

# *Monitoring the Situation of Children and Women*

Thailand  
Multiple Indicator Cluster Survey  
December 2005 – February 2006

FINAL REPORT



National Statistical Office  
Ministry of Information and  
Communication Technology

unicef 

**Photo by :**

© UNICEF-Thailand/2006/Mohan

**THAILAND**  
**Multiple Indicator Cluster Survey**  
**December 2005 – February 2006**

Thailand National Statistical Office

UNICEF  
United Nations Children's Fund

In collaboration with:  
Ministry of Social Development & Human Security  
Ministry of Education  
Ministry of Public Health

## Contributors to the report:

### Consultant

**Mr. Sue Lo-Utai**

**Ms. Jirawan Boonperm**

### Project Staff

Ms. Porntip Sriwatcharin

Ms. Srisamai Sapyaprapa

Ms. Oranuch Hutajata

Ms. Arpaporn Amonthum

Ms. Pannee Pattanapradit

Mr. Komin Nimnuan

Mr. Apichart Thunyahan

The Thailand Multiple Indicator Cluster Survey (MICS) was carried by the National Statistical Office in collaboration with the Ministry of Social Development & Human Security, the Ministry of Education and the Ministry of Public Health. Financial and technical support was provided by the United Nations Children's Fund (UNICEF) and the United Nations Development Programme (UNDP). The United Nations Educational, Scientific and Cultural Organisation (UNESCO) provided technical support for the contents of the survey.

The survey has been conducted as part of the third round of MICS surveys (MICS3), carried out around the world in more than 50 countries, in 2005-2006, following the first two rounds of MICS surveys that were conducted in 1995 and the year 2000. Survey tools are based on the models and standards developed by the global MICS project, designed to collect information on the situation of children and women in countries around the world. Additional information on the global MICS project may be obtained from [www.childinfo.org](http://www.childinfo.org).

### Suggested citation:

Thailand National Statistical Office. 2006. Thailand Multiple Indicator Cluster Survey December 2005- February 2006, Final Report. Bangkok, Thailand: National Statistical Office.

# Acknowledgements

The Thailand Multiple Indicator Cluster Survey (MICS) December 2005 – February 2006 was developed, for the first time, to collect data on situations of all children in Thailand to be used as tools in monitoring and evaluation of child development in Thailand. As also indicated in the Thailand Millennium Development Goals Report (2004), the quality and availability of disaggregated data on the situation of children in Thailand was limited. Moreover, data were obtained from various sources using different methods of collection and definitions. Finally, the results from the Thailand MICS will provide reliable and up to date information on children in Thailand that can be studied and compared internationally. This project was implemented by the National Statistical Office (NSO) in cooperation with the Ministry of Social Development and Human Security, Ministry of Education and Ministry of Public Health as well as other government agencies whom all contributed significantly to the implementation process. Members of the steering committee for the Thailand MICS included: Advisory Board and Technical committee

The National Statistical Office would also like to thank UNICEF Thailand (Bastiaan van't Hoff, Prasert Tepanart, Chayanit Wangdee, Temika Satayawiboon, Sunee Leenothai (MICS consultant)) for funding the survey and for providing technical support to data collection and analysis of the survey's results as well as for the publication of national and provincial reports. The Office would also like to thank the UNICEF Headquarters in New York for providing knowledge and advice in data processing and a model for report preparation. Moreover, the United Nations Development Programme (UNDP) provided additional funding for the analysis and publication of the survey. In addition, the Office would like to thank UNESCO and other United Nations agencies for providing technical advice in the MICS indicators that fit well within the Thai context. It is expected that this situation survey will pave ways for periodically and continuously monitoring and assessing the situation of children living in Thailand.

National Statistical Office  
Ministry of Information Technology and Communications



*Photo by : UNICEF-Thailand/2006/Few*

# TABLE OF CONTENTS

Acknowledgements	
Table of Contents .....	i
List of Tables .....	iii
List of Figures .....	v
List of Abbreviations .....	vi
Summary Table of Findings .....	vii
Executive Summary .....	xi
<b>1. Introduction</b> .....	<b>1</b>
1.1 Background .....	1
1.2 Mics in Thailand .....	2
1.3 Survey Objectives .....	3
<b>2. Sample and Survey Methodology</b> .....	<b>5</b>
2.1 Sample Plan .....	5
2.2 Sample Size .....	5
2.3 Questionnaires .....	6
2.4 Questionnaires Testing .....	7
2.5 Data Collection and Processing .....	8
2.5.1 Training For Field Staff .....	8
2.5.2 Data Collection .....	9
2.5.3 Data Processing .....	9
2.6 Post-Enumeration Survey .....	10
<b>3. Sample Coverage and the Characteristics of Households and Respondents</b> .....	<b>11</b>
3.1 Sample Coverage .....	11
3.2 Characteristics of Households .....	11
3.3 Characteristics of Respondents .....	13
<b>4. Results</b>	
<b>4.1 Nutrition</b> .....	<b>15</b>
4.1.1 Nutritional Status .....	15
4.1.2 Breastfeeding .....	17
4.1.3 Salt Iodization .....	21
4.1.4 Birth Weight .....	22
<b>4.2 Child Health</b> .....	<b>24</b>
4.2.1 Immunization Coverage .....	24
4.2.2 Tetanus Immunization .....	26
4.2.3 Oral Rehydration Treatment .....	27
4.2.4 Care Seeking and Antibiotic Treatment of Pneumonia .....	29
4.2.5 Solid Fuel Use .....	31

4.3	<b>Environment</b>	32
4.3.1	Drinking Water	32
4.3.2	Disposal of Excreta	34
4.3.3	Disposal of Children's Faeces	35
4.3.4	Living in Slum Housing	36
4.4	<b>Reproductive Health</b>	36
4.4.1	Contraception	36
4.4.2	Antenatal Care	37
4.4.3	Assistance at Birth	38
4.5	<b>Child Development</b>	39
4.6	<b>Education</b>	41
4.6.1	Pre-School Attendance and School Readiness	41
4.6.2	Primary and Secondary School Participation	42
4.6.3	Adult Literacy	45
4.7	<b>Child Protection</b>	45
4.7.1	Early Marriage	45
4.7.2	Child Disability	46
4.8	<b>HIV/AIDS Infection, Orphaned and Vulnerable Children</b>	47
4.8.1	Knowledge of HIV Transmission	47
4.8.2	Test For HIV	50
4.8.3	Orphans and Vulnerable Children	51
4.8.4	Orphans and Vulnerable Children School Attendance	52

List of References	53
--------------------	----

STATISTICAL TABLES	-1- to -62-
--------------------	-------------

Appendix A. Definition	(A1)
Appendix B. Sample Design	(A7)
Appendix C. Estimates of Sampling Errors	(A19)
Appendix D. Data Quality Tables	(A29)
Appendix E. MICS Indicators: Numerators and Denominators	(A43)
Appendix F. Questionnaires	(A49)
Appendix G. TABLES: Education of Children aged 6-11 Years and 12-17 Years	(A83)



## LIST OF TABLES

Table 1	Results of household and individual interviews .....	-1-
Table 2	Household age distribution by sex .....	-2-
Table 3	Household composition .....	-3-
Table 4	Women's background characteristics .....	-4-
Table 5	Children's background characteristics .....	-5-
Table 6	Child malnourishment .....	-6-
Table 7	Initial breastfeeding .....	-7-
Table 8	Breastfeeding .....	-8-
Table 9	Adequately fed infants .....	-9-
Table 10	Iodized salt consumption (which salt was tested) .....	-10-
Table 11	Iodized salt consumption (which salt was labtested) .....	-11-
Table 12	Low birth weight infants .....	-12-
Table 13	Vaccinations in first year of life .....	-13-
Table 13	Vaccinations in first year of life (continued) .....	-14-
Table 14	Vaccinations by background characteristics .....	-15-
Table 14	Vaccinations by background characteristics (continued) .....	-16-
Table 15	Neonatal tetanus protection .....	-17-
Table 16	Oral rehydration treatment .....	-18-
Table 17	Home management of diarrhoea .....	-19-
Table 18	Care seeking for suspected pneumonia .....	-20-
Table 19	Antibiotic treatment of pneumonia .....	-21-
Table 20	Knowledge of the two danger signs of pneumonia .....	-22-
Table 21	Solid fuel use .....	-23-
Table 22	Solid fuel use by type of stove or fire .....	-24-
Table 23	Use of improved water sources .....	-25-
Table 24	Household water treatment .....	-26-
Table 25	Time to source of water .....	-27-
Table 26	Person collecting water .....	-28-
Table 27	Use of sanitary means of excreta disposal .....	-29-
Table 28	Disposal of child's faeces .....	-30-
Table 29	Use of improved water sources and improved sanitation .....	-31-
Table 30	Slum housing .....	-32-
Table 31	Use of contraception .....	-33-
Table 32	Antenatal care provider .....	-34-
Table 33	Antenatal care .....	-35-
Table 34	Assistance during delivery .....	-36-
Table 35	Family support for learning .....	-37-
Table 36	Learning materials .....	-38-
Table 37	Children left alone or with other children .....	-39-
Table 38	Early childhood education .....	-40-
Table 39	Primary school entry .....	-41-

Table 40	Primary school net attendance ratio .....	-42-
Table 41	Secondary school net attendance ratio .....	-43-
Table 42	Secondary school age children attending primary school .....	-44-
Table 43	Children reaching grade 5 .....	-45-
Table 44	Primary school completion and transition to secondary education .....	-46-
Table 45	Education gender parity .....	-47-
Table 46	Adult literacy .....	-48-
Table 47	Early marriage and polygyny .....	-49-
Table 48	Spousal age difference .....	-50-
Table 49	Child disability .....	-51-
Table 50	Knowledge of preventing HIV transmission .....	-52-
Table 51	Identifying misconceptions about HIV/AIDS .....	-53-
Table 52	Comprehensive knowledge of HIV/AIDS transmission .....	-54-
Table 53	Knowledge of mother-to-child HIV transmission .....	-55-
Table 54	Attitudes toward people living with HIV/AIDS .....	-56-
Table 55	HIV testing and counselling coverage during antenatal care .....	-57-
Table 56	Children's living arrangements and orphanhood .....	-58-
Table 57	Prevalence of orphanhood and vulnerability among children .....	-59-
Table 58	School attendance of orphaned and vulnerable children .....	-60-
Table 59	Support for children orphaned and vulnerable .....	-61-
Table 60	Malnutrition among orphans and vulnerable children .....	-62-

## LIST OF FIGURES

Figure 1	Age and sex distribution of household population .....	12
Figure 2	Percentage of children under-5 who are undernourished .....	16
Figure 3	Percentage of mothers who started breastfeeding within one hour and within one day of birth .....	18
Figure 4	Infant feeding patterns by age: Percent distribution of children aged under 3 years by feeding pattern by age group .....	19
Figure 5	Percentage of households consuming adequately iodized salt .....	21
Figure 6	Percentage of infants weighing less than 2,500 grams at birth .....	23
Figure 7	Percentage of children aged 12-23 months who received the recommended vaccination by 12 months .....	24
Figure 8	Percentage of women with a live birth in the last 12 months who are protected against neonatal tetanus .....	25
Figure 9	Percentage of children aged 0-59 months with diarrhoea who received oral rehydration treatment .....	27
Figure 10	Percentage of children aged 0-59 months with diarrhoea who received ORT or increased fluids, AND continued feeding.....	27
Figure 11	Percentage distribution of household members by source of drinking water .....	31
Figure 12	Percent of women who have comprehensive knowledge of HIV/AIDS transmission .....	46

## LIST OF ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
BCG	Bacillus-Cereus-Geuerin (Tuberculosis)
DPT	Diphtheria Pertussis Tetanus
EPI	Expanded Programme on Immunization
HIV	Human Immunodeficiency Virus
IDD	Iodine Deficiency Disorders
ITN	Insecticide Treated Net
IUD	Intrauterine Device
LAM	Lactational Amenorrhea Method
MDG	Millennium Development Goals
NSO	National Statistical Office
MICS	Multiple Indicator Cluster Survey
MoH	Ministry of Health
NAR	Net Attendance Rate
ppm	Parts Per Million
SPSS	Statistical Package for Social Sciences
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children's Fund
WFFC	World Fit For Children
WHO	World Health Organization

