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU?</p> <p>HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU?</p> <p><i>If none, record "00".</i></p>	Sons elsewhere..... __ __ Daughters elsewhere __ __	

<p>CM8. HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED?</p> <p><i>If “No” probe by asking:</i> I MEAN, TO A CHILD WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE – EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?</p>	<p>Yes 1</p> <p>No 2</p>	<p>2⇒CM10</p>
<p>CM9. HOW MANY BOYS HAVE DIED?</p> <p>HOW MANY GIRLS HAVE DIED?</p> <p><i>If none, record “00”.</i></p>	<p>Boys dead __ __</p> <p>Girls dead __ __</p>	
<p>CM10. Sum answers to CM5, CM7, and CM9.</p>	<p>Sum __ __</p>	
<p>CM11. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL (<i>total number in CM10</i>) LIVE BIRTHS DURING YOUR LIFE. IS THIS CORRECT?</p> <p><input type="checkbox"/> <i>Yes. Check below:</i></p> <p style="padding-left: 20px;"><input type="checkbox"/> <i>No live births ⇒ Go to CONTRACEPTION Module.</i></p> <p style="padding-left: 20px;"><input type="checkbox"/> <i>One or more live births ⇒ Continue with CM12.</i></p> <p><input type="checkbox"/> <i>No. ⇒ Check responses to CM1-CM10 and make corrections as necessary before proceeding to CM12.</i></p>		
<p>CM12. OF THESE (<i>total number in CM10</i>) BIRTHS YOU HAVE HAD, WHEN DID YOU DELIVER THE LAST ONE (EVEN IF HE OR SHE HAS DIED)?</p> <p>Month and year must be recorded.</p>	<p>Date of last birth</p> <p>Month __ __</p> <p>Year __ __ __ __</p>	
<p>CM13. Check CM12: Last birth occurred within the last 2 years, that is, since (month of interview) in 2013 (if the month of interview and the month of birth are the same, and the year of birth is 2013, consider this as a birth within the last 2 years).</p> <p><input type="checkbox"/> <i>No live birth in last 2 years. ⇒ Go to CONTRACEPTION Module.</i></p> <p><input type="checkbox"/> <i>One or more live births in last 2 years. ⇒ Ask for the name of the last-born child-</i></p> <p style="padding-left: 40px;">Name of last-born child _____</p> <p><i>If child has died, take special care when referring to this child by name in the following modules.</i></p> <p><i>Continue with Next Module.</i></p>		

DESIRE FOR LAST BIRTH

DB

This module is to be administered to all women with a live birth in the 2 years preceding the date of interview.

Record name of last-born child from CM13 here _____.

Use this child's name in the following questions, where indicated.

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

MATERNAL AND NEWBORN HEALTH
MN

This module is to be administered to all women with a live birth in the 2 years preceding the date of interview.

Record name of last-born child from CM13 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? <i>Probe:</i> ANYONE ELSE? <i>Probe for the type of person seen and circle all answers given.</i>	Health professional: Doctor A Nurse / Midwife B Health centre staff/nurse's aide D Other person Community health worker G Other (specify) _____ X													
MN2A. HOW MANY WEEKS OR MONTHS PREGNANT WERE YOU WHEN YOU FIRST RECEIVED ANTENATAL CARE FOR THIS PREGNANCY? <i>Record the answer as stated by respondent.</i>	Weeks 1 __ __ Months 2 0 __ DK 998													
MN3. HOW MANY TIMES DID YOU RECEIVE ANTENATAL CARE DURING THIS PREGNANCY? <i>Probe to identify the number of times antenatal care was received. If a range is given, record the minimum number of times antenatal care received.</i>	Number of times __ __ DK 98													
MN4. AS PART OF YOUR ANTENATAL CARE DURING THIS PREGNANCY, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE: [A] WAS YOUR BLOOD PRESSURE MEASURED? [B] DID YOU GIVE A URINE SAMPLE? [C] DID YOU GIVE A BLOOD SAMPLE?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 10%; text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Blood pressure</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Urine sample</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Blood sample</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		Yes	No	Blood pressure	1	2	Urine sample	1	2	Blood sample	1	2	
	Yes	No												
Blood pressure	1	2												
Urine sample	1	2												
Blood sample	1	2												

<p>MN5. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED? MAY I SEE IT PLEASE?</p> <p><i>If a card is presented, use it to assist with answers to the following questions.</i></p>	<p>Yes (card seen) 1</p> <p>Yes (card not seen) 2</p> <p>No 3</p> <p>DK..... 8</p>	<p>2⇒MN6</p> <p>3⇒MN6</p> <p>8⇒MN6</p>																																							
<p>MN5A. Check card and record the details for blood test below.</p> <p>[A] STIs (VDRL) 1st time, test taken</p> <p>[B] STIs (VDRL) 2nd time test taken</p> <p>[C] Screening of Thalassemia (Wife)</p> <p>[D] Screening of Thalassemia (Husband)</p>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 20%; text-align: center;">Yes</th> <th style="width: 20%; text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>1st VDRL test taken</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">↓</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">D D / M M / Y Y Y Y</td> <td></td> <td></td> </tr> <tr> <td>2nd VDRL test taken</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">↓</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">D D / M M / Y Y Y Y</td> <td></td> <td></td> </tr> <tr> <td>Thalassemia test OF/DCIP/MCV.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">↓</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">D D / M M / Y Y Y Y</td> <td></td> <td></td> </tr> <tr> <td>Thalassemia test OF/DCIP/MCV.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">↓</td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">D D / M M / Y Y Y Y</td> <td></td> <td></td> </tr> </tbody> </table>		Yes	No	1 st VDRL test taken	1	2	↓			D D / M M / Y Y Y Y			2 nd VDRL test taken	1	2	↓			D D / M M / Y Y Y Y			Thalassemia test OF/DCIP/MCV.....	1	2	↓			D D / M M / Y Y Y Y			Thalassemia test OF/DCIP/MCV.....	1	2	↓			D D / M M / Y Y Y Y			
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<p>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?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 8</p>	<p>2⇒MN9</p> <p>8⇒MN9</p>																																							
<p>MN7. HOW MANY TIMES DID YOU RECEIVE THIS TETANUS INJECTION DURING YOUR PREGNANCY WITH (name)?</p>	<p>Number of times _</p> <p>DK..... 8</p>	<p>8⇒MN9</p>																																							
<p>MN8. How many tetanus injections during last pregnancy were reported in MN7?</p> <p><input type="checkbox"/> At least two tetanus injections during last pregnancy. ⇒ Go to MN17.</p> <p><input type="checkbox"/> Only one tetanus injection during last pregnancy. ⇒ Continue with MN9.</p>																																									
<p>MN9. DID YOU RECEIVE ANY TETANUS INJECTION AT ANY TIME BEFORE YOUR PREGNANCY WITH (name), EITHER TO PROTECT YOURSELF OR ANOTHER BABY?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 8</p>	<p>2⇒MN17</p> <p>8⇒MN17</p>																																							
<p>MN10. HOW MANY TIMES DID YOU RECEIVE A TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (name)?</p> <p><i>If 7 or more times, record '7'.</i></p>	<p>Number of times _</p> <p>DK..... 8</p>	<p>8⇒MN17</p>																																							
<p>MN11. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (name)?</p> <p><i>If less than 1 year, record '00'.</i></p>	<p>Years ago _ _</p>																																								

<p>MN22. HOW MUCH DID (<i>name</i>) WEIGH?</p> <p><i>If a card is available, record weight from card.</i></p>	<p>From card 1 (kg) __ . ____</p> <p>From recall..... 2 (kg) __ . ____</p> <p>DK.....99998</p>	
<p>MN23. HAS YOUR MENSTRUAL PERIOD RETURNED SINCE THE BIRTH OF (<i>name</i>)?</p>	<p>Yes 1</p> <p>No 2</p>	
<p>MN24. DID YOU EVER BREASTFEED (<i>name</i>)?</p>	<p>Yes 1</p> <p>No 2</p>	2⇒ MN28
<p>MN25. HOW LONG AFTER BIRTH DID YOU FIRST PUT (<i>name</i>) TO THE BREAST?</p> <p><i>If less than 1 hour, record “00” hours.</i></p> <p><i>If less than 24 hours, record hours.</i></p> <p><i>Otherwise, record days.</i></p>	<p>Immediately000</p> <p>Hours 1 __</p> <p>Days 2 __</p> <p>DK / Don't remember998</p>	
<p>MN26. IN THE FIRST THREE DAYS AFTER DELIVERY, WAS (<i>name</i>) GIVEN ANYTHING TO DRINK OTHER THAN BREAST MILK?</p>	<p>Yes 1</p> <p>No 2</p>	2⇒MN28
<p>MN27. WHAT WAS (<i>name</i>) GIVEN TO DRINK?</p> <p><i>Probe:</i></p> <p>ANYTHING ELSE?</p>	<p>Milk (other than breast milk) A</p> <p>Plain water B</p> <p>Sugar or glucose water C</p> <p>Gripe water D</p> <p>Sugar-salt-water solution..... E</p> <p>Fruit juice F</p> <p>Infant formula..... G</p> <p>Tea / Infusions H</p> <p>Honey I</p> <p>Other (<i>specify</i>) _____ X</p>	
<p>MN28. IN THE FIRST 42 DAYS AFTER THE DELIVERY OF (<i>name</i>), DID YOU RECEIVE ANY POST-NATAL HEALTH CHECKS?</p>	<p>Yes 1</p> <p>No 2</p>	2⇒ Next module
<p>MN29. HOW MANY TIMES DID YOU RECEIVE THESE CHECKS WITHIN 42 DAYS OF DELIVERY?</p> <p><i>If 7 or more times, record '7'</i></p> <p><i>If Unsure or DK, record '8'</i></p>	<p>Number of times__</p>	

CONTRACEPTION		CP
<p>CP1. I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING.</p> <p>ARE YOU PREGNANT NOW?</p>	<p>Yes, currently pregnant 1</p> <p>No 2</p> <p>Unsure or DK..... 8</p>	1⇒CP2A
<p>CP2. COUPLES USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY.</p> <p>ARE YOU OR YOUR PARTNER CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?</p>	<p>Yes 1</p> <p>No 2</p>	1⇒CP3
<p>CP2A1. WHAT IS THE REASON THAT YOU OR YOUR PARTNER CURRENTLY NOT DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?</p>	<p>Not married 01</p> <p>Fertility-related reasons</p> <p>Not having sex 02</p> <p>Infrequent sex 03</p> <p>Menopausal/hysterectomy 04</p> <p>Can't get pregnant 05</p> <p>Not menstruated since last birth 06</p> <p>Breast feeding 07</p> <p>Up to God/Fatalistic 08</p> <p>Wanted to have child 09</p> <p>Opposition to Use</p> <p>Respondent opposed 10</p> <p>Husband/Partner opposed 11</p> <p>Others opposed 12</p> <p>Religious prohibition 13</p> <p>Lack of knowledge</p> <p>Knows no method 14</p> <p>Knows no source 15</p> <p>Method-related reasons</p> <p>Side effects/Health concerns 16</p> <p>Lack of access/Too far 17</p> <p>Cost too much 18</p> <p>Preferred method not available 19</p> <p>No method available 20</p> <p>Inconvenient to use 21</p> <p>Interferes with body's normal processes 22</p> <p>Un-anticipated sex 23</p> <p>Other (<i>specify</i>) 96</p> <p>DK 98</p>	

<p>CP2A. HAVE YOU EVER DONE SOMETHING OR USED ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?</p>	<p>Yes 1</p> <p>No 2</p>	<p>1⇒ Next Module</p> <p>2⇒ Next Module</p>
<p>CP3. WHAT ARE YOU OR YOUR PARTNER DOING TO DELAY OR AVOID A PREGNANCY?</p> <p><i>Do not prompt.</i></p> <p><i>If more than one method is mentioned, circle each one.</i></p>	<p>Female sterilization A</p> <p>Male sterilization B</p> <p>IUD C</p> <p>Injectables D</p> <p>Implants E</p> <p>Pill F</p> <p>Male condom G</p> <p>Female condom H</p> <p>Diaphragm I</p> <p>Foam / Jelly J</p> <p>Periodic abstinence / Rhythm L</p> <p>Withdrawal M</p> <p>Contraceptive patch N</p> <p>Other (<i>specify</i>) X</p>	

UNMET NEED		UN
UN1. Check CP1: Currently pregnant? <input type="checkbox"/> Yes, currently pregnant ⇒ Continue with UN2. <input type="checkbox"/> 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 / DK..... 8	1⇒UN7 2⇒UN13 8⇒UN13
UN5. Check CP3: Currently using “Female sterilization”? <input type="checkbox"/> Yes ⇒ Go to UN13. <input type="checkbox"/> 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 / DK..... 8	2⇒UN9 3⇒UN11 8⇒UN9
UN7. HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (A/ANOTHER) CHILD? <i>Record the answer as stated by respondent.</i>	Months 1 __ __ Years..... 2 __ __ Does not want to wait (soon/now)..... 993 Says she cannot get pregnant 994 After marriage 995 Other 996 DK 998	994⇒UN11
UN8. Check CP1: Currently pregnant? <input type="checkbox"/> Yes, currently pregnant ⇒ Go to UN13. <input type="checkbox"/> No, unsure or DK ⇒ Continue with UN9.		

UN9. Check CP2: Currently using a method? <input type="checkbox"/> Yes ⇒ Go to UN13. <input type="checkbox"/> 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 amenorrheic F Breastfeeding G Too old H Fatalistic I Other (<i>specify</i>) _____ X DK Z	
UN12. Check UN11: "Never menstruated" mentioned? <input type="checkbox"/> Mentioned ⇒ Go to Next Module. <input type="checkbox"/> Not mentioned ⇒ Continue with UN13.		
UN13. WHEN DID YOUR LAST MENSTRUAL PERIOD START? Record the answer using the same unit stated by the respondent.	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	

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 with him	1	2	8
[D] IF SHE REFUSES TO HAVE SEX WITH HIM?	Refuses sex	1	2	8
[E] IF SHE BURNS THE FOOD?	Burns food	1	2	8

MARRIAGE/UNION		MA
MA1. ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A MAN AS IF MARRIED?	Yes, currently married..... 1 Yes, living with a man 2 No, not in union..... 3	3⇒MA5
MA2. HOW OLD IS YOUR HUSBAND/PARTNER? <i>Probe:</i> HOW OLD WAS YOUR HUSBAND/PARTNER ON HIS LAST BIRTHDAY?	Age in years __ __ DK 98	
MA3. BESIDES YOURSELF, DOES YOUR HUSBAND/PARTNER HAVE ANY OTHER WIVES OR PARTNERS OR DOES HE LIVE WITH OTHER WOMEN AS IF MARRIED?	Yes 1 No 2	2⇒MA7
MA4. HOW MANY OTHER WIVES OR PARTNERS DOES HE HAVE?	Number __ __ DK 98	⇒MA7 98⇒MA7
MA5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN AS IF MARRIED?	Yes, formerly married 1 Yes, formerly lived with a man..... 2 No 3	3⇒Next Module
MA6. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed 1 Divorced..... 2 Separated 3	
MA7. HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?	Only once..... 1 More than once 2	1⇒MA8A 2⇒MA8B
MA8A. IN WHAT MONTH AND YEAR DID YOU MARRY OR START LIVING WITH A MAN AS IF MARRIED? MA8B. IN WHAT MONTH AND YEAR DID YOU <u>FIRST</u> MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Date of (first) marriage Month __ __ DK month 98 Year __ __ __ __ DK year 9998	⇒Next Module
MA9. HOW OLD WERE YOU WHEN YOU FIRST STARTED LIVING WITH YOUR (<u>FIRST</u>) HUSBAND/PARTNER?	Age in years __ __	

HIV/AIDS				HA
HA1. NOW I WOULD LIKE TO ASK ABOUT THE KNOWLEDGE AND UNDERSTANDING OF HIV/AIDS HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?	Yes..... 1 No 2			2⇒HA28
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?	Yes No DK During pregnancy 1 2 8			
[B] DURING DELIVERY?	During delivery 1 2 8			
[C] BY BREASTFEEDING?	By breastfeeding 1 2 8			

HA9. IN YOUR OPINION, IF A FEMALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes..... 1 No 2 DK / Not sure / Depends..... 8																					
HA10. WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS VIRUS?	Yes..... 1 No 2 DK / Not sure / Depends..... 8																					
HA11. IF A MEMBER OF YOUR FAMILY GOT INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes..... 1 No 2 DK / Not sure / Depends..... 8																					
HA12. IF A MEMBER OF YOUR FAMILY BECAME SICK WITH AIDS, WOULD YOU BE WILLING TO CARE FOR HER OR HIM IN YOUR OWN HOUSEHOLD?	Yes..... 1 No 2 DK / Not sure / Depends..... 8																					
HA12A. DO YOU THINK CHILDREN LIVING WITH HIV SHOULD BE ABLE TO ATTEND SCHOOL WITH CHILDREN WHO ARE HIV NEGATIVE?	Yes..... 1 No 2 DK / Not sure / Depends..... 8																					
HA13. Check CM13: Any live birth in last 2 years? <input type="checkbox"/> No live birth in last 2 years (CM13= "No" or blank) ⇒ Go to HA24. <input type="checkbox"/> One or more live births in last 2 years ⇒ Continue with HA14.																						
HA14. Check MN1: Received antenatal care? <input type="checkbox"/> Received antenatal care ⇒ Continue with HA15. <input type="checkbox"/> Did not receive antenatal care ⇒ 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?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 10%; text-align: center;">Y</th> <th style="width: 10%; text-align: center;">N</th> <th style="width: 10%; text-align: center;">DK</th> </tr> </thead> <tbody> <tr> <td>AIDS from mother</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Things to do</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Tested for AIDS</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Offered a test</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>		Y	N	DK	AIDS from mother	1	2	8	Things to do	1	2	8	Tested for AIDS	1	2	8	Offered a test	1	2	8	
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<p>HA16. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS AS PART OF YOUR ANTENATAL CARE?</p>	<p>Yes..... 1 No 2 DK..... 8</p>	<p>2⇒HA19 8⇒HA19</p>
<p>HA17. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?</p>	<p>Yes..... 1 No 2 DK..... 8</p>	<p>2⇒HA22 8⇒HA22</p>
<p>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?</p>	<p>Yes..... 1 No 2 DK..... 8</p>	<p>1⇒HA22 2⇒HA22 8⇒HA22</p>
<p>HA19. Check MN17: Birth delivered by health professional (A, B or D)?</p> <p><input type="checkbox"/> Yes, birth delivered by health professional (MN17 = A, B or D) ⇒ Continue with HA20.</p> <p><input type="checkbox"/> No, birth not delivered by health professional (MN17 = else) ⇒ Go to HA24.</p>		
<p>HA20. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE AIDS VIRUS BETWEEN THE TIME YOU WENT FOR DELIVERY BUT BEFORE THE BABY WAS BORN?</p>	<p>Yes..... 1 No 2</p>	<p>2⇒HA24</p>
<p>HA21. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?</p>	<p>Yes..... 1 No 2</p>	
<p>HA22. HAVE YOU BEEN TESTED FOR THE AIDS VIRUS SINCE THAT TIME YOU WERE TESTED DURING YOUR PREGNANCY?</p>	<p>Yes..... 1 No 2</p>	<p>1⇒HA25</p>
<p>HA23. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED FOR THE AIDS VIRUS?</p>	<p>Less than 12 months ago 1 12-23 months ago 2 2 or more years ago..... 3</p>	<p>1⇒HA28 2⇒ HA28 3⇒ HA28</p>
<p>HA24. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE AIDS VIRUS?</p>	<p>Yes..... 1 No 2</p>	<p>2⇒HA27</p>

HA25. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?	Less than 12 months ago 1 12-23 months ago 2 2 or more years ago 3	
HA26. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes 1 No 2 DK 8	1⇒ HA28 2⇒ HA28 8⇒ HA28
HA27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes 1 No 2	
HA28. CHECK AGE IS BETWEEN 15-24 (WB2= 15-24) AND EVER ATTENDED SCHOOL (WB3=1) <input type="checkbox"/> YES => CONTINUE WITH HA29 <input type="checkbox"/> NO => SKIP TO WM11		
HA29. "DID YOU STUDY SEXUALITY EDUCATION IN SCHOOL?" "SEXUALITY EDUCATION ON TOPICS SUCH AS BIRTH CONTROL, SAFE SEX, TEEN PREGNANCY, REPRODUCTIVE TRACT INFECTIONS AND GOOD HEALTH"	Yes 1 No 2	2⇒WM11
HA30. "WHAT LEVEL DID YOU FIRST HAVE SEXUALITY EDUCATION?"	Primary 1 Lower Secondary 2 Upper Secondary 3 Vocational 4 Diploma 5 DK/Unsure 8	

WM11. Record the time.