## Summary Table of Findings

### Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Thailand, 2005-2006

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	Whole Kingdom	Central Region (Incl.BKK)	Northern Region	Northeastern Region	Southern Region
<b>NUTRITION</b>									
Nutritional status	6	4	Underweight prevalence	Percent	9.3	6.1	7.1	11.5	12.5
	7		Stunting prevalence	Percent	11.9	8.9	10.4	12.3	18.3
Breast-feeding	8		Wasting prevalence	Percent	4.1	3.9	3.9	3.8	5.4
	45		Timely initiation of breastfeeding	Percent	49.6	43.0	41.6	54.4	58.3
	15		Exclusive breastfeeding rate	Percent	5.4	2.4	10.9	6.0	5.2
	16		Continued breastfeeding rate at 20-23 months	Percent	18.7	18.5	12.3	15.0	34.3
	17		Timely complementary feeding rate	Percent	42.6	25.6	50.0	46.2	59.9
	18		Frequency of complementary feeding	Percent	34.8	19.8	45.9	38.3	46.4
	19		Adequately fed infants	Percent	20.9	11.5	30.7	23.0	25.6
Salt iodization	41		Iodized salt consumption	Percent	47.2	59.7	53.7	22.6	60.3
Low birth weight	9		Low birth weight infants	Percent	9.2	8.9	9.1	9.5	9.3
	10		Infants weighed at birth	Percent	98.7	99.5	98.0	98.4	98.5
<b>CHILD HEALTH</b>									
Immuni- zation	25	15	Tuberculosis immunization coverage	Percent	98.0	-	-	-	-
	26		Polio immunization coverage	Percent	91.5	-	-	-	-
	27		DPT immunization coverage	Percent	91.4	-	-	-	-
	28		Measles immunization coverage	Percent	91.4	-	-	-	-
	31		Fully immunized children	Percent	83.3	-	-	-	-
	29		Hepatitis B immunization coverage	Percent	85.7	-	-	-	-
Tetanus toxoid	32		Neonatal tetanus protection	Percent	89.2	88.0	90.7	89.0	90.4
Care of illness	33		Use of oral rehydration therapy (ORT)	Percent	68.3	64.5	63.1	78.1	55.9
	34		Home management of diarrhoea	Percent	3.8	2.4	4.9	2.9	7.3
	35		Received ORT or increased fluids, and continued feeding	Percent	46.4	44.8	44.6	50.8	40.4
	23		Care seeking for suspected pneumonia	Percent	84.0	83.5	84.5	84.6	81.3
	22		Antibiotic treatment of suspected pneumonia	Percent	64.8	70.1	54.7	69.3	58.1
Solid fuel use	24	29	Solid fuels	Percent	36.9	9.1	51.5	66.6	9.0

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	Whole Kingdom	Central Region (Incl.BKK)	Northern Region	Northeastern Region	Southern Region
<b>ENVIRONMENT</b>									
Water and Sanitation	11	30	Use of improved drinking water sources	Percent	94.0	98.1	95.0	94.4	81.5
	13		Water treatment	Percent	27.4	38.6	25.4	16.2	29.3
	12	31	Use of improved sanitation facilities	Percent	99.2	99.8	99.6	99.5	96.6
	14		Disposal of child's faeces	Percent	64.6	63.3	71.4	68.5	51.8
	95	32	Slum household	Percent	9.9	-	-	-	-
<b>REPRODUCTIVE HEALTH</b>									
Contraception and newborn health	21	19c	Contraceptive prevalence	Percent	71.5	69.5	75.7	75.8	59.9
	20		Antenatal care	Percent	97.8	97.8	98.2	98.9	95.3
	44		Content of antenatal care	Percent	98.8	98.5	98.7	99.2	98.7
	4	17	Skilled attendant at delivery	Percent	97.3	99.4	94.6	98.6	92.8
	5		Institutional deliveries	Percent	96.7	99.3	94.1	97.9	92.0
<b>CHILD DEVELOPMENT</b>									
Child development	46		Support for learning	Percent	78.6	78.0	79.1	78.0	81.0
	47		Father's support for learning	Percent	57.5	65.5	57.5	43.6	74.2
	48		Support for learning: children's books	Percent	42.6	52.0	40.0	37.4	39.0
	49		Support for learning: non-children's books	Percent	68.3	68.8	68.6	68.9	65.8
	50		Support for learning: materials for play	Percent	31.1	28.3	29.0	32.6	34.9
	51		Non-adult care	Percent	13.2	9.9	15.2	15.9	11.4
<b>EDUCATION</b>									
Education	52		Pre-school attendance	Percent	60.7	58.8	78.3	57.8	54.3
	53		School readiness	Percent	99.4	99.6	97.8	100.0	100.0
	54		Net intake rate in primary education	Percent	69.6	63.5	61.0	75.8	75.1
	55	6	Net primary school attendance rate	Percent	97.9	97.8	97.5	98.3	97.5
	56		Net secondary school attendance rate	Percent	79.8	76.2	82.4	84.5	71.5
	57	7	Children reaching grade five	Percent	98.9	98.5	98.3	99.3	99.2
	58		Transition rate to secondary school	Percent	97.2	97.3	98.2	97.6	94.9
	59	7b	Primary completion rate	Percent	86.8	84.5	84.7	92.6	79.5
	61	9	Gender parity index						
			primary school	Ratio	1.0	1.0	1.0	1.0	1.0
		secondary school	Ratio	1.1	1.1	1.0	1.1	1.3	
Literacy	60	8	Adult literacy rate	Percent	96.4	96.7	95.2	98.0	93.2

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	Whole Kingdom	Central Region (Incl.BKK)	Northern Region	Northeastern Region	Southern Region	
<b>CHILD PROTECTION</b>										
Early marriage and polygyny	67		Marriage before age 15	Percent	2.3	1.8	3.0	2.5	2.8	
			Marriage before age 18	Percent	19.7	14.5	23.5	23.8	20.5	
	68		Young women aged 15-19 currently married/in union	Percent	14.6	17.3	15.0	13.2	12.3	
	69		Spousal age difference	age 15-19 years	Percent	14.5	18.7	11.7	9.8	18.5
				age 20-24 years	Percent	13.0	13.4	14.6	13.1	10.1
Disability	101		Child disability	Percent	12.3	11.9	7.5	13.1	16.1	
<b>HIV/AIDS, SEXUAL BEHAVIOUR, AND ORPHANED AND VULNERABLE CHILDREN</b>										
HIV/AIDS knowledge and attitudes	82	19b	Comprehensive knowledge about HIV prevention among young people	Percent	46.1	-	-	-	-	
	89		Knowledge of mother- to-child transmission of HIV	Percent	68.3	62.1	72.3	74.8	65.4	
	86		Attitude towards people with HIV/AIDS	Percent	20.7	19.9	27.4	19.2	17.8	
	90		Counselling coverage for the prevention of mother-to-child transmission of HIV	Percent	86.2	85.0	89.5	87.6	82.7	
	91		Testing coverage for the prevention of mother-to-child transmission of HIV	Percent	84.0	88.6	85.5	83.8	74.9	
Support to orphaned and vulnerable children	75		Prevalence of orphans	Percent	4.7	4.5	6.5	4.3	4.5	
	78		Children's living arrangements	Percent	19.3	15.1	21.3	25.6	9.8	
	76		Prevalence of vulnerable children	Percent	2.7	2.6	3.1	2.9	2.3	
	77	20	School attendance of orphans versus non-orphans	Ratio	1.0	1.0	1.0	0.9	0.7	
	81		External support to children orphaned and made vulnerable	Percent	21.4	15.4	34.1	15.9	26.6	

Note : Please see Appendix E for MICS indicators : Numerators and Denominators



*Photo by : UNICEF-Thailand/2006/Few*



## EXECUTIVE SUMMARY

From December 2005–February 2006, the National Statistical Office of Thailand surveyed 43,400 households across the country on a number of key indicators related to the well being of children and women. Data gathered under this Multiple Indicator Cluster Survey (MICS) was disaggregated under several categories, including region, gender, language and age group.

### NUTRITIONAL STATUS OF CHILDREN

#### NUTRITIONAL STATUS

The survey indicates that nearly one in 10 children (9.3 per cent) below the age of 5 is moderately underweight. These children live mainly in the South and Northeast regions of the country and come from very poor households. Of all the children surveyed, just 0.4 per cent is severely underweight, and most of these severely malnourished children are between 1-2 years old.

Nearly 12 per cent of children are too short for their age (stunted), while just over 4 per cent are too thin for their height (wasted). The problem of overweight was observed in 6.9 per cent of all children, while 10 per cent of children in the Central region, which includes Bangkok, were overweight. Overweight children are mainly found in rich and very rich households and in municipal areas.

#### BREASTFEEDING

Mother's milk provides the best source of nutrients for infants and is all an infant needs for the first six months of life. However, the survey shows that only 7.6 per cent of infants are exclusively breastfed during the first three months of life. The exclusive breastfeeding rate declines even further, to 5.4 per cent, for infants aged 0-5 months. The lowest percentage of exclusive breastfeeding was found in the Central region, including Bangkok, and in households where mothers had no education completed. Of infants aged 6-9 months, 42.6 per cent received breast milk together with complementary food (either solid or semi-solid food). Of infants aged 0-11 months, 20.9 per cent were found to be "adequately fed", which refers to the minimum number of times they received breast milk together with complementary (solid/semi-solid) food recommended by physicians. The survey indicates that children in the North region were the most "adequately fed" compared to other regions.

## SALT IODIZATION

Iodine Deficiency Disorders (IDD) are the world's leading cause of preventable mental retardation and impaired psychomotor development in young children. Iodine deficiency is most commonly and visibly associated with goitre. IDD, however, takes its greatest toll on children in terms of impaired mental growth and development, contributing in turn to poor school performance, reduced intellectual ability and impaired work performance. In order to determine whether Thai households consume an adequate amount of iodised salt, a sample of household salt was collected in each household surveyed and the salt was tested for iodine content in a laboratory. The results from the tests show that 45.1 per cent of households consume salt that does not have any iodine. In the South and Central regions, including Bangkok, rates for consumption of adequately iodized salt are higher, at 60.3 and 59.7 per cent, respectively. The lowest figures were observed for the Northeast region (22.6 per cent). Municipal households consume higher proportions of adequately iodized salt than non-municipal households (62.0 per cent versus 39.9 per cent), while very rich households consume nearly three times more than the very poor (68.6 per cent versus 23.6 per cent).

## BIRTH WEIGHT

The survey indicates that 9.2 per cent of all infants weigh less than 2,500 grams when born. The highest proportions of new born infants weighing less than 2,500 grams were found in the Northeast (9.5 per cent) and in the South (9.3 per cent). Infants from very poor households accounted for the highest proportion (10.0 per cent) of infants with low birth weights.

## CHILD'S HEALTH

### IMMUNIZATION COVERAGE

According to UNICEF and World Health Organization guidelines, a child should receive a BCG vaccination to protect against tuberculosis; three doses of DPT to protect against diphtheria, pertussis, and tetanus; three doses of polio vaccine; and a measles vaccination by the age of 12 months or before the first birthday. Information on immunization coverage was received from vaccination records or the reports of mothers/caretakers. The percentage of fully immunised children totals 83.3 per cent, while the percentage of children who receive all three vaccinations for polio and Hepatitis B before their first birthday is 93.6 per cent and 88.3 per cent, respectively.

## ENVIRONMENT

### DRINKING WATER

The survey indicates that 94.0 per cent of the population (97.6 per cent in municipal areas and 92.5 per cent in the non-municipal areas) has access to improved drinking water sources. Regarding drinking water sources, 36.9 per cent of the population depends upon rain water, 24.9 per cent on bottled water and 21.0 per cent on piped water connected into the dwelling. People living in the Central region, including Bangkok, have the highest access to improved drinking water sources (98.1 per cent), while people in the South have the lowest access (81.5 per cent). Water from unprotected wells is considered the least hygienic among all water sources, and 2.8 per cent of the population rely on this source for their drinking water.

### EXCRETA DISPOSAL

Over 99 per cent of the population live in households with improved sanitation facilities. The most common improved sanitation facility is a flush/pour flush toilet with a connection to a septic tank (90.9 per cent). The South region has the lowest rates of improved sanitation facilities (96.6 per cent).

Safe disposal of the faeces of 0-2 year old children was found in 64.6 per cent of households. The most common safe disposal methods used include putting or rinsing solid wastes into flush/pour flush toilets or latrines (40.4 per cent) and having the child using the toilet (24.2 per cent).

### SLUM HOUSEHOLD

The survey indicates that 9.9 per cent of the households are considered overcrowded and inappropriate for living. The numbers of very poor and poor families living in slum housing were 21.5 per cent and 15.9 per cent, respectively. Most households living in slum housing are among either non-Thai speaking households (24.1 per cent); or those whose family head has only a primary education (27.6 per cent).

## REPRODUCTIVE HEALTH

### CONTRACEPTION

Among women between 15-49 years of age and currently married or in a union, contraceptive use is 71.5 per cent. Among non-Thai speaking women, 48 per cent report not using any form of contraception. With regard to the choice of contraceptive methods, 70.1 per cent of married/in union women use modern methods, which include contraceptive pills (30.9 per cent), female sterilization (24.5 per cent) and injections (10.4 per cent). Contraceptive prevalence is highest in the North and Northeast, at about 75 per cent, and lowest in the South, at 56.8 per cent.