Hour and minutes ____ : ____

WM12. Check List of Household Members, columns HL7B and HL15:

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

- Yes* ⇒ Proceed to complete the result of woman's interview (WM7) on the cover page and then 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 and proceed to complete the result of woman's interview (WM7) on the cover page.

Interviewer's Observations

Supervisor's Observations



QUESTIONNAIRE FOR CHILDREN UNDER FIVE

SITUATION OF WOMEN AND CHILDREN IN THAILAND, 2558

Thailand

UNDER-FIVE CHILD INFORMATION PANEL		UF												
<p>This questionnaire is to be administered to all mothers or caretakers (see List of Household Members, column HL15) who care for a child that lives with them and is under the age of 5 years (see List of Household Members, column HL7B). A separate questionnaire should be used for each eligible child.</p>														
UF1. Cluster number: _____	UF2. Household number: _____													
UF3. Child's name: Name _____	UF4. Child's line number: _____													
UF5. Mother's / Caretaker's name: Name _____	UF6. Mother's / Caretaker's line number: _____													
UF7. Interviewer's name and number: Name _____	UF8. Day / Month / Year of interview: _____ / _____ / 201__													
<p>Repeat greeting if not already read to this respondent:</p> <p>WE ARE FROM <i>NATIONAL STATISTICAL OFFICE</i>. WE ARE CONDUCTING A SURVEY ABOUT THE SITUATION OF CHILDREN, FAMILIES AND HOUSEHOLDS. I WOULD LIKE TO TALK TO YOU ABOUT (<i>child's name from UF3</i>)'S HEALTH AND WELL-BEING. THE INTERVIEW WILL TAKE ABOUT 15 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>	<p><i>If greeting at the beginning of the household questionnaire has already been read to this person, then read the following:</i></p> <p>NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT (<i>child's name from UF3</i>)'S HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 15 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>													
<p>MAY I START NOW?</p> <p><input type="checkbox"/> <i>Yes, permission is given</i> ⇒ Go to UF12 to record the time and then begin the interview.</p> <p><input type="checkbox"/> <i>No, permission is not given</i> ⇒ Circle '03' in UF9. Discuss this result with your supervisor.</p>														
<p>UF9. Result of interview for children under 5</p> <p>Codes refer to mother/caretaker.</p>	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>Completed</td> <td style="text-align: right;">01</td> </tr> <tr> <td>Not at home</td> <td style="text-align: right;">02</td> </tr> <tr> <td>Refused</td> <td style="text-align: right;">03</td> </tr> <tr> <td>Partly completed</td> <td style="text-align: right;">04</td> </tr> <tr> <td>Incapacitated</td> <td style="text-align: right;">05</td> </tr> <tr> <td>Other (<i>specify</i>) _____</td> <td style="text-align: right;">96</td> </tr> </table>		Completed	01	Not at home	02	Refused	03	Partly completed	04	Incapacitated	05	Other (<i>specify</i>) _____	96
Completed	01													
Not at home	02													
Refused	03													
Partly completed	04													
Incapacitated	05													
Other (<i>specify</i>) _____	96													

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

AGE	AG	
<p>AG1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE DEVELOPMENT AND HEALTH OF <i>(name)</i>.</p> <p>ON WHAT DAY, MONTH AND YEAR WAS <i>(name)</i> BORN?</p> <p><i>Probe:</i> WHAT IS HIS / HER BIRTHDAY?</p> <p>If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day.</p> <p>Month and year must be recorded.</p>	<p>Date of birth</p> <p>Day __</p> <p>DK day.....98</p> <p>Month..... __</p> <p>Year 2 5 5 _</p>	
<p>AG2. HOW OLD IS <i>(name)</i>?</p> <p><i>Probe:</i> HOW OLD WAS <i>(name)</i> AT HIS / HER LAST BIRTHDAY?</p> <p>Record age in completed years.</p> <p>Record '0' if less than 1 year.</p> <p>Compare and correct AG1 and/or AG2 if inconsistent.</p>	<p>Age (in completed years) __</p>	

BIRTH REGISTRATION

BR

“THE BIRTH CERTIFICATE IS ISSUED BY THE REGISTRAR AFTER A REPORT OF BIRTH IS MADE AT THE DISTRICT OR MUNICIPAL OFFICE. IF THE PARENT/GUARDIAN ONLY HAS A “CERTIFICATE OF REPORT OF BIRTH” ISSUED BY THE DELIVERING HOSPITAL THEN THAT INDICATES THAT A BIRTH CERTIFICATE HAS NOT BEEN ISSUED.”

<p>BR1. DOES <i>(name)</i> HAVE A BIRTH CERTIFICATE?</p> <p><i>If yes, ask:</i> MAY I SEE IT?</p>	<p>Yes, seen..... 1</p> <p>Yes, not seen..... 2</p> <p>No 3</p> <p>DK..... 8</p>	<p>1⇒Next Module</p>
<p>BR2. HAS <i>(name)</i>'S BIRTH CERTIFICATE BEEN ISSUED BY THE REGISTRAR AT THE DISTRICT OR MUNICIPALITY?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 8</p>	<p>1⇒Next Module</p>
<p>BR3. DO YOU KNOW HOW TO REGISTER <i>(name)</i>'S BIRTH?</p>	<p>Yes 1</p> <p>No 2</p>	<p>1⇒BR5</p>
<p>BR4. DO YOU KNOW THAT YOU HAVE TO REPORT THE BIRTH AND OBTAIN A BIRTH CERTIFICATE FOR <i>(name)</i>?</p>	<p>Yes 1</p> <p>No 2</p>	<p>2⇒Next Module</p>
<p>BR5. WHAT IS THE MAIN REASON FOR NOT REPORTING THE BIRTH AND OBTAIN A BIRTH CERTIFICATE FOR <i>(name)</i>?</p>	<p>High cost..... 1</p> <p>Too far to travel 2</p> <p>Did not want to be fined..... 3</p> <p>Did go to the district/municipality, but the registrar did not register the birth 4</p> <p>Do not know the location of registrar's office 5</p> <p>Other (specify) 6</p> <p>DK..... 8</p>	

EARLY CHILDHOOD DEVELOPMENT

EC

<p>EC1. HOW MANY CHILDREN’S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR <i>(name)</i>?</p>	<p>None00</p> <p>Number of children’s books0 __</p> <p>Ten or more books 10</p>	
<p>EC2. I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT <i>(name)</i> PLAYS WITH WHEN HE/SHE IS AT HOME.</p> <p>DOES HE/SHE PLAY WITH:</p> <p>[A] HOMEMADE TOYS (SUCH AS DOLLS, CARS, OR OTHER TOYS MADE AT HOME)?</p> <p>[B] TOYS FROM A SHOP OR MANUFACTURED TOYS?</p> <p>[C] HOUSEHOLD OBJECTS (SUCH AS BOWLS OR POTS) OR OBJECTS FOUND OUTSIDE (SUCH AS STICKS, ROCKS, ANIMAL SHELLS OR LEAVES)?</p> <p>If the respondent says “YES” to the categories above, then probe to learn specifically what the child plays with to ascertain the response.</p>	<p style="text-align: right;">Y N DK</p> <p>Homemade toys1 2 8</p> <p>Toys from a shop.....1 2 8</p> <p>Household objects or outside objects1 2 8</p>	
<p>EC2D. DOES HE/SHE PLAY WITH ELECTRONIC DEVICES (SUCH AS MOBILE PHONE, TABLET OR GAME PLAYER)?</p>	<p>Yes 1</p> <p>No2</p> <p>DK.....8</p>	
<p>EC3. SOMETIMES ADULTS TAKING CARE OF CHILDREN HAVE TO LEAVE THE HOUSE TO GO SHOPPING, WASH CLOTHES, OR FOR OTHER REASONS AND HAVE TO LEAVE YOUNG CHILDREN.</p> <p>ON HOW MANY DAYS IN THE PAST WEEK WAS <i>(name)</i>:</p> <p>[A] LEFT ALONE FOR MORE THAN AN HOUR?</p> <p>[B] LEFT IN THE CARE OF ANOTHER CHILD, THAT IS, SOMEONE LESS THAN 10 YEARS OLD, FOR MORE THAN AN HOUR?</p> <p>If ‘none’ enter ‘0’. If ‘don’t know’ enter ‘8’.</p>	<p>Number of days left alone for more than an hour __</p> <p>Number of days left with other child for more than an hour __</p>	

EC4. Check AG2: Age of child.

Child age 0, 1 or 2 ⇒ Go to Next Module.

Child age 3 or 4 ⇒ Continue with EC5.

<p>EC5. DOES (name) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?</p>	<p>Yes 1 No 2 DK..... 8</p>																																				
<p>EC7. IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER AGE 15 OR OVER ENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (name):</p> <p><i>If yes, ask: WHO ENGAGED IN THIS ACTIVITY WITH (name)?</i></p> <p><i>Circle all that apply.</i></p> <p>[A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH (name)?</p> <p>[B] TOLD STORIES TO (name)?</p> <p>[C] SANG SONGS TO (name) OR WITH (name), INCLUDING LULLABIES?</p> <p>[D] TOOK (name) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?</p> <p>[E] PLAYED WITH (name)?</p> <p>[F] NAMED, COUNTED, OR DREW THINGS TO OR WITH (name)?</p>	<table border="0"> <thead> <tr> <th></th> <th>Mother</th> <th>Father</th> <th>Other</th> <th>No one</th> </tr> </thead> <tbody> <tr> <td>Read books</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Told stories</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Sang songs</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Took outside</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Played with</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Named/counted</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> </tbody> </table>		Mother	Father	Other	No one	Read books	A	B	X	Y	Told stories	A	B	X	Y	Sang songs	A	B	X	Y	Took outside	A	B	X	Y	Played with	A	B	X	Y	Named/counted	A	B	X	Y	
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<p>EC8. I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH AND DEVELOPMENT OF (name). 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 (name)'S DEVELOPMENT.</p> <p>CAN (name) IDENTIFY OR NAME AT LEAST TEN LETTERS OF THE ALPHABET?</p>	<p>Yes 1 No 2 DK..... 8</p>																																				
<p>EC9. CAN (name) READ AT LEAST FOUR SIMPLE, POPULAR WORDS?</p>	<p>Yes 1 No 2 DK..... 8</p>																																				
<p>EC10. DOES (name) KNOW THE NAME AND RECOGNIZE THE SYMBOL OF ALL NUMBERS FROM 1 TO 10?</p>	<p>Yes 1 No 2 DK..... 8</p>																																				

EC11. CAN (<i>name</i>) 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 (<i>name</i>) SOMETIMES TOO SICK TO PLAY?	Yes 1 No 2 DK..... 8	
EC13. DOES (<i>name</i>) FOLLOW SIMPLE DIRECTIONS ON HOW TO DO SOMETHING CORRECTLY?	Yes 1 No 2 DK..... 8	
EC14. WHEN GIVEN SOMETHING TO DO, IS (<i>name</i>) ABLE TO DO IT INDEPENDENTLY?	Yes 1 No 2 DK..... 8	
EC15. DOES (<i>name</i>) GET ALONG WELL WITH OTHER CHILDREN?	Yes 1 No 2 DK..... 8	
EC16. DOES (<i>name</i>) KICK, BITE, OR HIT OTHER CHILDREN OR ADULTS?	Yes 1 No 2 DK..... 8	
EC17. DOES (<i>name</i>) GET DISTRACTED EASILY?	Yes 1 No 2 DK..... 8	

BREASTFEEDING AND DIETARY INTAKE

BD

BD1. *Check AG2: Age of child*

- Child age 0, 1 or 2 ⇒ Continue with BD2.*
- Child age 3 or 4 ⇒ Go to IMMUNIZATION Module*

<p>BD2. HAS (<i>name</i>) EVER BEEN BREASTFED?</p>	<p>Yes..... 1 No 2 DK..... 8</p>	<p>2⇒BD4 8⇒BD4</p>
<p>BD3. IS (<i>name</i>) STILL BEING BREASTFED?</p>	<p>Yes..... 1 No 2 DK..... 8</p>	<p>2⇒BD4 8⇒BD4</p>
<p>BD3A. HOW MANY TIMES WAS (<i>name</i>) BREASTFED YESTERDAY, DURING THE DAY OR NIGHT?</p>	<p>Number of times breastfeed.....__ __</p>	
<p>BD4. YESTERDAY, DURING THE DAY OR NIGHT, DID (<i>name</i>) <u>DRINK ANYTHING FROM A BOTTLE WITH A NIPPLE?</u></p>	<p>Yes..... 1 No 2 DK..... 8</p>	
<p>BD5. DID (<i>name</i>) <u>DRINK ORS (ORAL REHYDRATION SOLUTION)</u> YESTERDAY, DURING THE DAY OR NIGHT?</p>	<p>Yes..... 1 No 2 DK..... 8</p>	
<p>BD6. DID (<i>name</i>) <u>DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES</u> YESTERDAY, DURING THE DAY OR NIGHT?</p>	<p>Yes..... 1 No 2 DK..... 8</p>	

<p>BD7. NOW I WOULD LIKE TO ASK YOU ABOUT (OTHER) LIQUIDS THAT (<i>name</i>) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. I AM INTERESTED TO KNOW WHETHER (<i>name</i>) HAD THE ITEM EVEN IF COMBINED WITH OTHER FOODS.</p> <p>PLEASE INCLUDE LIQUIDS CONSUMED OUTSIDE OF YOUR HOME.</p> <p>DID (<i>name</i>) DRINK (<i>Name of item</i>) YESTERDAY DURING THE DAY OR THE NIGHT:</p>		
<p>[A] PLAIN WATER?</p> <p>IF THE RESPONDENT SAYS "YES", THEN PROBE TO LEARN SPECIFICALLY THAT THE CHILD WAS GIVEN WATER ONLY FOR DRINKING AND NOT FOR MOUTH WASH OR CLEANING TO ASCERTAIN THE RESPONSE.</p>	<p>Plain water</p>	<p>Yes No DK</p> <p>1 2 8</p>
<p>[B] JUICE OR JUICE DRINKS?</p>	<p>Juice or juice drinks</p>	<p>1 2 8</p>
<p>[C] NAMSOUF?</p>	<p>Namsouf</p>	<p>1 2 8</p>
<p>[D] MILK SUCH AS FRESH MILK, TINNED, PACKED, BOXED, UHT, PASTEURIZED, POWDERED, SOYA OR CORN?</p>	<p>Milk</p>	<p>1 2 8</p>
<p><i>If yes:</i> HOW MANY TIMES DID (<i>name</i>) DRINK MILK? <i>If unknown, record '98'.</i></p>	<p>Number of times drank milk.....__ __</p>	
<p>[E] INFANT FORMULA?</p>	<p>Infant formula</p>	<p>1 2 8</p>
<p><i>If yes:</i> HOW MANY TIMES DID (<i>name</i>) DRINK INFANT FORMULA? <i>If 7 or more times, record '7'.</i> <i>If unknown, record '8'.</i></p>	<p>Number of times drank infant formula __</p>	
<p>[F] ANY OTHER LIQUIDS?</p> <p>(Specify)_____</p>	<p>Other liquids</p>	<p>1 2 8</p>

<p>BD8. NOW I WOULD LIKE TO ASK YOU ABOUT (OTHER) FOODS THAT (<i>name</i>) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. AGAIN, I AM INTERESTED TO KNOW WHETHER (<i>name</i>) HAD THE ITEM EVEN IF COMBINED WITH OTHER FOODS.</p> <p>PLEASE INCLUDE FOODS CONSUMED OUTSIDE OF YOUR HOME.</p> <p>DID (<i>name</i>) EAT (<i>Name of food</i>) YESTERDAY DURING THE DAY OR THE NIGHT:</p>				
		Yes	No	DK
[A] YOGURT?	Yogurt	1	2	8
<i>If yes: HOW MANY TIMES DID (<i>name</i>) DRINK OR EAT YOGURT? If 7 or more times, record '7'. If unknown, record '8'.</i>	Number of times drank/ate yogurt.....	__		
[B] ANY FORTIFIED BABY FOOD, E.G., CERELAC, NESTLE, PEDIASURE?	Fortified baby food, e.g. Cerelac	1	2	8
<i>If yes: HOW MANY TIMES DID (<i>name</i>) DRINK OR EAT FORTIFIED BABY FOOD? If 7 or more times, record '7'. If unknown, record '8'.</i>	Number of times drank/ate fortified food.....	__		
[C] BREAD, RICE, NOODLES, PORRIDGE, OR OTHER FOODS MADE FROM GRAINS?	Foods made from grains	1	2	8
[D] PUMPKIN, CARROTS, SQUASH OR SWEET POTATOES OR VEGETABLES THAT ARE YELLOW OR ORANGE INSIDE?	Pumpkin, carrots, etc.	1	2	8
[E] WHITE POTATOES, WHITE YAMS, MANIOC, CASSAVA, OR ANY OTHER FOODS MADE FROM ROOTS?	White potatoes, white yams, manioc, cassava, etc.	1	2	8
[F] ANY DARK GREEN, LEAFY VEGETABLES?	Dark green, leafy vegetables	1	2	8
[G] RIPE MANGOES, PAPAYAS, THAI MELON, CANTALOUPE, AND MELON?	Ripe mangoes, papayas, Thai melon, etc.	1	2	8
[H] ANY OTHER FRUITS OR VEGETABLES?	Other fruits or vegetables	1	2	8
[I] LIVER, KIDNEY, HEART OR OTHER ORGAN MEATS?	Liver, kidney, heart or other organ meats	1	2	8
[J] ANY MEAT, SUCH AS BEEF, PORK, LAMB, GOAT, CHICKEN, OR DUCK?	Meat, such as beef, pork, lamb, goat, etc.	1	2	8
[K] EGGS?	Eggs	1	2	8
[L] FRESH OR DRIED FISH OR SHELLFISH?	Fresh or dried fish	1	2	8
[M] ANY FOODS MADE FROM BEANS, PEAS, LENTILS, OR NUTS?	Foods made from beans, peas, etc.	1	2	8
[N] CHEESE OR OTHER FOOD MADE FROM MILK?	Cheese or other food made from milk	1	2	8
[O] ANY OTHER SOLID, SEMI-SOLID, OR SOFT FOOD THAT I HAVE NOT MENTIONED? <i>(Specify)</i> _____	Other solid, semi-solid, or soft food	1	2	8

BD9. Check BD8 (Categories “A” through “O”).

- At least one “Yes” or all “DK” ⇒ Go to BD11.
- Else ⇒ Continue with BD10.