## EDUCATION

### PRE-SCHOOL EDUCATION

The survey indicates that 60.7 per cent of children aged 36-59 months are attending early childhood education programmes. The highest proportions of children attending such programmes are found in the North (78.3 per cent) and the lowest in the South (54.3 per cent). Children 4-5 years of age participate in early childhood education programmes at a higher rate than children in the three-year-old age group (75.3 per cent and 48 per cent, respectively). The attendance rates for municipal and non-municipal children are 63.9 per cent and 59.4 per cent, respectively.

### PRIMARY AND SECONDARY SCHOOL EDUCATION

Around 98 per cent of children between 7-12 years old (at the time of the survey) are attending primary school.

The percentage of secondary school age children (between 13-18 years) attending secondary school is 79.8 per cent. Secondary school attendance rates are higher for girls than for boys (83.1 per cent versus 68.9 per cent). The secondary school attendance rates for the Northeast (84.5 per cent) and the North (82.4 per cent) are higher than those of other regions, while the South has the lowest attendance rate (71.5 per cent). The ratio of girls to boys attending secondary education or higher, also called the Gender Parity Index, is high in every region, particularly in the South, where attendance rates for girls and boys are 79.9 per cent and 63.6 per cent, respectively.

The survey indicates that 96.4 per cent of women between 15-24 years are literate, but there are some disparities between regions. The proportion of literate women from the Central region, including Bangkok, is high at 98 per cent, while the literacy rates for women in the South trails all other regions at 93.2 per cent.

## EARLY MARRIAGE

The percentage of Thai women below 18 years who are married or in union is 19.7 per cent. If disaggregated by region, the Northeast and the North have the highest percentages of women married or in union, at 23.8 per cent and 23.5 per cent, respectively. The Central region, including Bangkok, has the lowest proportion (14.5 per cent). The majority of women married or in union before the age of 18 live in municipal areas have received a primary education or no education (59.6 per cent), and nearly 30 per cent of these women live in non-Thai speaking households.

The percentage of women who were married or in union before 15 years of age is 2.3 per cent, with the highest percentages in the North (3.0 per cent) and in the South (2.8 per cent).

## CHILD DISABILITY

The percentage of children aged 2-9 years with a disability reported by their mothers/care-takers is 12.3 per cent, with the highest proportions found in the South (16.1 per cent) and the Northeast (13.1 per cent). When segregated by types of disabilities, the data show that 7.1 per cent of these children exhibit delayed learning capacity in comparison to their peers; 3.3 per cent appear mentally retarded, dull or slow; and 0.9 per cent exhibit slow development in sitting, standing or walking. Some 5.4 per cent of children with learning difficulties do not speak or cannot be understood. In addition, the survey indicates that 11.5 per cent of all two-year-old children cannot name even one object.

## HIV/AIDS

### KNOWLEDGE OF HIV/AIDS TRANSMISSION

The percentage of women aged 15-49 years who know the three main methods of preventing HIV/AIDS transmission (being faithful to one partner, using condoms, and abstaining from sex) was 49 per cent. Women in the Central region and the South are less knowledgeable on how to prevent HIV/AIDS (42.7 per cent and 46.2 per cent, respectively) than women in the other regions. Nearly 95 per cent of women know at least one way of preventing HIV/AIDS.

Nearly 47 per cent of women have comprehensive knowledge on how HIV/AIDS is transmitted. Women from the Northeast and the North show the highest proportions compared to other regions (50.2 per cent and 48.3 per cent). Women from non-municipal areas have better understanding on HIV/AIDS transmission than those from municipal areas.

In total, 93.3 per cent of women know that HIV can be transmitted from mother to child. The percentage of women who know that HIV can be transmitted during pregnancy and through breast milk are 87.6 per cent and 82.4 per cent, respectively, while 76.3 per cent know that the disease can be transmitted during delivery. Around 68.3 per cent of women can correctly identify three ways of HIV transmission. Women from the Northeast and the North have higher knowledge of HIV transmission (74.8 per cent and 72.3 per cent, respectively), while women from the Central region, including Bangkok, and the South have less knowledge (62.1 per cent and 65.4 per cent, respectively).

### **ORPHANS AND VULNERABLE CHILDREN**

In Thailand, only 63 per cent of children between 0-17 years of age are living with both parents. The number of children not living with a biological parent accounts for 19.3 per cent (25.6 per cent in the Northeast and 21.3 per cent in the North). The numbers of children in the 5-9 and 0-4 age groups not living with a biological parent account for 21.3 per cent and 19.6 per cent, respectively.

A total of 4.7 per cent of the children comes from households where one or both parents are no longer alive, and many of these children live in poor or very poor households.

In total, 7.1 per cent of children aged between 0-17 years are considered orphans (4.7 per cent) or vulnerable (2.7). If disaggregated by region, the North has the highest proportion of orphans or vulnerable children (9.2 per cent).

# 1. BACKGROUND AND OBJECTIVES

## 1.1 Background

This report is based on the Thailand Multiple Indicator Cluster Survey (MICS), which was conducted from December 2005 to February 2006 by the National Statistical Office (NSO). The survey provides valuable information on the situation of children and women in Thailand, and was based in large part on the need to monitor progress towards the goals and targets emanating from recent international agreements. These agreements include the Millennium Declaration, adopted by all 191 United Nations Member States in September 2000, and the Plan of Action of “A World Fit for Children, adopted by 189 Member States at the United Nations Special Session on Children in May 2002. Both of these commitments build upon promises made by the international community at the 1990 World Summit for Children.

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

### A Commitment to Action: National and International Reporting Responsibilities

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

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

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

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

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

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

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

## 1.2 MICS IN THAILAND

Thailand is one of the countries that signed the Millennium Declaration, and the Plan of Action of A World Fit for Children. In signing these international agreements, the Thai government committed itself to improving conditions for all children in Thailand and to monitoring progress towards that end. The Thailand MICS was therefore developed and used as a tool to monitor progress towards set objectives and to provide standard information and data on children in Thailand that can be studied and compared internationally.

Before the survey, as stated in the first report of the Millennium Development Goals (MDG), indicators on the situation of children in Thailand were incomplete, and data were obtained from various sources using different methods of collection and definitions. Therefore, the data could not be integrated. As a result, these indicators could not be used to assess and monitor the development of children effectively. In addition, Thailand lacked sub-level and otherwise disaggregated data, especially at the provincial level, which are needed for designing policies and measures to appropriately and directly address the situation of children.

The Thailand MICS was carried out by the National Statistical Office (NSO) with support from UNICEF Thailand. Other Thai ministries supporting children's overall development also took part in the survey. These included the Ministries of Social Development and Human Security, Education and Public Health. Data at both the national and the provincial (26 provinces) levels were collected. It is expected that this survey will create processes for regularly monitoring and assessing the situation of children in Thailand.

The Thailand MICS emphasized monitoring the situation relating to indicators reflecting the goals of the Plan of Action of A World Fit for Children, the Millennium Development Goals (MDG) and other goals from commitments between international organizations and the committed countries. The findings from the survey will be a large and important source of data for monitoring outcomes towards achievement of the MDG-plus Goals for Thailand.



### 1.3 SURVEY OBJECTIVES

The Thailand MICS primary objectives include:

- providing up-to-date information for assessing the situation of children and women in Thailand;
- furnishing data needed for monitoring progress toward goals established by the Millennium Development Goals (MDG), the goals of A World Fit for Children (WFFC) and other internationally agreed upon goals, as a basis for future action at national and provincial level; and
- contributing to the improvement of data and monitoring systems on the situation of children and women in Thailand and strengthening technical expertise for the design, implementation, and analysis of such systems.



*Photo by : UNICEF-Thailand/2006/Few*

## 2. SAMPLE AND SURVEY METHODOLOGY

### 2.1 SAMPLING PLAN

The Thailand MICS was carried out by a sample survey method that used a stratified two-stage sampling plan. The primary sample units (PSU) consisted of blocks (in municipal areas) or villages (in non-municipal areas). The secondary sample units consisted of collective households systematically drawn from a household listing. The plan is designed to provide estimates of situation indicators for children and women at the national level, for municipal and non-municipal areas, and for four regions: Central (including Bangkok), North, Northeast and South. The household listing is obtained from “The Basic Household Information Survey” conducted every two years by the National Statistical Office (NSO). In the survey, members of each household located in the block/village samples are counted. Data on basic household information from the survey are to be used as the sample frame in various survey projects of the NSO.

Data from the 2006 Basic Household Information Survey were used as the frame for household samples in the Thailand MICS. Thirty collective household samples per block/village sample were selected in both municipal and non-municipal areas. Field staff then created a *Listing of Household Samples* by adding together all the names of household heads and the addresses. After a household listing was carried out within the selected 30 households in each block/village, a systematic sample of households was drawn. For national-level results, sample data were weighted in accordance with sampling plan. (See Appendix for details of the sampling plan and weighting of data.)

A “block” is an operational boundary in a municipal area that is made up of approximately 100 to 200 households. Blocks are established on a map so that field staff know the exact area they are to cover in the survey.

A “village” is an administrative unit, a community, in a non-municipal area governed by a village head (Phuyaiban) or a district head (Kamnan).

### 2.2 SAMPLE SIZE

The MICS national-level report included 1,449 block/village samples. Thirty collective household samples per block/village samples were selected and a total of 43,470 household samples were obtained.

For MICS provincial-level reports, 1,032 block/village samples were selected and 30,960 household samples were included.

### Number of Block/Village Sample and Household Samples by Regions

Region	National Level Report		Provincial Level Report	
	Block/village samples	Household samples	Block/village samples	Household samples
Bangkok	78	2,340	156	4,680
Central (excl. Bangkok)	492	14,760	156	4,680
North	309	9,270	216	6,480
North East	324	9,720	168	5,040
South	246	7,390	336	10,080
<b>Total</b>	<b>1,449</b>	<b>43,470</b>	<b>1,032</b>	<b>30,960</b>

### 2.3 QUESTIONNAIRES

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

- The Household Questionnaire
  - Household Listing
  - Education
  - Support for Orphans and Vulnerable Children
  - Child Labour
  - Disability
  - Drinking Water and Disposal of Excreta
  - Household Characteristics
  - Salt Iodization

- The Questionnaire for Individual Women
  - Child Mortality
  - Tetanus Toxoid
  - Maternal and Newborn Health
  - Marriage and Union
  - Contraception
  - HIV/AIDS
  
- The Questionnaire for Children Under the Age of 5 was administered to mothers or caretakers of children in this age group. In cases where the mother was not listed in the household roster, a primary caretaker for the child was identified and interviewed.
  - Birth Registration and Early Learning
  - Child Development
  - Breastfeeding
  - Care of Illness
  - Immunization
  - Anthropometry

The three set of questionnaires were based on the English version of the MICS model questionnaire. The model questionnaires were translated into Thai by the NSO MICS co-ordinators in September 2005.

In addition to the administration of questionnaires, fieldwork teams tested salt used for cooking in the households surveyed for presence of iodine, and measured the weight and height of children under 5 years of age.

## 2.4 QUESTIONNAIRE TESTING

The Thai MICS questionnaires went through two pre-tests, first in Ratchaburi province and later in Ayutthaya province. Based on the results of the two pre-tests, modifications on wording and terminology in the Thai version were made to make them more suitable for the Thai population.

The first pre-test in Ratchaburi province was held during October 10-12, 2005. The interview was conducted by the NSO MICS co-ordinators themselves to determine if the interviewee would understand the questions/wording used and to find out if there were any problems with particular modules. Results from the first pre-test were discussed among the NSO MICS co-ordinators, and the questionnaires were revised accordingly.

During the pre-test survey in Ratchaburi province, the NSO MICS co-ordinators obtained information on maternal and child health from the staff of Health Centre IV on topics such as birth registration for children born in hospitals, child vaccination, maternal tetanus prevention, contraception and antenatal care. The knowledge and information obtained from this process were used to improve the questionnaires and prepare field work manuals.

The second pre-test in Ayutthaya province was carried out by field staff using the revised questionnaires under the observation of the NSO MICS co-ordinators. Before commencing the test survey, field staff were provided with training on definitions and the survey's objectives.

Again, results from the pre-test, especially in relation to questions that interviewees did not understand or did not want to answer, were discussed among the NSO MICS co-ordinators and field staff. These related to questions that were considered either sensitive or difficult to answer due to the degree of detailed information required. In the case of child vaccination, respondents were asked what kind of vaccines the child had received, and when and how many times the child had received the vaccines. The discussion contributed positively to the interview process and the accuracy of the survey results. It took about 2-2.5 hours per household to finish all three questionnaires.

After the second pre-test, a final revision was made to both the questionnaires and the field work manuals to be used in the Thailand MICS.