BD10. Probe to determine whether the child ate any solid, semi-solid or soft foods yesterday during the day or night.

- The child did not eat or the respondent does not know ⇒ Go to Next Module.
- The child ate at least one solid, semi-solid or soft food item mentioned by the respondent ⇒ Go back to BD8 and record food eaten yesterday [A to O]. When finished, continue with BD11.

BD11. HOW MANY TIMES DID (*name*) EAT ANY SOLID, SEMI-SOLID OR SOFT FOODS YESTERDAY DURING THE DAY OR NIGHT?

If 7 or more times, record '7'.

Number of times —

DK..... 8

IMMUNIZATION

IM

If an immunization (**child health**) card is available, copy the dates in IM3 for each type of immunization recorded on the card. IM6-IM16B will only be asked if a card is not available.

IM1. DO YOU HAVE A CARD WHERE <i>(name)</i> 'S VACCINATIONS ARE WRITTEN DOWN? <i>If yes: MAY I SEE IT PLEASE?</i>		Yes, seen.....1				1⇒IM3			
		Yes, not seen.....2				2⇒IM6			
		No card3							
IM2. DID YOU EVER HAVE A VACCINATION (child health) CARD FOR <i>(name)</i> ?		Yes.....1				1⇒IM6			
		No2				2⇒IM6			
IM3. (a) Copy dates for each vaccination from the card. (b) Write '44' in day column if card shows that vaccination was given but no date recorded.		Date of Immunization							
		Day		Month		Year			
BCG	BCG								
POLIO 1	OPV1								
POLIO 2	OPV2								
POLIO 3	OPV3								
POLIO 4	OPV4								
POLIO 5	OPV5								
DPT 1	DPT1								
DPT 2	DPT2								
DPT 3	DPT3								
DPT 4	DPT4								
DPT 5	DPT5								
HEPB AT BIRTH	HEP0								
HEPB 1	HEP1								
HEPB 2	HEP2								
HEPB 3	HEP3								
MMR 1	MMR1								
MMR 2	MMR2								
JAPE 1	JE1								
JAPE 2	JE2								
JAPE 3	JE3								

IM4. Check IM3. Are all vaccines (BCG to JE3) recorded?

Yes ⇒ Go to IM19.

No ⇒ Continue with IM5.

IM5. IN ADDITION TO WHAT IS RECORDED ON THIS CARD, DID (*name*) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS OR CHILD HEALTH DAYS?

Yes ⇒ Go back to IM3 and probe for these vaccinations and write '66' in the corresponding day column for each vaccine mentioned. When finished, skip to IM19.

No/DK ⇒ Go to IM19.

<p>IM6. HAS (<i>name</i>) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY OR CHILD HEALTH DAY?</p>	<p>Yes.....1 No2 DK.....8</p>	<p>2⇒IM19 8⇒IM19</p>
<p>IM7. HAS (<i>name</i>) EVER RECEIVED A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION IN THE ARM OR SHOULDER THAT USUALLY CAUSES A SCAR?</p>	<p>Yes.....1 No2 DK.....8</p>	
<p>IM8. HAS (<i>name</i>) EVER RECEIVED ANY VACCINATION DROPS IN THE MOUTH TO PROTECT HIM/HER FROM POLIO?</p>	<p>Yes.....1 No2 DK.....8</p>	<p>2⇒IM11 8⇒IM11</p>
<p>IM9. WAS THE FIRST POLIO VACCINE RECEIVED IN THE FIRST TWO WEEKS AFTER BIRTH?</p>	<p>Yes.....1 No2</p>	
<p>IM10. HOW MANY TIMES WAS THE POLIO VACCINE RECEIVED?</p>	<p>Number of times _</p>	
<p>IM11. HAS (<i>name</i>) EVER RECEIVED A DPT VACCINATION – THAT IS, AN INJECTION IN THE THIGH TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, OR DIPHTHERIA?</p> <p><i>Probe by indicating that DPT vaccination is sometimes given at the same time as Polio.</i></p>	<p>Yes.....1 No2 DK.....8</p>	<p>2⇒IM13 8⇒IM13</p>
<p>IM12. HOW MANY TIMES WAS THE DPT VACCINE RECEIVED?</p>	<p>Number of times _</p>	

<p>IM13. HAS (<i>name</i>) EVER RECEIVED A HEPATITIS B VACCINATION – THAT IS, AN INJECTION IN THE THIGH TO PREVENT HIM/HER FROM GETTING HEPATITIS B?</p> <p><i>Probe by indicating that the Hepatitis B vaccine is sometimes given at the same time as Polio and DPT vaccines.</i></p>	<p>Yes.....1</p> <p>No2</p> <p>DK.....8</p>	<p>2⇒IM16</p> <p>8⇒IM16</p>
<p>IM14. WAS THE FIRST HEPATITIS B VACCINE RECEIVED WITHIN 24 HOURS AFTER BIRTH?</p>	<p>Yes.....1</p> <p>No2</p> <p>DK.....8</p>	
<p>IM15. HOW MANY TIMES WAS THE HEPATITIS B RECEIVED?</p>	<p>Number of times _</p>	
<p>IM16. HAS (<i>name</i>) EVER RECEIVED A MEASLES INJECTION (OR AN MMR OR MR) – THAT IS, A SHOT IN THE ARM AT THE AGE OF 9 MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING MEASLES?</p>	<p>Yes.....1</p> <p>No2</p> <p>DK.....8</p>	
<p>IM16A. HAS (<i>name</i>) EVER RECEIVED A JE VACCINE TO PREVENT HIM/HER FROM GETTING JAPANESE ENCEPHALITIS – THAT IS, A SHOT ON THE UPPER ARM OR THIGH?</p>	<p>Yes.....1</p> <p>No2</p> <p>DK.....8</p>	<p>2⇒IM19</p> <p>8⇒IM19</p>
<p>IM16B. HOW MANY TIMES WAS A JE VACCINE RECEIVED?</p>	<p>Number of times _</p>	
<p>IM19. PLEASE TELL ME IF (<i>name</i>) HAS PARTICIPATED IN ANY OF THE FOLLOWING CAMPAIGNS:</p> <p>[A] MR CAMPAIGN FOR CHILDREN AGE 2.5 TO 7 YEARS OLD (1 MAY – 30 SEPTEMBER 2015)</p> <p>[B] POLIO CAMPAIGN FOR SPECIAL TARGET GROUP (1 JANUARY – 30 APRIL 2015)</p>	<p style="text-align: right;">Y N DK</p> <p>MR campaign..... 1 2 8</p> <p>Polio campaign 1 2 8</p>	

CARE OF ILLNESS		CA
<p>CA1. IN THE LAST TWO WEEKS, HAS (<i>name</i>) HAD DIARRHOEA?</p> <p>BY DIARRHEA I MEAN THE CHIDL HAD AT LEAST THREE STOOLS A DAY, OR STOOLS WITH MUCUS AND BLOOD AT LEAST ONE TIME, OR LIQUID STOOLS MORE THAN ONE TIME PER DAY?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 8</p>	<p>2⇒CA6A</p> <p>8⇒ CA6A</p>
<p>CA2. I WOULD LIKE TO KNOW HOW MUCH (<i>name</i>) WAS GIVEN TO DRINK DURING THE DIARRHOEA (INCLUDING BREASTMILK).</p> <p>DURING THE TIME (<i>name</i>) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO DRINK, ABOUT THE SAME AMOUNT, OR MORE THAN USUAL?</p> <p><i>If 'less', probe:</i></p> <p>WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO DRINK, OR SOMEWHAT LESS?</p>	<p>Much less 1</p> <p>Somewhat less 2</p> <p>About the same 3</p> <p>More 4</p> <p>Nothing to drink 5</p> <p>DK..... 8</p>	
<p>CA3. DURING THE TIME (<i>name</i>) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO EAT, ABOUT THE SAME AMOUNT, MORE THAN USUAL, OR NOTHING TO EAT?</p> <p><i>If 'less', probe:</i></p> <p>WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO EAT OR SOMEWHAT LESS?</p>	<p>Much less 1</p> <p>Somewhat less 2</p> <p>About the same 3</p> <p>More 4</p> <p>Stopped food 5</p> <p>Never gave food 6</p> <p>DK..... 8</p>	
<p>CA3A. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE DIARRHOEA FROM ANY SOURCE?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 8</p>	<p>2⇒CA4</p> <p>8⇒CA4</p>

<p>CA3B. FROM WHERE DID YOU SEEK ADVICE OR TREATMENT?</p> <p><i>Probe:</i> ANYWHERE ELSE?</p> <p>Circle all providers mentioned, but do NOT prompt with any suggestions.</p> <p>Probe to identify each type of source.</p> <p>If unable to determine if public or private sector, write the name of the place.</p> <p>_____</p> <p>(Name of place)</p>	<p>Public sector</p> <p>Government hospital..... A</p> <p>Government health centre B</p> <p>Community health worker D</p> <p>Mobile / Outreach clinic E</p> <p>Other public (<i>specify</i>) _____ H</p> <p>Private medical sector</p> <p>Private hospital / clinic I</p> <p>Private physician..... J</p> <p>Private pharmacy K</p> <p>Mobile clinic L</p> <p>Other private medical (<i>specify</i>) _____ O</p> <p>Other source</p> <p>Relative / Friend..... P</p> <p>Shop Q</p> <p>Traditional practitioner R</p> <p>Other (<i>specify</i>) _____ X</p>	
<p>CA4. DURING THE TIME (<i>name</i>) HAD DIARRHOEA, WAS (<i>name</i>) GIVEN TO DRINK A FLUID MADE FROM ORS PACKET?</p>	<p>Yes.....1</p> <p>No2</p> <p>DK.....8</p>	<p>2⇒CA4F</p> <p>8⇒CA4F</p>
<p>CA4B. WHERE DID YOU GET THE ORS?</p> <p><i>Probe to identify the type of source.</i></p> <p><i>If unable to determine whether public or private, write the name of the place.</i></p> <p>_____</p> <p>(Name of place)</p>	<p>Public sector</p> <p>Government hospital.....11</p> <p>Government health centre12</p> <p>Community health worker14</p> <p>Mobile / Outreach clinic15</p> <p>Other public (<i>specify</i>) _____16</p> <p>Private medical sector</p> <p>Private hospital / clinic21</p> <p>Private physician.....22</p> <p>Private pharmacy23</p> <p>Mobile clinic24</p> <p>Other private medical (<i>specify</i>) _____26</p> <p>Other source</p> <p>Relative / Friend.....31</p> <p>Shop32</p> <p>Traditional practitioner33</p> <p>Already had at home40</p> <p>Other (<i>specify</i>) _____96</p>	
<p>CA4F. DURING THE TIME (<i>name</i>) HAD DIARRHOEA, WAS (<i>name</i>) GIVEN TO DRINK HEALTH PERSONNEL RECOMMENDED HOMEMADE FLUID?</p>	<p>Yes.....1</p> <p>No2</p> <p>DK.....8</p>	
<p>CA5. WAS ANYTHING (ELSE) GIVEN TO TREAT THE DIARRHOEA?</p>	<p>Yes.....1</p> <p>No2</p> <p>DK.....8</p>	<p>2⇒CA6A</p> <p>8⇒CA6A</p>

<p>CA6. WHAT (ELSE) WAS GIVEN TO TREAT THE DIARRHOEA?</p> <p><i>Probe:</i> ANYTHING ELSE?</p> <p><i>Record all treatments given. Write brand name(s) of all medicines mentioned.</i></p> <p>_____ (Name)</p>	<p>Pill or Syrup Antibiotic A Antimotility B Other pill or syrup (Not antibiotic, antimotility or zinc) G Unknown pill or syrup H</p> <p>Injection Antibiotic L Non-antibiotic M Unknown injection N</p> <p>Intravenous O</p> <p>Home remedy / Herbal medicine Q</p> <p>Other (<i>specify</i>) _____ X</p>	
<p>CA6A. IN THE LAST TWO WEEKS, HAS (<i>name</i>) BEEN ILL WITH A FEVER AT ANY TIME?</p>	<p>Yes 1 No 2 DK 8</p>	
<p>CA7. AT ANY TIME IN THE LAST TWO WEEKS, HAS (<i>name</i>) HAD AN ILLNESS WITH A COUGH?</p>	<p>Yes 1 No 2 DK 8</p>	<p>2⇒CA9A 8⇒CA9A</p>
<p>CA8. WHEN (<i>name</i>) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, RAPID BREATHS OR HAVE DIFFICULTY BREATHING?</p>	<p>Yes 1 No 2 DK 8</p>	<p>2⇒CA10 8⇒CA10</p>
<p>CA9. WAS THE FAST OR DIFFICULT BREATHING DUE TO A PROBLEM IN THE CHEST OR A BLOCKED OR RUNNY NOSE?</p>	<p>Problem in chest only 1 Blocked or runny nose only 2 Both 3 Other (<i>specify</i>) 6 DK 8</p>	<p>1⇒CA10 2⇒CA10 3⇒CA10 6⇒CA10 8⇒CA10</p>
<p>CA9A. <i>Check CA6A: Had fever?</i></p> <p><input type="checkbox"/> <i>Child had fever ⇒ Continue with CA10.</i></p> <p><input type="checkbox"/> <i>Child did not have fever ⇒ Go to CA14.</i></p>		
<p>CA10. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?</p>	<p>Yes 1 No 2 DK 8</p>	<p>2⇒CA12 8⇒CA12</p>

<p>CA11. FROM WHERE DID YOU SEEK ADVICE OR TREATMENT?</p> <p><i>Probe:</i> ANYWHERE ELSE?</p> <p>Circle all providers mentioned, but do NOT prompt with any suggestions.</p> <p>Probe to identify each type of source.</p> <p>If unable to determine if public or private sector, write the name of the place.</p> <p>_____</p> <p>(Name of place)</p>	<p>Public sector</p> <p>Government hospital..... A</p> <p>Government health centre B</p> <p>Community health worker D</p> <p>Mobile / Outreach clinic E</p> <p>Other public (<i>specify</i>) _____ H</p> <p>Private medical sector</p> <p>Private hospital / clinic I</p> <p>Private physician..... J</p> <p>Private pharmacy K</p> <p>Mobile clinic L</p> <p>Other private medical (<i>specify</i>) _____ O</p> <p>Other source</p> <p>Relative / Friend..... P</p> <p>Shop Q</p> <p>Traditional practitioner R</p> <p>Other (<i>specify</i>) _____ X</p>	
<p>CA12. AT ANY TIME DURING THE ILLNESS, WAS (<i>name</i>) GIVEN ANY MEDICINE FOR THE ILLNESS?</p>	<p>Yes.....1</p> <p>No2</p> <p>DK.....8</p>	<p>2⇒CA14</p> <p>8⇒CA14</p>

<p>CA13. WHAT MEDICINE WAS (<i>name</i>) GIVEN?</p> <p><i>Probe:</i> ANY OTHER MEDICINE?</p> <p>Circle all medicines given. Write brand name(s) of all medicines mentioned.</p> <p>_____</p> <p>(Names of medicines)</p>	<p>Antibiotics:</p> <p>Pill / SyrupI</p> <p>Injection.....J</p> <p>Other medications:</p> <p>Paracetamol..... P</p> <p>AspirinQ</p> <p>Ibuprofen..... R</p> <p>Other (<i>specify</i>) _____ X</p> <p>DK..... Z</p>	
<p>CA13A. Check CA13: Antibiotic mentioned (codes I or J)?</p> <p><input type="checkbox"/> Yes ⇒ Continue with CA13B.</p> <p><input type="checkbox"/> No ⇒ Go to CA14.</p>		
<p>CA13B. WHERE DID YOU GET THE (<i>name of medicine from CA13</i>)?</p> <p><i>Probe to identify the type of source.</i></p> <p><i>If unable to determine whether public or private, write the name of the place.</i></p> <p>_____</p> <p>(Name of place)</p>	<p>Public sector</p> <p>Government hospital11</p> <p>Government health centre12</p> <p>Community health worker14</p> <p>Mobile / Outreach clinic15</p> <p>Other public (<i>specify</i>) _____ 16</p> <p>Private medical sector</p> <p>Private hospital / clinic21</p> <p>Private physician.....22</p> <p>Private pharmacy23</p> <p>Mobile clinic24</p> <p>Other private medical (<i>specify</i>) _____ 26</p> <p>Other source</p> <p>Relative / Friend.....31</p> <p>Shop32</p> <p>Traditional practitioner33</p> <p>Already had at home40</p> <p>Other (<i>specify</i>) _____ 96</p>	
<p>CA14. Check AG2: Age of child.</p> <p><input type="checkbox"/> Child age 0, 1 or 2 ⇒ Continue with CA15.</p> <p><input type="checkbox"/> Child age 3 or 4 ⇒ Go to UF13.</p>		

CA15. THE LAST TIME <i>(name)</i> 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
	Buried	05
	Left in the open	06
	Used disposable diapers and thrown into garbage.....	07
	Thrown into garbage but did not use disposable diapers.....	08
	Other (<i>specify</i>) _____	96
	DK.....	98

UF13. <i>Record the time.</i>	Hour and minutes ____ : ____	
--------------------------------------	------------------------------------	--

UF14. *Check List of Household Members, columns HL7B and HL15.*
Is the respondent the mother or caretaker of another child age 0-4 living in this household?

Yes ⇒ *Indicate to the respondent that you will need to measure the weight and height of the child later. Go to the next QUESTIONNAIRE FOR CHILDREN UNDER FIVE to be administered to the same respondent.*

No ⇒ *End the interview with this respondent by thanking her/him for her/his cooperation and tell her/him that you will need to measure the weight and height of the child before you leave the household.*

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

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

ANTHROPOMETRY
AN

After questionnaires for all children are complete, the measurer weighs and measures each child. Record weight and length/height below, taking care to record the measurements on the correct questionnaire for each child. Check the child's name and line number in the List of Household Members before recording measurements.

AN1. <i>Measurer's name and number:</i>	Name _____	
AN2. <i>Result of height / length and weight measurement:</i>	Either or both measured1	
	Child not present.....2	2⇒AN6
	Child or mother/caretaker refused3	3⇒AN6
	Other (<i>specify</i>) _____ 6	6⇒AN6
AN3. <i>Child's weight:</i>	Kilograms (kg).....	
	Weight not measured..... 99.9	
AN3A. <i>Was the child undressed to the minimum?</i>		
<input type="checkbox"/> Yes. <input type="checkbox"/> No, the child could not be undressed to the minimum.		
AN3B. <i>Check age of child in AG2:</i>		
<input type="checkbox"/> Child under 2 years old ⇒ Measure length (lying down). <input type="checkbox"/> Child age 2 or more years ⇒ Measure height (standing up).		
AN4. <i>Child's length or height:</i>	Length / Height (cm)	
	Length / Height not measured 999.9	⇒ AN5
AN4A. <i>How was the child actually measured? Lying down or standing up?</i>	Lying down.....1	
	Standing up.....2	
AN5. WAS (<i>name</i>) WEIGHED AT BIRTH?	Yes.....1	2⇒ AN6
	No2	
	DK.....8	8⇒ AN6
AN5A. HOW MUCH DID (<i>name</i>) WEIGH? <i>If a card is available, record weight from card.</i>	From card 1 (kg) _ . _	
	From recall 2 (kg) _ . _	
	DK..... 99998	

AN6. Is there another child in the household who is eligible for measurement?

- Yes ⇒ Record measurements for next child.
- No ⇒ Check if there are any other individual questionnaires to be completed in the household. If yes, then proceed interviewing until all eligible are interviewed.