## **2.5 DATA COLLECTION AND PROCESSING**

### **2.5.1 TRAINING FOR FIELD STAFF**

In November 2005, before data collection, a three-day training programme was provided to 145 field staff from the North and Northeast regions in Khon Kaen province, and in Krabi province for 160 field staff from the South and Central (including Bangkok) regions. The NSO MICS co-ordinators and representatives from UNICEF Thailand participated in both training sessions as observers. Instructors from the Ministry of Public Health provided information on antenatal care, attendance at birth, child vaccination, maternal tetanus vaccination and oral rehydration treatment for children with diarrhoea. The knowledge and information acquired through the training were useful for the interview process and the accuracy of the survey results.

### 2.5.2 DATA COLLECTION

Administratively, Thailand is divided into 76 provinces, including Bangkok (Metropolis). In Bangkok, the field work was carried out under the responsibility of the Director of the Data Management Division of the Bangkok Metropolitan Administration (BMA), while Provincial Statistical Officers were responsible for the field work undertaken in the other 75 provinces. In each province, data were collected by three teams of four field staff, three interviewers and one supervisor. The supervisor provided advice on field work, helped in solving problems arising during the field work, and checked the completeness of data after the survey. The NSO MICS co-ordinators provided overall supervision, with continuous visits to the field.

The fieldwork began in December 2005 and concluded in February 2006.

Additional data collected from 26 targeted provinces during March–May 2006 and will be published in separate provincial reports.

### 2.5.3 DATA PROCESSING

After the fieldwork, the team supervisor checked the data collected during the interview for completeness. Then the Provincial Statistical Officer in each province and the Director of the Data Management Division of the BMA randomly rechecked the data before sending all the questionnaires to the NSO for processing.

Upon receiving the questionnaires from the 76 provinces, the collected data were entered on 30 microcomputers by data entry operators and data entry supervisors using CSPro software. In order to ensure quality control, editing and structural checks, all questionnaires were double entered for verification and internal consistency checks were performed, followed by secondary editing. The data entry and verification used CSPro programme applications that were developed under the global MICS project by UNICEF to be used as standard processing procedures worldwide. In Thailand, the standard CSPro programme was modified appropriately to the Thai version questionnaires. The modification was done by NSO staff that had been trained on data processing by MICS experts from UNICEF.

Data entry and data verification for the national level report began in February 2006 and was completed in April 2006. For the provincial reports, the process was completed in June 2006. Data were analysed using the Statistical Package for Social Sciences (SPSS) software programme, Version 14, and the model syntax and tabulation plans developed by UNICEF for this purpose.

## 2.6 POST-ENUMERATION SURVEY

The Thailand MICS covered a large number of samples from all 76 provinces in the country. It was expected that data deviation could possibly occur from the work of the field staff, or the interviewees. Therefore, the NSO operated a post enumeration survey (PES) in Bangkok and 22 provinces selected from all four regions to aid data users in their consideration of data quality. The PES consisted of 150 block/village samples, in both municipal and non-municipal areas. Collective household samples – 20 households per block/village for a total of 3,000 household samples – were selected from the listing of household samples of the MICS survey. Staff were sent in to repeat the survey in these areas. Matching of questionnaires from the actual survey and the repeated survey was carried out and data were analysed for deviation.



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

### 3.1 SAMPLE COVERAGE

Of the 43,440 households selected for the sample, 42,302 were found to be occupied. Of these, 40,511 were successfully interviewed, yielding a response rate of 95.8 percent. (See details in Table 1). In the interviewed households, 37,187 eligible women (aged 15-49) were identified. Of these eligible women, 36,960 were successfully interviewed, yielding a response rate of 99.4 percent. In addition, 9,444 children under the age of 5 were listed as being eligible in the households. The mothers and/or caretakers of 9,409 of these children (99.6 per cent) were successfully interviewed. (See Table 1).

Differentials in response rates by areas showed 94.9 percent of the households in municipal areas and 96.9 percent in non-municipal areas. Participant differentials in response rates were observed, with the highest in the North Region (98.8 percent), followed by the Northeast Region (98.1 percent), and the South and the Central regions' same low response rate of 93 percent.

### 3.2 CHARACTERISTICS OF HOUSEHOLDS

The age and sex distribution of the surveyed population is provided in Table 2. Based on the 40,511 sample households successfully interviewed, household members were listed and were estimated to a total population of 65,064,070 household members by statistical systematic methodology (See detail in appendix B). Of these, 31,951,196 were male and 33,112,873 were female. The child population (aged 0-14 years) was projected to be 14,847,917 children, accounting for 22.8 percent of the projected total population. The labour age population (aged 15-64 years) was projected at 45,634,287 members, or 70.1 percent of the total. The elderly population (65 years and older), was projected at 4,851,865 members, or 7.0 percent of the total. In addition, of the surveyed population, 27.9 percent were children aged 0-17 years, and 72.1 percent adults aged 18 years and over.

**Figure 1 Age and sex distribution of household population, Thailand, 2005-2006**

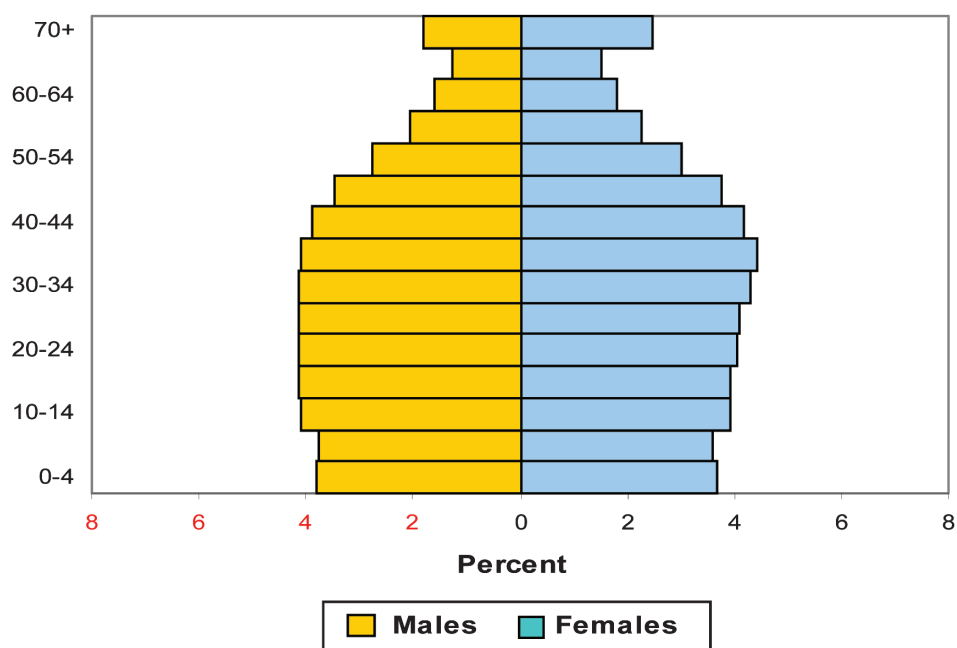


Table 3 provides basic background information on the households. The distribution of households by area of residence showed that 31.5 percent of the households (5,677,957 households) were located in municipal areas and 68.5 percent (12,353,113 households) were located in non-municipal areas. The Central Region, including Bangkok, had the highest percentage of households (35.4 percent), followed by 32.1 percent in the Northeast Region

Most of the households (44.4 percent) had 2-3 members, and most had a male head of household (70.0 percent). Households having at least one child under the age of 5 accounted for 21.5 percent of all households, while 71.8 percent of households had at least one woman aged 15-49 years.

Regarding language, Thai was spoken in 93.8 percent of the households, while other languages (including Yawee and hill tribe languages) were used in 6.2 percent of the households.

### 3.3 CHARACTERISTICS OF RESPONDENTS

Table 4 provides background characteristics of female respondents 15-49 years of age. The table includes information on the distribution of women according to region, residential areas, age, marital status, motherhood status, education, wealth index quintiles and ethnicity. About 32.6 percent of the women were residing in municipal areas and 67.4 percent in non-municipal areas. With regard to marital status, 66.9 percent of the women were married/in union, and 64.4 percent had given birth(s). The education level of more than half of the women (52.4 percent) was secondary and beyond, with only 2.9 percent being non-educated.

Table 5 shows some background characteristics of children under the age of 5, 50.9 percent of whom were male and 49.1 percent of whom were female. Of the children under 5 years of age, one in five (20 percent) was 12 months old and over. Mothers of about half of the under-5 children (51.9 percent) had a primary school level education. In addition, 89.3 percent of the children were born to Thai speaking households, and 10.7 percent to households speaking other languages.



*Photo by : NSO-Thailand/2006/Komin*

## 4. RESULTS

### 4.1 NUTRITION

#### 4.1.1 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 maximum growth potential and are considered well nourished.

Malnutrition is associated with more than half of all child deaths worldwide. Undernourished children are more likely to die from common childhood ailments, while those who survive often experience recurring illnesses and faltering growth. Three-quarters of the children who die from causes related to malnutrition are only mildly or moderately malnourished, showing no outward sign of their vulnerability. The Millennium Development target is to reduce by half the proportion of people who suffer from hunger between 1990 and 2015. A World Fit for Children goal is to reduce the prevalence of malnutrition among children under 5 years of age by at least one-third (between 2000 and 2010), with special attention to children under 2 years of age. A reduction in the prevalence of malnutrition will assist in the goal to reduce child mortality.

In a well-nourished population, there is a standard distribution of height and weight for children under 5 years of age. Under-nourishment in a population can be gauged by comparing children to a reference distribution. The reference population used here is the WHO/CDC/NCHS reference, which is recommended for use by UNICEF and WHO. Each of the three nutritional status indicators can be expressed in standard deviation units (called "z-scores") from the median of this reference population.

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

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

Finally, children whose **weight for height** is more than two standard deviations below the median of the reference population are classified as *moderately or severely wasted*, while those who fall more than three standard deviations below the median are *severely wasted*. Wasting

is usually the result of a recent nutritional deficiency. The indicator may exhibit significant seasonal shifts associated with changes in the availability of food or disease prevalence.

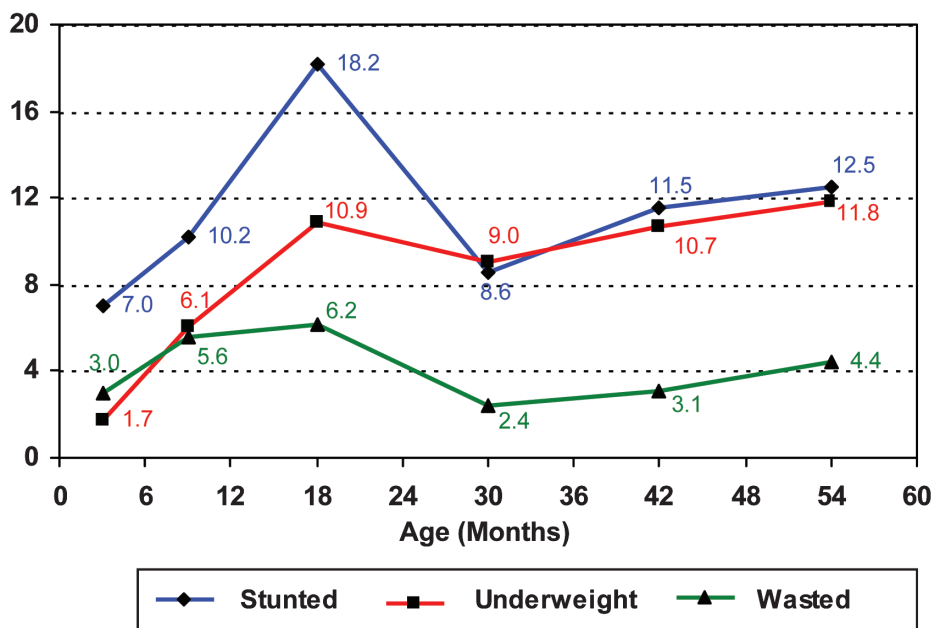
In MICS, weights and heights of all children under 5 years of age were measured using anthropometric equipment recommended by UNICEF. Findings in this section were based on the results of these measurements.

Table 6 shows the percentage of children classified into each of these three categories, based on the anthropometric measurements that were taken during fieldwork. In addition, a table showing the percentage of children who are overweight (having weight for height more than two standard deviations above the median of the reference population) has been included.

The figures in Table 6 exclude children who were not weighed and measured (approximately 2.9 percent) and those whose measurements were outside a plausible range. In addition, a small number of children whose birth dates are not known are also excluded.

Almost one in 10 children under 5 years of age (9.3 percent) in Thailand are moderately underweight, while only 0.4 percent are classified as severely underweight. About 11.9 percent of children are moderately stunted, or too short for their age, and 4.1 percent are moderately wasted, or too thin for their height. Only 0.6 percent of the children are severely wasted.

**Figure 2 Percentage of children aged 0-59 months who are undernourished, Thailand, 2005-2006**



Children in the South region are more likely to be underweight and stunted than children in other regions. Of the children in the South region, 12.5 percent are moderately underweight, 18.3 percent moderately stunted and 4.1 percent moderately wasted. The proportion of children in the Central (including Bangkok) who are moderately underweight is 6.1 percent, while 8.9 percent are moderately stunted, which is lower than other regions. In addition, children with mothers having secondary or higher education are less likely to be underweight and moderately stunted (6.4 percent and 9.7 percent, respectively) than children of non-educated mothers (13.1 percent and 17.6 percent, respectively). Similarly, proportions of children living in wealthy households who are moderately underweight (4.1 percent) and moderately stunted (6.7 percent), are less than those living in very poor households (15.2 percent and 15.7 percent, respectively).

The age pattern shows that 18.2 percent of children aged 12–23 months are moderately stunted and 6.2 percent moderately wasted, which is higher than for other age groups. These characteristics could be due to the fact that children are usually not breastfed when they are 12–23 months. As a result, the chance of children having unclean food and drinking water and contaminated environment is higher than breastfed children. Insignificant gender differentials are found.

In Thailand, 6.9 percent of the children are overweight. The largest proportion of overweight children is found in the Central Region (10.8 percent), followed by the South Region (8.3 percent), with the least in the Northeast Region (4.6 percent). Overweight children are found more in municipal (10.4 percent) than in non-municipal households (5.5 percent), and more among children below 6 months of age (8.5 percent). About 8.8 percent of overweight children have mothers with an education level of secondary school and higher; while 11.3 percent live in very rich households, compared to 3.0 percent of children in poor households.

#### **4.1.2 BREASTFEEDING**

Breastfeeding for the first few years of life protects children from infection, provides an ideal source of nutrients, and is economical and safe. However, many mothers stop breastfeeding too soon, and they are often pressured to switch to infant formula, which can contribute to faltering growth and micronutrient malnutrition. Use of instant formula is unsafe if clean water is not readily available. The World Summit for Children goal states that children should be exclusively breastfed for 6 months and continued breastfeeding with safe, appropriate and adequate complementary feeding up to 2 years of age and beyond.

WHO/UNICEF have the following feeding recommendations:

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

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

The indicators of recommended child feeding practices are as follows:

- Exclusive breastfeeding rate (< 6 months and < 4 months)
- Timely complementary feeding rate (6-9 months)
- Continued breastfeeding rate (12-15 and 20-23 months)
- Timely initiation of breastfeeding (within 1 hour of birth)
- Frequency of complementary feeding (6-11 months)
- Adequately fed infants (0-11 months)

Table 7 provides the proportion of women who started breastfeeding their infants within one hour of birth, and the women who started breastfeeding their infants within one day of birth (which includes those who started within one hour). About half of the women (49.6 percent) started breastfeeding their baby within one hour of birth. The highest proportion is found among women in the South Region (58.3 percent), and the lowest among women in the North Region (41.6 percent). Differentials are clearly seen with respect to women's residential area, women's education and household socioeconomic status. The percentage breakdowns for starting breastfeeding within one hour of birth were: non-municipal women (51.7 percent) compared to municipal women (43.6 percent); women with no education (52.8 percent) compared to women with a secondary school level education or beyond (49.8 percent); and women of very poor households (53.8 percent) compared to women of very rich households (42.7 percent).

The proportion of women who started breastfeeding within one day of birth (which includes those who started within one hour) is 84.8 percent. The highest proportion was among women in the South and the Northeast (about 89.0 percent). A higher proportion of non-municipal women (87.2 percent) started breastfeeding their infants within one day of birth compared to municipal women (78.2 percent). Insignificant differentials are found between infant's age, mother's education and household wealth in breastfeeding within one day of birth.



**Figure 3 Percentage of mothers who started breastfeeding within one hour and within one day of birth, Thailand, 2005-2006**

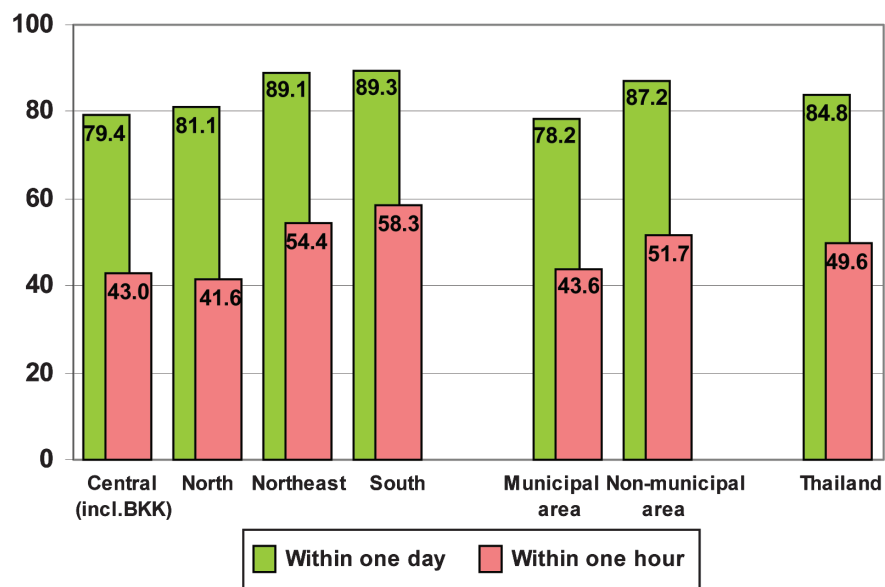


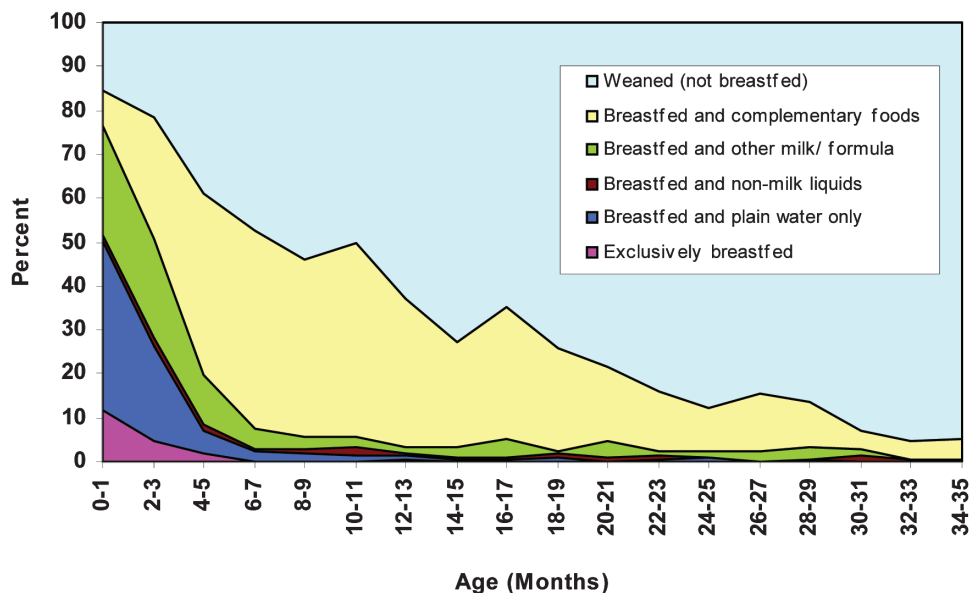
Table 8 shows exclusive breastfeeding of infants during the first 6 months of life (separately for 0-3 months and 0-5 months), as well as complementary feeding of children aged 6-9 months and continued breastfeeding of children at 12-15 months and at 20-23 months of age.

**Exclusively breastfed refers to infants who received only breast milk and vitamins, mineral supplements or medicine.**

Approximately 7.6 percent of children aged 0-3 months are exclusively breastfed, and the proportion decreases to 5.4 percent for infants aged 0-5 months. At age 6-9 months, 42.6 percent of children are receiving breast milk and solid or semi-solid foods. By age 12-15 months, 31.6 percent of children are still being breastfed, and by age 20-23 months, 18.7 percent are still breastfed. Breastfeeding of infants/children is associated with background characteristics. Exclusive breastfeeding of infants during the first 0-3 months and 0-5 months of life is found the most in women of the North Region (14.5 percent and 10.9 percent, respectively). In the Central Region (including Bangkok), the proportion of exclusively breastfed infants is very low (3.7 percent for those 0-3 months old, and 2.4 percent for those 0-5 months old). Mothers with secondary education level and beyond exclusively breastfed their infants the most (8.5 percent for the 0-3 month old and 6.5 percent for the 0-5 month old infants).

Gender differentials are observed in terms of breastfeeding of infants aged 20-23 months. Notably, among the four regions, infants in the South are breastfed until the age of 20-23 months the most (34.3 percent), and in the North (12.3 percent) the least. Most of the 20-23 month old breastfed infants have a mother with no education (34.6 percent) and live in non-Thai speaking households (42.9 percent).

**Figure 4 Infant feeding patterns by age: Percent distribution of children aged under 3 years by feeding pattern by age group, Thailand, 2005-2006**



The adequacy of infant feeding in children under 12 months is provided in Table 9. Different criteria of adequate feeding are used depending on the age of the child:

- Infants aged 0-5 months, exclusive breastfeeding is considered as adequate feeding.
- Infants aged 6-8 months are considered to be adequately fed if they are receiving breast milk and complementary food at least two times per day.
- Infants aged 9-11 months are considered to be adequately fed if they are receiving breast milk and eating complementary food at least three times a day.

From Table 9, only 5.4 percent of infants aged 0-5 months are exclusively breastfed, a level considerably lower than recommended by WHO. At age 6-8 months, 39.4 percent of infants are adequately fed, and at age 9-11 months, 29.9 percent of infants are. As a result of these feeding patterns, only 34.8 percent of infants aged 6-11 months are being adequately fed, and the proportion is less among 0-11 month old infants at 20.9 percent.

The difference in adequate feeding is associated with children's background characteristics. Children in the North Region are adequately fed the most (30.7 percent), while children in the Central Region (including Bangkok) are adequately fed the least (11.5 percent). A lower proportion of municipal children (13.5 percent) are adequately fed than non-municipal children (23.9 percent). Moreover, adequate feeding is negatively related to mother's education and household wealth. Children with non-educated mothers (23.4 percent) are adequately fed more than those with educated mothers (21.9 percent primary level, and 19.9 percent secondary level and beyond). Similarly, children of poor households are more adequately fed than those of very rich households (25.1 percent and 14.4 percent, respectively).

#### 4.1.3 SALT IODIZATION

Iodine Deficiency Disorders (IDD) are 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 international goal is to achieve sustainable elimination of iodine deficiency by 2005. The indicator is the percentage of households consuming adequately iodized salt ( $\geq 15$  parts per million).

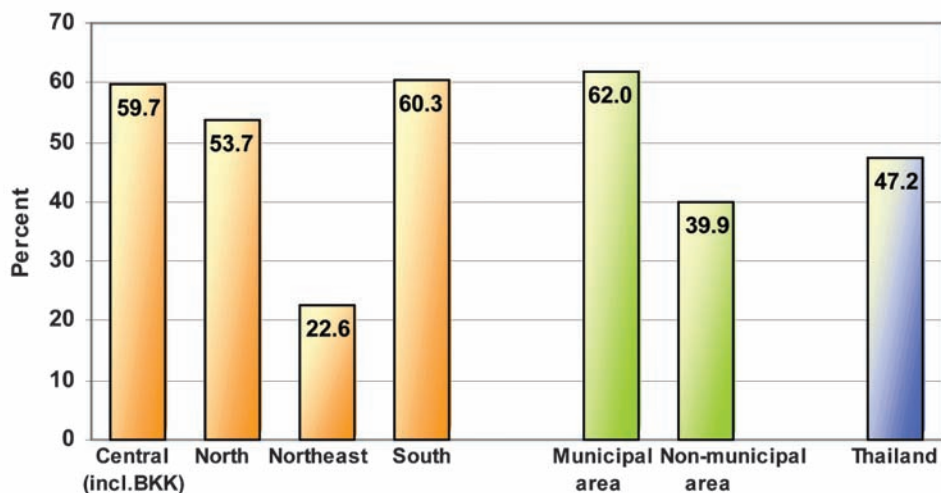
Iodine deficiency in food causes goitre (enlargement of the thyroid gland). Iodine deficiency during the antenatal period, in infants or childhood causes brain damage. Universal Salt Iodization (USI) is a low cost measure that can prevent Iodine Deficiency Disorders (IDD). In this survey, salt consumed in the surveyed households was tested for iodine by two methods. Method 1, using I-KIT, was done by fieldwork staff, and shows whether iodine is present. This method of testing does not determine how much iodine is present in the salt or whether the salt is adequately iodized. Method 2 was carried out in the laboratory to determine iodine content in the salt samples collected during the interviews. Adequately iodized salt must have at least 15 ppm (parts per million) of iodine.