Interviewer's Observations

Supervisor's Observations

Measurer's Observations



QUESTIONNAIRE FOR INDIVIDUAL MEN
 SITUATION OF WOMEN AND CHILDREN IN THAILAND, 2558
 Thailand

MAN'S INFORMATION PANEL	MWM
<p><i>This questionnaire is to be administered to all men age 15 through 49 (see List of Household Members, column HL7A).</i></p> <p><i>A separate questionnaire should be used for each eligible man.</i></p>	
MWM1. Cluster number: _____	MWM2. Household number: _____
MWM3. Man's name: Name _____	MWM4. Man's line number: _____
MWM5. Interviewer's name and number: Name _____	MWM6. Day / Month / Year of interview: _____ / _____ / 201____

<p><i>Repeat greeting if not already read to this man:</i></p> <p>WE ARE FROM NATIONAL STATISTICAL OFFICE. WE ARE CONDUCTING A SURVEY ABOUT THE SITUATION OF CHILDREN, FAMILIES AND HOUSEHOLDS. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 10 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>	<p><i>If greeting at the beginning of the household questionnaire has already been read to this man, then read the following:</i></p> <p>NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 10 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>
---	---

<p>MAY I START NOW?</p> <p><input type="checkbox"/> <i>Yes, permission is given ⇒ Go to MWM10 to record the time and then begin the interview.</i></p> <p><input type="checkbox"/> <i>No, permission is not given ⇒ Circle "03" in MWM7. Discuss this result with your supervisor.</i></p>

MWM7. Result of man's interview	Completed..... 01 Not at home 02 Refused..... 03 Partly completed 04 Incapacitated 05 Other (<i>specify</i>) _____ 96
--	--

MWM10. Record the time.	Hour and minutes ____ : ____	
--------------------------------	------------------------------------	--

MAN'S BACKGROUND		MWB
MWB1. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth Month ____ DK month98 Year ____ DK year9998	
MWB2. HOW OLD ARE YOU? <i>Probe:</i> HOW OLD WERE YOU AT YOUR LAST BIRTHDAY? <i>Compare and correct MWB1 and/or MWB2 if inconsistent.</i>	Age (in completed years)..... ____	
MWB3. HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL?	Yes.....1 No2	2⇒MWB7
MWB4. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Preschool.....00 Primary01 Secondary.....02 Associate / Commercial college degree03 Diploma.....04 Bachelor degree05 Master degree06 Doctoral degree07	00⇒MWB7
MWB5. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL? <i>If the first grade at this level is not completed, enter "00".</i>	Grade..... ____	

MWB6. Check MWB4:

Secondary through doctoral degree (MWB4 = 02 to 07) ⇒ Go to Next Module.

Primary (MWB4 = 01) ⇒ Continue with MWB7.

MWB7. 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 all1

Able to read only parts of sentence2

Able to read whole sentence3

No sentence in
required language _____ 4
(specify language)

Blind / visually impaired5

FERTILITY		MCM
<p>MCM1. NOW I WOULD LIKE TO ASK ABOUT ALL THE CHILDREN YOU HAVE HAD IN YOUR LIFE. I AM INTERESTED IN ALL OF THE CHILDREN THAT ARE BIOLOGICALLY YOURS, EVEN IF THEY ARE NOT LEGALLY YOURS OR DO NOT HAVE YOUR LAST NAME.</p> <p>HAVE YOU EVER FATHERED ANY CHILDREN WITH ANY WOMAN?</p>	Yes..... 1 No 2 DK..... 8	2⇒MCM8 8⇒MCM8
<p>MCM3. HOW OLD WERE YOU WHEN YOUR FIRST CHILD WAS BORN?</p>	Age in years __ __	
<p>MCM4. DO YOU HAVE ANY SONS OR DAUGHTERS THAT YOU HAVE FATHERED WHO ARE NOW LIVING WITH YOU?</p>	Yes..... 1 No 2	2⇒MCM6
<p>MCM5. HOW MANY SONS LIVE WITH YOU?</p> <p>HOW MANY DAUGHTERS LIVE WITH YOU?</p> <p><i>If none, record "00".</i></p>	Sons at home..... __ __ Daughters at home __ __	
<p>MCM6. DO YOU HAVE ANY SONS OR DAUGHTERS THAT YOU HAVE FATHERED WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?</p>	Yes..... 1 No 2	2⇒MCM8
<p>MCM7. HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU?</p> <p>HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU?</p> <p><i>If none, record '00'.</i></p>	Sons elsewhere __ __ Daughters elsewhere..... __ __	
<p>MCM8. HAVE YOU EVER FATHERED A SON OR DAUGHTER WHO WAS BORN ALIVE BUT LATER DIED?</p> <p><i>If "No" probe by asking: I MEAN, 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?</i></p>	Yes..... 1 No 2	2⇒MCM10
<p>MCM9. HOW MANY BOYS HAVE DIED?</p> <p>HOW MANY GIRLS HAVE DIED?</p> <p><i>If none, record '00'.</i></p>	Boys dead..... __ __ Girls dead __ __	
<p>MCM10. Sum answers to MCM5, MCM7, and MCM9.</p>	Sum..... __ __	

MCM11. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE FATHERED IN TOTAL (*total number in MCM10*) LIVE BIRTHS DURING YOUR LIFE. IS THIS CORRECT?

Yes. Check below:

No live births ⇒ Go to Next Module.

One or more live births ⇒ Continue with MCM11A.

No ⇒ Check responses to MCM1-MCM10 and make corrections as necessary.

<p>MCM11A. DID ALL THE CHILDREN YOU HAVE FATHERED HAVE THE SAME BIOLOGICAL MOTHER?</p>	<p>Yes..... 1 No 2</p>	<p>1⇒MCM12</p>
<p>MCM11B. IN ALL, HOW MANY WOMEN HAVE YOU FATHERED CHILDREN WITH?</p>	<p>Number of women __ __</p>	
<p>MCM12. OF THESE (<i>total number in MCM10</i>) BIRTHS YOU HAVE FATHERED, WHEN WAS THE LAST ONE BORN (EVEN IF HE OR SHE HAS DIED)? Month and year must be recorded.</p>	<p>Date of last birth Month __ __ Year __ __ __ __</p>	

ATTITUDES TOWARD DOMESTIC VIOLENCE

MDV

MDV1. 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 with him	1	2	8
[D] IF SHE REFUSES TO HAVE SEX WITH HIM?	Refuses sex	1	2	8
[E] IF SHE BURNS THE FOOD?	Burns food	1	2	8

MARRIAGE/UNION		MMA
MMA1. ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A WOMAN AS IF MARRIED?	Yes, currently married 1 Yes, living with a woman 2 No, not in union 3	3⇒MMA5
MMA3. DO YOU HAVE OTHER WIVES OR DO YOU LIVE WITH OTHER WOMEN AS IF MARRIED?	Yes (More than one) 1 No (Only one) 2	2⇒MMA7
MMA4. HOW MANY OTHER WIVES OR LIVE-IN PARTNERS DO YOU HAVE?	Number..... _ _	⇒MMA8B
MMA5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A WOMAN AS IF MARRIED?	Yes, formerly married 1 Yes, formerly lived with a woman 2 No 3	3⇒Next Module
MMA6. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed 1 Divorced 2 Separated 3	
MMA7. HAVE YOU BEEN MARRIED OR LIVED WITH A WOMAN ONLY ONCE OR MORE THAN ONCE?	Only once 1 More than once 2	1 ⇒MMA8A 2 ⇒MMA8B
MMA8A. IN WHAT MONTH AND YEAR DID YOU MARRY OR START LIVING WITH A WOMAN AS IF MARRIED?	Date of (first) marriage Month _ _ DK month 98	
MMA8B. IN WHAT MONTH AND YEAR DID YOU <u>FIRST</u> MARRY OR START LIVING WITH A WOMAN AS IF MARRIED?	Year _ _ _ _ DK year 9998	⇒Next Module
MMA9. HOW OLD WERE YOU WHEN YOU FIRST STARTED LIVING WITH YOUR (FIRST) WIFE/PARTNER?	Age in years _ _	

HIV/AIDS

MHA

<p>MHA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE.</p> <p>HAVE YOU EVER HEARD OF AN ILLNESS CALLED AIDS?</p>	<p>Yes 1</p> <p>No 2</p>	<p>2⇒ MHA28</p>																
<p>MHA2. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY HAVING JUST ONE UNINFECTED SEX PARTNER WHO HAS NO OTHER SEX PARTNERS?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK 8</p>																	
<p>MHA3. CAN PEOPLE GET THE AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK 8</p>																	
<p>MHA4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK 8</p>																	
<p>MHA5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK 8</p>																	
<p>MHA6. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS THE AIDS VIRUS?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK 8</p>																	
<p>MHA7. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK 8</p>																	
<p>MHA8. CAN THE VIRUS THAT CAUSES AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY:</p> <p>[A] DURING PREGNANCY?</p> <p>[B] DURING DELIVERY?</p> <p>[C] BY BREASTFEEDING?</p>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 60%;"></th> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 10%; text-align: center;">No</th> <th style="width: 10%; text-align: center;">DK</th> </tr> </thead> <tbody> <tr> <td>During pregnancy.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>During delivery.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>By breastfeeding.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>		Yes	No	DK	During pregnancy.....	1	2	8	During delivery.....	1	2	8	By breastfeeding.....	1	2	8	
	Yes	No	DK															
During pregnancy.....	1	2	8															
During delivery.....	1	2	8															
By breastfeeding.....	1	2	8															

MHA9. 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	
MHA10. 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	
MHA11. 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	
MHA12. 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	
MHA12A. DO YOU THINK CHILDREN LIVING WITH HIV SHOULD BE ABLE TO ATTEND SCHOOL WITH CHILDREN WHO ARE HIV NEGATIVE?	Yes 1 No 2 DK / Not sure / Depends 8	
MHA24. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes 1 No 2	2⇒MHA27
MHA25. 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	
MHA26. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes 1 No 2 DK 8	1⇒MHA28 2⇒MHA28 8⇒MHA28
MHA27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE AIDS VIRUS?	Yes 1 No 2	

MHA28. CHECK AGE IS BETWEEN 15-24 (MWB2=15-24) AND EVER ATTENDED SCHOOL (MWB3=1) <input type="checkbox"/> YES => CONTINUE WITH MHA29 <input type="checkbox"/> NO => SKIP TO MWM11		
MHA29. "DID YOU STUDY SEXUALITY EDUCATION IN SCHOOL?" "SEXUALITY EDUCATION ON TOPICS SUCH AS BIRTH CONTROL, SAFE SEX, TEEN PREGNANCY, REPRODUCTIVE TRACT INFECTIONS AND GOOD HEALTH"	Yes 1 No 2	2⇒MWM11
MHA30. "WHAT LEVEL DID YOU FIRST HAVE SEXUALITY EDUCATION?"	Primary..... 1 Lower Secondary 2 Upper Secondary 3 Vocational 4 Diploma 5 DK/Unsure 8	

MWM11. Record the time.	Hour and minutes ____ : ____	
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MWM12. Check List of Household Members, columns HL7B and HL15:
Is the respondent the caretaker of any child age 0-4 living in this household?