Table 10 presents the results of iodine test using the I-KIT (Method 1). As shown in the table, 9.9 percent of households did not have salt for consumption and 90.1 percent of households had salt. The household salt was tested at the time of the interview for the presence of iodine in the salt. The result of the iodine test shows that 32.6 percent of households having salt tested consumed salt with no iodine, while 57.6 percent had iodized salt. Use of iodized

salt in municipal households is not much higher than in non-municipal households (63.3 percent and 54.9 percent, respectively). The highest proportion of households using iodized salt is found in the South Region, and the lowest in the Northeast Region (35.4 percent). (See details in Table 10)

A quantitative test for iodine content in salt by Method 2 was done in the laboratory. The test was conducted by the Institute of Nutrition, Mahidol University/INMU, using a special iodine checker machine. The results show that 45.1 percent of the households consumed salts that do not have any iodine; 7.7 percent use inadequately iodized salt (containing 5-14.9 ppm of iodine) and 47.2 percent use adequately iodized salt (containing at least 15.0 ppm of iodine) for consumption. The proportions of household consumption of adequately iodized salt in all the regions are: 60.3 percent in the South, 59.7 percent in the Central Region (including Bangkok), 53.7 percent in the North, and only 22.6 percent in the Northeast. Municipal households use adequately iodized salt more than non-municipal households (62.0 percent and 39.9 percent, respectively); and very rich households more than the very poor (68.6 percent and 23.6 percent, respectively).

**Figure 5 Percentage of households consuming adequately iodized salt, Thailand, 2005-2006**



#### 4.1.4 BIRTH WEIGHT

Weight at birth is a good indicator not only of a mother's health and nutritional status but also the newborn's chances for survival, growth, long-term health and psychosocial development. Low birth weight (less than 2,500 grams) carries a range of grave health risks for children. Babies who were undernourished in the womb face a greatly increased risk of

dying during their early months and years. Those who survive have impaired immune systems and increased risk of disease. They are likely to remain undernourished, with reduced muscle strength, throughout their lives, and suffer a higher incidence of diabetes and heart disease in later life. Children born underweight also tend to have a lower IQ and cognitive disabilities, affecting their performance in school and their job opportunities as adults.

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

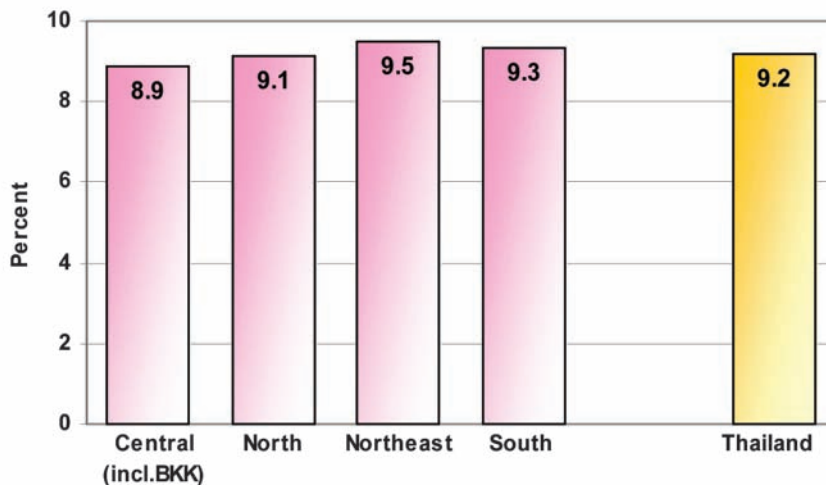
In the industrialized world, cigarette smoking during pregnancy is the leading cause of low birth weight. In developed and developing countries alike, teenagers who give birth when their own bodies have yet to finish growing run the risk of bearing underweight babies.

Because many infants are not weighed at birth, and those who are weighed may be a biased sample of all births, 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.

Percentage of births weighing less than 2,500 grams is calculated from the total number of infants with birth weight less than 2,500 grams divided by the total number of infants weighed.

In Thailand, 98.7 percent of infants were weighed at birth, and 9.2 percent had a birth weight less than 2,500 grams. The incidence of low birth weight is not significantly affected by region, residential area, mother's education and household language, and varies slightly between very poor and very rich households (10.0 percent and 8.5 percent, respectively). (See details in Table 12)

**Figure 6 Percentage of infants weighing less than 2,500 grams at birth, Thailand, 2005-2006**



## 4.2 CHILD HEALTH

### 4.2.1 IMMUNIZATION COVERAGE

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

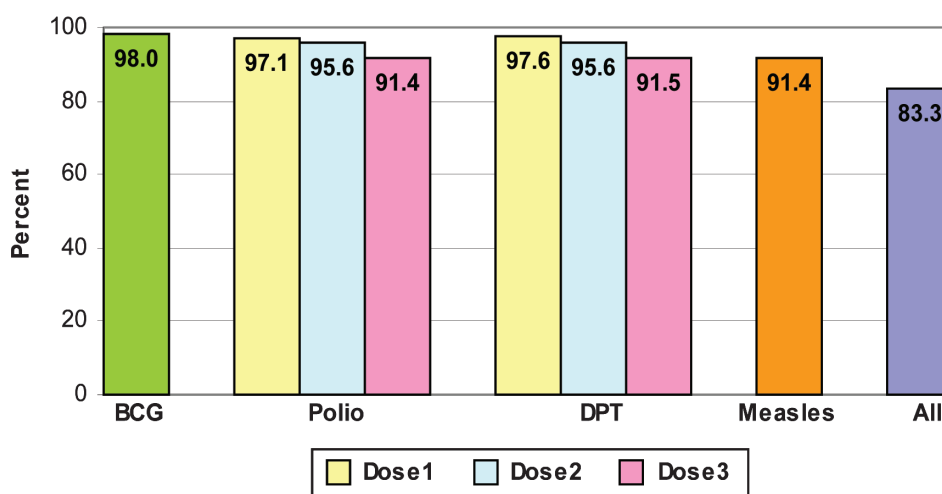
One goal of A World Fit for Children is to ensure full immunization of children under one year of age at 90 percent nationally, with at least 80 percent coverage in every province.

According to UNICEF and WHO guidelines, a child should receive a BCG vaccination to protect against tuberculosis; three doses of DPT to protect against diphtheria, pertussis, and tetanus; three doses of polio vaccine; and a measles vaccination by the age of 12 months. In the survey, mothers or caretakers were asked to provide vaccination records for children under 5 years of age. Interviewers copied vaccination information from the records onto the MICS3 questionnaire. Table 4 shows that 88.4 percent of children had health records. If the child did not have any record, the interviewer would read brief information about each vaccination to the mother or caretaker, who was then asked to recall whether or not the child had received any of the vaccinations and, for DPT and Polio, how many times.

Table 13 shows the percentage of children aged 12-23 months who received each of the vaccinations divided into two panels. In the top panel, the numerator includes all children who were vaccinated at any time before the survey according to the vaccination records or the mother or caretaker's report. In the bottom panel, only those who were vaccinated before their first birthday are included. For children without vaccination records, the proportion of vaccinations given before the first birthday is assumed to be the same as for children with vaccination records.

Approximately, 98 percent of children aged 12-23 months received a BCG vaccination before their first birthday. The percentage of children receiving the first dose of DPT before their first birthday is 97.1 percent. The percentage for subsequent doses of DPT declines slightly to 95.6 percent and 91.4 percent for the second dose and third dose, respectively. Similarly, the percentage of children receiving the first dose of polio vaccination is higher than for the second and third doses (97.6 percent, 95.9 percent and 91.5 percent, respectively). For measles vaccination, 91.4 percent of the children received the vaccine before their first birthday. Of children aged 12-23 months, 83.3 percent received all eight recommended vaccinations by their first birthday. (See details in Table 13).

**Figure 7 Percentage of children aged 12-23 months who received the recommended vaccinations by 12 months, Thailand, 2005-2006**



Similar to DPT and polio vaccinations, the percentage of children receiving the first dose is higher than the second, and the second higher than the third (88.3 percent, 87.6 percent and 85.7 percent, respectively).

For vaccination of children before their second birthday, about 89.7 percent of children aged 12-23 months had received all eight recommended vaccinations at any time before the survey and only 1.3 percent had received none. For individual vaccines, 98.1 percent of children aged 12-23 months had received BCG, 93.5 percent DPT, 93.6 percent polio, and 96.1 percent measles.

With respect to the background characteristics of vaccinated children, children in the North Region have the highest coverage of all the recommended vaccinations (95.4 percent), followed by children in the Northeast (94.0 percent); the lowest proportion (83.9 percent) was found among children in the Central Region (including Bangkok). There is little variation by sex, residential area, mother's education and household wealth. (See details in Table 14)

#### 4.2.2 TETANUS IMMUNIZATION

One of the MDGs is to reduce by three quarters the maternal mortality ratio, with one strategy to eliminate maternal tetanus. In addition, another goal is to reduce the incidence of neonatal tetanus to less than one case of neonatal tetanus per 1,000 live births in every province. The relevant World Fit for Children goal is to eliminate maternal and neonatal tetanus by 2005.

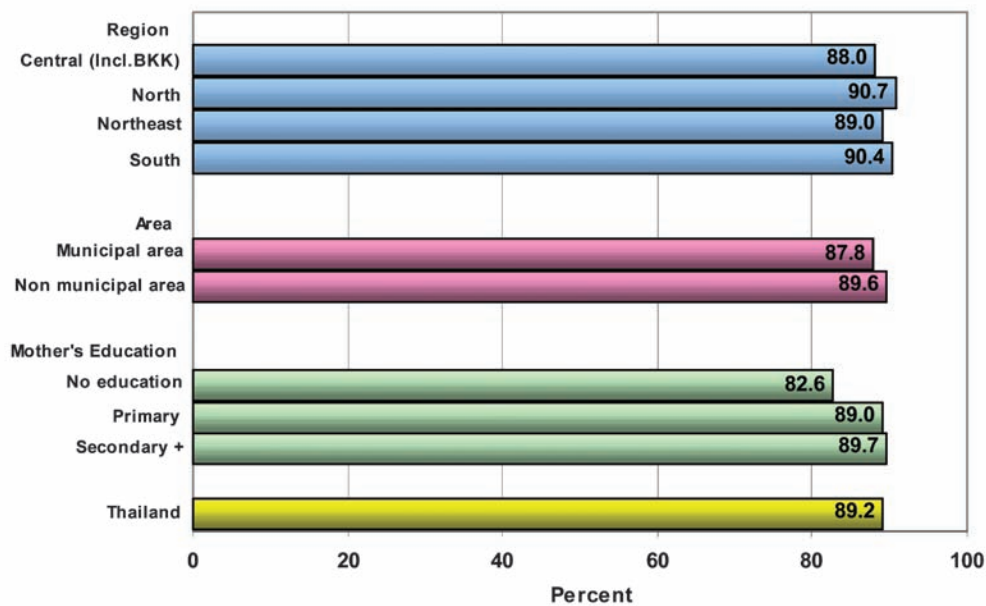
Tetanus vaccination of pregnant women is aimed at preventing neonatal tetanus, one of the major causes of infant death. All pregnant women should receive at least two doses of the vaccine during pregnancy for complete protection against maternal and neonatal tetanus. However, women (and their newborns) are also considered to be protected if the following conditions are met:

- Received at least two doses of tetanus toxoid vaccine, the last within the prior three years;
- Received at least three doses, the last within the prior five years;
- Received at least four doses, the last within 10 years;
- Received at least five doses during lifetime.

Table 15 shows the percentage of mothers with a live birth in the last 12 months before the interview. In Thailand, 89.2 percent of the women received vaccine against tetanus during pregnancy, which 80.8 percent received at least two doses during their last pregnancy. The proportion of women receiving at least two doses of tetanus toxoid vaccine, the last within the prior three years and receiving at least three doses, the last within the prior five years were 7.7 percent and 0.7 percent, respectively. The percentage of vaccination against tetanus for women is not much different between all groups of background characteristics.



**Figure 8 Percentage of women with a live birth in the last 12 months who are protected against neonatal tetanus, Thailand, 2005-2006**



### 4.2.3 ORAL REHYDRATION TREATMENT

Diarrhoea is the second leading cause of death among children under the age of 5 worldwide. Most diarrhoea-related deaths in children are due to dehydration from loss of large quantities of water and electrolytes from the body in liquid stools. Management of diarrhoea – either through oral rehydration salts (ORS) or a recommended home fluid (RHF) – can prevent many of these deaths. Preventing dehydration and malnutrition by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhoea.

International goals regarding diarrhoea in children are to: 1) by 2010, reduce by one-half the deaths due to diarrhoea among children under the age of 5 as compared to 2000 (A World Fit for Children); and 2) by 2025, reduce by two-thirds the mortality rate among children under five as compared to 1990 (Millennium Development Goals). In addition, A World Fit for Children calls for a reduction in the incidence of diarrhoea by 25 percent.

The indicators for reaching these goals are:

- Prevalence of diarrhoea
- Oral rehydration therapy (ORT)
- Home management of diarrhoea
- ORT or increased fluids **AND** continued feeding

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

Table 16 shows that in the two weeks preceding the survey, 8.7 percent of children aged 0-59 months had diarrhoea, and that most were in the 12-23 month old and 0-11 month age groups (15.0 percent and 10.7 percent, respectively). Of those children with diarrhoea, 68.3 percent received ORT with oral rehydration solution (ORS).

Table 16 also shows the percentage of children receiving various types of recommended liquids during the period of diarrhoea. Since mothers were able to name more than one type of liquid, the percentages do not necessarily add to 100. About 43 percent of children received fluids from ORS packets; 24.3 percent received pre-packaged ORS fluids; and 22.5 percent received recommended homemade fluids. The use rate of ORS or other fluids is associated with the child's sex, region and the socioeconomic status of the child's household. The rate for boys (71.0 percent) was slightly higher than that for girls (65.0 percent). The rate was also higher for children in the Northeast Region (78.1 percent) and lowest in the South (55.9 percent). Children of very rich households (75.4 percent) received ORS or other fluids more than those of poor households (67.8 percent). Notably, almost one in three children with diarrhoea (31.7 percent) received no treatment, with the highest level of non-treatment among children in the South (44.1 percent).

**Figure 9 Percentage of children aged 0-59 months with diarrhoea who received oral rehydration treatment, Thailand, 2005-2006**

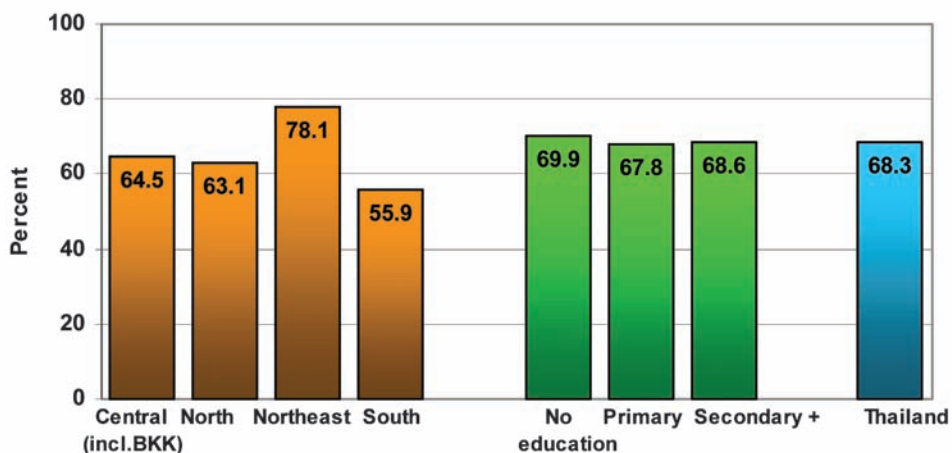
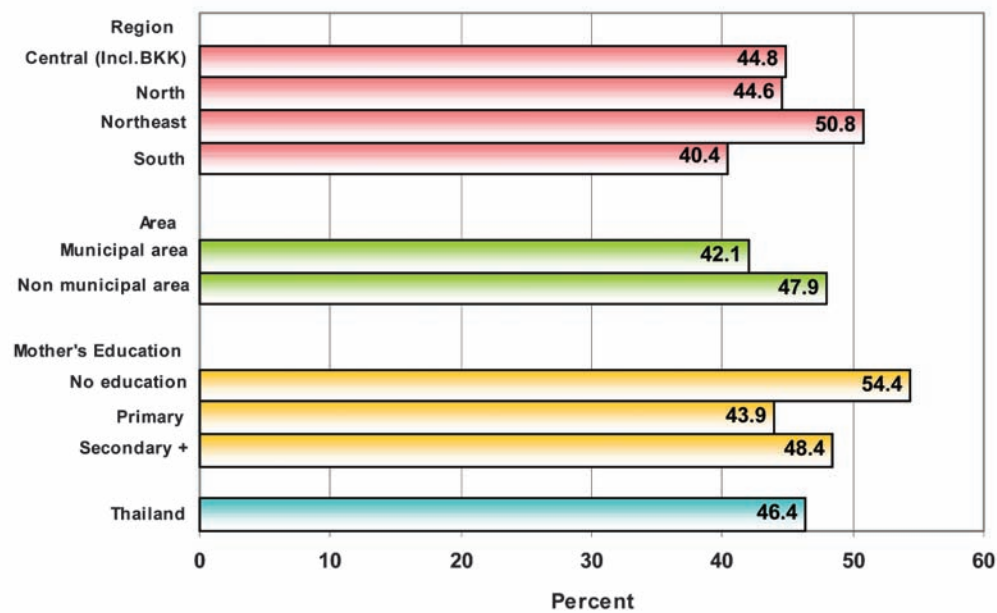


Table 17 shows that 46.4 percent of children aged 0-59 months with diarrhea received ORT or increased fluids and continued feeding. There are differences in the home management of diarrhoea by background characteristics. In the South, 7.3 percent of children received ORT or increased fluids and continued feeding; 5.0 percent of children with mother a having education of secondary level or higher; and 7.8 percent children belonged to non-Thai speaking households.

**Figure 10 Percentage of children aged 0-59 months with diarrhoea who received ORT or increased fluids, and continued feeding, Thailand, 2005-2006**



#### 4.2.4 CARE SEEKING AND ANTIBIOTIC TREATMENT OF CHILDREN WITH SUSPECTED PNEUMONIA,

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

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

The indicators are:

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

Table 18 shows that 4.5 percent of children aged 0-59 months were reported to have had acute respiratory infection during the two weeks preceding the survey, with the highest proportion among children in the North (6.5 percent). Of these children, 6.2 percent were children 12-23 months of age; 6.6 percent were from very poor households; 84 percent were taken to an appropriate health care provider; and more were municipal children (85.0 percent) than non-municipal children (79.9 percent). Children with suspected pneumonia were taken mostly to government hospitals (36.3 percent) and government health centres (26.2 percent). Only 23.3 percent were taken to a private hospital/clinic. About 1 percent of children with suspected pneumonia were treated with drugs purchased from a pharmacy or drugstore.

Table 19 shows the percentage of children aged 0-59 months with suspected pneumonia who received antibiotic treatment by sex, region, residence, age and socioeconomic factors.

In Thailand, 64.8 percent of children with suspected pneumonia received an antibiotic treatment during the two weeks prior to the survey. The percentage was slightly higher in municipal areas (68.1 percent) than in the non-municipal areas (64.0 percent). In comparison to other regions, children in the North comprised the lowest percentage of children receiving antibiotics (54.7 percent), while children in the Central Region (including Bangkok) had the highest percentage (70.1 percent), followed by children in the Northeast (69.3 percent).

In addition, children aged 24-35 months (70.9 percent) were treated with antibiotics more than any other age groups. Children of rich households received more antibiotic treatment than those of poor households (84.8 percent and 49.2 percent, respectively).

Issues related to knowledge of the danger signs of pneumonia are presented in Table 20. Obviously, mothers' knowledge of the danger signs is an important determinant of care-seeking behaviour. In this survey, mothers/caretakers were asked about their knowledge of the danger signs that prompted care seeking for their children in their real life experience. The most commonly identified symptom for taking a child to a health facility was when the child develops a fever (87.7 percent). Other identified signs for taking children immediately to a health care provider included when the child became sicker (36.7 percent), fast breathing (25.2 percent) and difficult breathing (24.8 percent). Overall, 15.1 percent of women knew of

the two danger signs of pneumonia – fast and difficult breathing. Approximately, 16-17 percent of these women were in the Central Region (including Bangkok), the Northeast and the South. The lowest percentage of women knowing the two danger signs of pneumonia was in the North (6.8 percent). (See details in Table 20)

#### 4.2.5 SOLID FUEL USE

More than three billion people around the world rely on solid fuels (biomass, charcoal and wood) for their basic energy needs, including cooking and heating. Cooking and heating with solid fuels lead to high levels of indoor smoke made up of a complex mix of health-damaging pollutants. The main problem with the use of solid fuels is that it increases the risks of acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer, and possibly tuberculosis, low birth weight, cataracts and asthma. The primary indicator is the proportion of the population using solid fuels as the primary source of domestic energy for cooking.

Solid fuel use alone is a poor proxy indicator for indoor air pollution, since the concentration of the pollutants is different when the same fuel is burnt in different stoves or fires.

Table 21 shows that 36.9 percent of households in Thailand are using solid fuels for cooking. Use of solid fuels was very low in municipal areas (11.3 percent), but very high in non-municipal areas, where almost half of the households (47.2 percent) were using solid fuels. Differentials with respect to household wealth and the educational level of the household head were also significant. The table clearly shows that very poor households and households with a non-educated household head use solid fuels more than other groups. Poorest households use solid fuel for cooking the most (90.1 percent), especially compared to rich and very rich households (5.4 percent and 0.4 percent, respectively). Similarly, use of solid fuels was positively associated with the educational level of the household head. While more than half of the households with a non-educated head (52.5 percent) use solid fuels, only 12.5 percent of households with a household head that has an education of secondary level and beyond do so.

In Thailand, the solid fuels used for cooking the most were charcoal (18.8 percent) and wood (18.0 percent), especially in the Northeast (32.6 percent and 33.9 percent, respectively) followed by the North (24.3 percent and 27.0 percent, respectively). Households in the South and the Central regions (including Bangkok) used solid fuels for cooking the least (only 9 percent). Most of the households in these two regions used LPG for cooking (84.5 percent in the Central Region, including Bangkok, and 86.2 percent in the South).

Among the households that used solid fuels for cooking, 94.4 percent of the households used closed stoves and 4.3 percent used an open stove or fire with no chimney or hood. The latter were mostly used in the South Region (8.8 percent), with the lowest figure found in the Central Region (including Bangkok) at just 2.6 percent. In addition, the use of an open stove or fire with no chimney or hood was associated with the education level of the head of the household and household wealth. Households with non-educated heads and very poor households used open stoves or fires with no chimney or hood the most (6.1 percent and 4.9 percent, respectively). (See details in Table 22)

### 4.3 ENVIRONMENT

#### 4.3.1 DRINKING WATER

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

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

The lists of indicators used in MICS are as follows:

#### Water

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

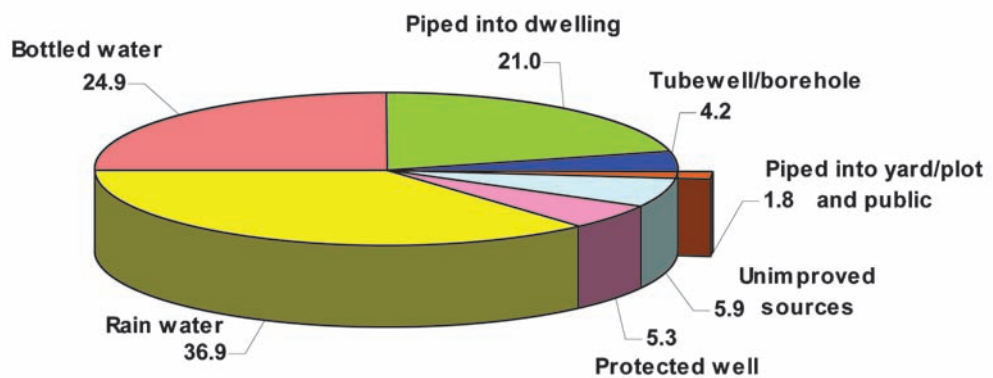
#### Sanitation

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

The distribution of population by main sources of drinking water is shown in Table 23. The populations using improved drinking water sources are those who use any of the following

types of supply: piped into dwelling or yard/plot, public tap, tube-well, protected well, protected rainwater and bottled water. Bottled water is considered as an improved water source only if the household is using an improved water source for other purposes, such as hand washing and cooking.

**Figure 11 Percentage distribution of household members by source of drinking water, Thailand, 2005-2006**



Overall, 94.0 percent of the population have access to improved drinking water sources, of which 97.6 percent are living in municipal areas and 92.5 percent in non-municipal areas. In the Central Region (including Bangkok), 98.1 percent of the population gets its drinking water from an improved source, whereas only 81.5 percent people in the Southern Region do so. The situation in the South is considerably worse than in other regions.

The source of drinking water for the population varies strongly by region (Table 23). Bottled water use is highest in the Central Region (including Bangkok) at 36.5 percent, followed by the South (28.3 percent) and the North (26.9 percent). The second most important source of drinking water is piped water. In the Central Region (including Bangkok), the North and the South, 33.8 percent, 25.8 percent and 10.4 percent, respectively, use water that is piped into their dwelling or into their yard or plot.