Yes ⇒ Proceed to complete the result of man's interview (MWM7) on the cover page and then 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 him for his cooperation and proceed to complete the result of man's interview (MWM7) on the cover page.

Interviewer's Observations

Supervisor's Observations

Appendix F. List of Definitions

1) Collective Household

Any household comprising one person or more, who live together in a house or residence and take part in providing or consuming food and necessities for living. These individuals may or may not be related.

2) Age

Age in years as of the individual's last birthday before the interview

3) Education

Learning that has taken place in the formal education system at all levels: pre-school, primary, lower secondary and upper secondary; academic and vocational; university, which includes open universities such as Ramkhamhaeng University; and distant learning universities such as Sukhothai Thammathirat University, where teaching takes place through various media and class attendance is not required. These educational facilities are managed either by the Government or the private sector. On completion of the programme, graduates of formal education receive certificates, diplomas or degrees, which they can use in application for further study at any relevant higher level provided in the system. Formal education excludes short-term vocational training programmes, such as hairdressing, dressmaking, driving, radio repairing, typing, and so on, which do not involve learning of any academic subjects. However, a non-formal education programme whose degree is equivalent to formal education is included.

4) No Education (or None)

Never attended school or received any education.

5) Levels of Education

Education is classified into four levels as follows:

5.1 Pre-school Level – child education programmes to prepare children for school before they start primary school, which is compulsory. Programmes include two to three years of kindergarten or one year of pre-school.

5.2 Primary Level – Compulsory basic education of knowledge and skills over six years, from Prathom (Por.) 1-6 (formerly Por.1-7 or Por. 1-4 plus Mattayom (Mor.) 1-3).

5.3 Secondary Level – Education continued from primary that is divided into two levels of three years each: lower and upper secondary.

5.3.1 Lower Secondary Level – currently three years, Mor. 1-3 (formerly Mattayomsuksa (MorSor.) 1-3, or Mor. 4-6), including other educational programmes equivalent to lower secondary level, such as the three-year basic classical dance programme. Lower secondary education is geared towards developing students' ethics, knowledge and abilities. It allows students to explore their needs, areas of interest and aptitudes.

5.3.2 Upper Secondary Level – Divided into two fields:

- a) Academic Field – currently three years, Mor. 4-6 (formerly MorSor. 4-5, or Mor. 7-8), including other educational programmes equivalent to upper secondary level in academic fields such as non-formal education (KorSorNor.) Level 5, or two years of Military Cadet School.
- b) Formal Vocational and Technical Field – A three-year educational programme leading to a lower certificate of vocational education (PorWorChor.) and a three-year intermediate Thai classical dance programme, including other educational programmes equivalent to the upper secondary level of formal vocational education, such as the military machinist programme (three years), railway engineering (five years), artisan skills (two years at Phradabot Foundation), and a former certificate of education (PorKorSor.) programme.

5.4 Higher Level – Academic education in colleges or universities leading to diplomas and degrees (bachelor, master and philosophy/doctoral) and special programme education leading to certificates from a university, college, military academy, police academy, or other institutions of higher-level education leading to a diploma or vocational associate degree (PorWorSor.), technical vocational certificate (PorWorThor.), and higher certificate of education (PorKorSor. Soong), including the advance Thai classical dance programme.

Note: Educational programmes that are not comparable to any of the above mentioned formal education levels are considered Other Levels of Education.

6) Academic Year

A period of the academic calendar running from the first day of school until end-of-year examinations. For the MICS, it was from May 2015 to February 2016 for students of upper secondary level and below, and June 2015 to March 2016 for students of higher education.

7) Marriage

A commitment between a man and a woman living together as husband and wife, with or without legal registration.

8) Live birth

Live-born children regardless of the survival period, excluding step-children, adopted children and fetal deaths.

9) Contraception

A regimen of one or more actions, devices or medications followed in order to deliberately prevent or reduce the likelihood of a woman becoming pregnant. There are many contraceptive methods, including contraceptive pills, injections, implants, IUD (intrauterine device), condoms, female sterilization, male sterilization and safety period (calendar method).

10) Underweight

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

11) Stunting

Stunting is a reflection of chronic malnutrition obtained from comparisons of children's height-for-age with a standard deviation of reference. Children whose height-for-age is more than two standard deviations below the median of the reference population are considered short for their age and are classified as moderately or severely stunted. Stunting is a result of failure to receive adequate nutrition over a long period and recurrent or chronic illness.

12) Wasting

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

Children whose weight-for-height is more than two standard deviations above the median reference population are classified as moderately or severely overweight.

13) Exclusive Breastfeeding

Infants received only breast milk and vitamins, mineral supplements or medicine in the day prior to the interview.

14) Ministry of Health's Tetanus Immunization Coverage in Pregnant Women

- For pregnant women who have never received any tetanus vaccine, they should receive at least three doses. The first dose should be given at their first antenatal care visit. The second dose should be given one month after the first dose, and the third dose six months after the first dose. Later, one booster dose should be given every 10 years.

- For women who have already received one dose of tetanus vaccine, they should receive two more doses at zero and six-month intervals. If the women have already received two doses of the vaccine, they should receive one more dose at least six months after the second dose. Later, one booster dose should be given every 10 years.

15) Ministry of Health's Vaccination Schedule for Children Aged Under Five

Age	Vaccine Provision
Newborn	Vaccination against tuberculosis (BCG) Vaccination against hepatitis B (HEPB0)
2 months	Combined vaccination against diphtheria, pertussis, and tetanus, 1st dose (DPT1); and oral polio vaccine, 1st dose (OPV1) Vaccination against hepatitis B, 1st dose (HEPB1)

4 months	Combined vaccination against diphtheria, pertussis, and tetanus, 2nd dose (DPT2); and oral polio vaccine, 2nd dose (OPV2) Vaccination against hepatitis B, 2nd dose (HEPB2)
6 months	Combined vaccination against diphtheria, pertussis, and tetanus, 3rd dose (DPT3); and oral polio vaccine, 3rd dose (OPV3) Vaccination against hepatitis B, 3rd dose (HEPB3)
9 months	Vaccination against measles, mumps and rubella or German measles, 1st dose (MMR1)
1.5 years	Combined vaccination against diphtheria, pertussis, and tetanus, 4th dose (DPT4); and oral polio vaccine, 4th dose (OPV4) Vaccination against Japanese encephalitis, 1st dose (JE1)
1 month after JE1	Vaccination against Japanese encephalitis, 2nd dose (JE2)
2.5 years	Vaccination against Japanese encephalitis, 3rd dose (JE3) Vaccination against measles, mumps and rubella or German measles, 2nd dose (MMR2) (since 2015, according to the new schedule)
4 years	Combined vaccination against diphtheria, pertussis, and tetanus, 5th dose (DPT5); and oral polio vaccine, 5th dose (OPV5)

16) Flush/Pour Flush Toilets Connected to Piped Sewer System

Flush/pour flush toilets with treatment system and treated water overflowing to sewage system without having to empty the content. A piped sewer system is a system of sewer pipes, also called sewerage, that is designed to collect human excreta (faeces and urine) and wastewater and remove them from the household environment. Sewerage systems consist of facilities for collection, pumping, treating and disposing of human excreta and wastewater.

17) Flush/Pour Flush Toilets Connected to Septic Tank

Flush/pour flush toilets that keep all excreta disposal in a septic tank without overflow system for water or solid waste. When the tank is full, it needs to be emptied by suction truck. The tank may be located inside or outside the house. This type of toilet is mostly found in houses.

18) Flush/Pour Flush Toilets Connected to Pit Latrines

A flush/pour flush to pit latrine refers to a system that flushes excreta to a hole in the ground and has a water seal.

19) Piped Water

Piped water is defined as water service connected by pipe, with or without sterilization

20) Wealth Index Quintiles

Important indicators for measurement of factors related to accumulated household living standards

- Ownership of certain types of household assets, such as refrigerator, television, car, truck, bicycle, motorcycle, and so on.
- Materials used in household construction, such as wood, bricks, rocks, cement, and so on.
- Having electricity in the household
- Access to drinking water and water for general usage
- Improved sanitation facilities

Wealth index quintiles are calculated by a statistical method called Analysis of Principal Factors, where households are grouped together in a continuum of comparative wealth. The values are particularly valuable for countries that lack reliable data on incomes and expenses, which were formerly used for measurement of wealth.

Wealth index quintiles can be used to analyse economic inequalities in access to important health services and outcomes, such as childhood illness and fatality. In addition, the wealth index quintiles can enable the government to assess whether poor population groups have access to public health services, immunization, education and other important programmes.

Wealth index quintiles enable the analysis of multi-variable data from population and health surveys to be more comprehensive and to identify the extent of the impact of a household's economic status on health outcomes.

Caution: The Thailand MICS wealth index quintiles can be used for comparisons with international MICS results only and not with any other surveys since they were created specifically for the analysis of MICS data only.

Thailand MICS
Multiple Indicator Cluster Survey
2016