Notably, the population in the Northeast Region uses collected rainwater for drinking the most (66.3 percent); in the South, 11.6 percent of the population use water from unprotected wells for drinking, higher than in the other regions.

Use of in-house water treatment is presented in Table 24. Households were asked about the ways they may be treating water at home to make it safer to drink. Boiling, adding bleach or

chlorine, using a water filter and using solar disinfection were considered proper treatments for drinking water. The table shows that 56.1 percent of the Thai population drink untreated water and 27.4 percent use appropriately treated water. Sources of water before treatment are from both improved and un-improved drinking water sources (33.0 percent and 14.8 percent, respectively).

The population in the Central Region (including Bangkok) uses an appropriate water treatment method the most (38.6 percent), and the most used method is a water filter (27.4 percent). In contrast, the population in the Northeast uses an appropriate water treatment method the least (16.2 percent). The most popular methods used for water treatment in the Northeast are straining through a cloth (10.0 percent) and letting the water stand and settle (22.1 percent). Neither of these is considered appropriate.

Use of appropriate in-house water treatment is associated with residential area and socioeconomic status. The percentage of the municipal population appropriately treating water is approximately double that of non-municipal areas (43.4 percent and 20.5 percent, respectively). The higher the wealth status of the households, the higher the percentage of the population using appropriate in-house water treatment: 15.3 percent in very poor households, 26.8 percent in medium wealth households, and 46.3 percent in very rich households.

Table 25 shows that for 91.5 percent of households, the drinking water source is on the premise and no one has to collect water from elsewhere, while 8.1 percent of households had to go to outside water sources. For these households, the average amount of time to obtain water (one round trip from home to drinking water source) was about 10 minutes. The percentage of the population having to get to water sources is highest in the Northeast Region (11.5 percent), and for these households it took 14 minutes to obtain water.

Table 26 shows that for the majority of households, an adult female (61.4 percent) is usually the person collecting the water when the source of drinking water is not on the premises. Adult men collecting water comprise of 32.0 percent of all cases.

#### 4.3.2 DISPOSAL OF EXCRETA

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases, including diarrhoeal diseases and polio. *Improved sanitation facilities* include: flush/pour flush toilets connected to sewage systems, septic tanks or pit latrines; and pit latrines with slabs.



Table 27 shows that 99.2 percent of the population living in households use improved sanitation facilities. Almost all of the population in municipal areas (99.7 percent) use improved sanitation facilities; however, a slightly lower percentage of improved sanitation facilities use is found in the non-municipal areas (99.0 percent). The population in the South Region are a bit less likely to use improved sanitation facilities (96.6 percent) than other regions (about 99 percent).

Among those having improved sanitation facilities, the most common facility is a flush toilet with a connection to septic tank (90.9 percent). Unimproved sanitation facilities include use of flush or pour flush to rivers or canals, pit latrines without slabs, or simply having no facilities at all (using bush and field). Unimproved sanitation facilities are mostly used in the South (3.3 percent) and in households with a non-educated head (3.5 percent), very poor households (2.1 percent) and non-Thai speaking households (6.2 percent).

#### 4.3.3 DISPOSAL OF CHILDREN'S FAECES

Safe disposal of a child's faeces is defined as the disposal of the child's last stool by having the child using the toilet, or the faeces being put or rinsed into a flush/pour flush toilet connected to piped sewer system or into a latrine and pit latrine with slabs.

Safe disposal of the faeces of children 0-2 years of age was found in 64.6 percent of the children's households, with the highest percentage in the North (71.4 percent) and the lowest in the South (51.8 percent). Safe disposal methods used are putting or rinsing faeces into flush/pour flush toilets or latrines (40.4 percent) and having the child use a toilet (24.2 percent). Children of households with a mother who has a secondary level education or above (18.9 percent) use a safe disposal method more often than children with non-educated mothers (65.4 percent compared to 51.9 percent). (See details in Table 28)

Table 28 also shows unsafe disposal methods of children's faeces. The unsafe disposal methods include putting faeces in the garbage (16.4 percent), burying it (9.1 percent) and leaving it in the open (7.2 percent). Regional differentials exist. The unsafe disposal method practiced most frequently in the Central Region (including Bangkok) is putting children's faeces in the garbage (26.3 percent), while in the Northeast it is burying the faeces (15.9 percent). In the South, the unsafe methods practiced most are putting faeces in the garbage (20.0 percent) and leaving it in the open (14.6 percent).

An overview of the percentage of households with improved sources of drinking water and sanitary means of excreta disposal is presented in Table 29. Overall, 94 percent of the population in Thailand has access to improved drinking water sources and 99.2 percent use

improved sanitation facilities for excreta disposal. The percentage of the population having access to both improved drinking water sources and improved sanitation facilities was 93.6 percent. Of these, the highest proportion, 97.9 percent, are living in the Central Region (including Bangkok), while the lowest proportion, 79.8 percent, are in the Southern Region. A higher percentage is also found among households having a head of household with an education level of secondary and beyond (96.7 percent). Non-Thai speaking households show a lower percentage (64.9 percent). (See details in Table 29)

#### 4.3.4 LIVING IN SLUM HOUSING

The survey on living in slum housing was done only among populations living in municipal areas. There are three definitions for slum housing: 1) over-crowding, meaning more than three persons per sleeping room; 2) lack of improved water sources for use; and 3) lack of improved sanitation facilities for use.

Table 30 shows that in Thailand, a total of 5,677,957 households in municipal area of these 9.9 percent live in slum conditions. Of these households, 7.7 percent are over-crowded; 2.3 percent lack improved water sources; and 0.2 percent lack improved sanitation facilities. Most of the households living in slum conditions are found among households with non-educated household heads or with just primary education (13.8 percent), very poor households (21.5 percent), and non-Thai speaking households (32.6 percent).

### 4.4 REPRODUCTIVE HEALTH

#### 4.4.1 CONTRACEPTION

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

In this study, contraception means the use of any contraceptive methods by women aged 15-49 years currently married or in union, with and without marriage certification.

Use of any method of contraception is reported by 71.5 percent of women, aged 15-49, currently married or in union (Table 31). With regard to contraceptive method of choice, 70.1 percent of married women in Thailand used a modern method, which include contraceptive pill (30.9 percent), female sterilization (24.5 percent) and injection (10.4 percent).

Use of condom, IUD, and male sterilization are reported among about 1 percent by the women and 1.4 percent use any traditional method. The traditional methods used include periodic abstinence (0.6 percent), withdrawal (0.4 percent) and others (0.5 percent).

Contraceptive prevalence is highest in the North and Northeast at about 75 percent, followed by 69.5 percent in the Central Region (including Bangkok) and the lowest in the South at 59.9 percent. About 74-78 percent of married or in union women aged 25-39 years currently use a method of contraception, compared to 66.4 percent of 15-19 year olds and 62.5 percent of 45-49 year olds. Additionally, the number of contraceptive users among women having 2 or 3 living children is 81 percent.

Married women living in non-municipal areas currently use any contraceptive methods more than municipal women (72.9 percent compared to 67.9 percent). Women's education level is strongly associated with contraceptive prevalence. The percentage of women using any method of contraception rises from 58.4 percent among those with no education to 74.1 percent among women with a primary education. Women from poor households (75.1 percent) use contraception at a higher rate than very rich women (68.7 percent).

#### 4.4.2 ANTENATAL CARE

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and that of their infants. Better understanding of foetal growth and development, and its relationship to the mother's health, has resulted in increased attention to the potential of antenatal care as an intervention to improve both maternal and newborn health. For example, if the antenatal period is used to inform women and families about the danger signs and symptoms and about the risks of labour and delivery, it may provide the route for ensuring that pregnant women do, in practice, deliver with the assistance of a skilled health care provider. The antenatal period also provides an opportunity to supply information on birth spacing, which is recognized as an important factor in improving infant survival. Tetanus immunization during pregnancy can be life-saving for both the mother and infant. The prevention and treatment of malaria among pregnant women, management of anaemia during pregnancy and treatment of STIs can significantly improve foetal outcomes and improve maternal health. Adverse outcomes such as low birth weight can be reduced through a combination of interventions to improve women's nutritional status and prevent infections (e.g., malaria and STIs) during pregnancy. More recently, the potential of the antenatal period as an entry point for HIV prevention and care, in particular for the prevention of HIV transmission from mother to child, has led to renewed interest in access to and use of antenatal services.

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

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

Antenatal care (by a doctor, nurse, or midwife) coverage is relatively high in Thailand, with 97.8 percent of women aged 15-49 years who gave birth in the two years preceding the survey receiving antenatal care at least once during the pregnancy. The care was provided by a medical doctor (62.9 percent), a nurse/midwife (33.0 percent) and a traditional birth attendant /community health worker (1.0 percent). Only 1.2 percent of the pregnant women did not receive ANC during pregnancy. (See details in Table 32)

About 95-98 percent of women aged 15-49 years in all regions received ANC provided by skilled personnel (doctor, nurse, or midwife) at least once during pregnancy. The highest level of antenatal care is found in women with a secondary education level or higher (98.5 percent), more than for women with no education (90.5 percent). No significant variables are found for other background characteristics. It is noted that women in the South received ANC from traditional birth attendant /community health worker at higher rate than in other regions.

Almost all of the women aged 15-49 years (98.8 percent) had received ANC at least once during pregnancy. The types of services pregnant women received were blood chemistry, blood pressure measurement, urine testing, and weight measurement. (See details in Table 33)

#### 4.4.3 ASSISTANCE AT BIRTH

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

The MICS included a number of questions to assess the proportion of births attended by a skilled attendant. *Skilled assistance at delivery* is defined as assistance provided by a doctor, nurse, midwife or auxiliary nurse/midwife.

Table 34 shows that 97.3 percent of births occurring in the preceding two years prior to the survey were delivered by skilled personnel. This percentage is highest in the Central Region (including Bangkok) at 99.4 percent, followed by the Northeast at 98.6 percent, and with the lowest rate in the South at 92.8 percent. In addition, women in the South received the highest levels of assistance at birth from a nurse/midwife (41.1 percent) and from a traditional birth attendant/community health worker (7.2 percent).

Assistance at birth is significantly associated with women's education and the socioeconomic status of the women's households. The more educated a woman is, the more likely she is to have delivered with the assistance of a skilled attendant (81.1 percent among those with no education, 95.3 percent among women with primary education, and 99.3 percent among women with secondary or higher education). Women from very poor households received assistance from skilled attendants during delivery at 92.7 percent, compared to 99.8 percent of very rich women (99.8 percent).

In regard to delivery facilities, 96.7 percent had their births in health facilities, both government and private. Prevalence of delivery facilities vary with women's background characteristics, similar to assistance at delivery by skilled personnel. A remark should be made that the 63.6 percent of the interviewees who delivered by "medical doctor" could be an error because the Thai generally call any health personnel (such as public health worker, nurse, midwife and physician) "medical doctor".

#### 4.5 CHILD DEVELOPMENT

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

Information on a number of activities that support early learning was collected in the survey. These included the involvement of adults with children in the following activities: reading books or looking at picture books, telling stories, singing songs, taking children outside the

home, compound or yard, playing with children, and spending time with children naming, counting, or drawing things.

For almost four in five (78.6 percent) children under the age of 5, an adult engaged in more than four activities that promote learning and school readiness during the three days preceding the survey (Table 35). The average number of activities that adults engaged in with children was four. The table also indicates that the father's involvement in one or more activities was 57.5 percent. The average number of activities that the father engaged in with children was 2.2. The percentage of children aged 0-59 months living in a household without fathers was 33.9 percent. There is very little gender differential in terms of fathers engaged in activities with male children (58.9 percent) or female children (56.1 percent). Larger proportions of fathers engaged in learning and school readiness activities in municipal areas (65.6 percent) than in non-municipal areas (54.3 percent).

Insignificant differentials of adult engagement in activities with children (approximately 78-81 percent) are observed by region. On the other hand, strong differentials of father involvement are recognized: the lowest in the Northeast (43.6 percent), increases to 57.5 percent in the North, and to 74.2 percent, the highest, in the South. The findings are negatively associated with the living arrangements of the children. The percentage of children living in a household without their fathers was highest in the Northeast at 47.3 percent, which decreased to 35.0 percent in the North and 16 percent in the South. Educated fathers (primary level and secondary and higher) engaged more in such activities with children than those with no education (77.4 percent, 81.0 percent and 84.8 percent, respectively).

Exposure to children's and non-children's books in the early years not only provides the child with reading activities, but also gives the child opportunities to see older children, including siblings and cousins, reading in the household. Presence of books is important for later school performance and IQ scores.

In Thailand, 68.3 percent of children are living in households where at least three non-children's books are present (Table 36). However, 42.6 percent of children aged 0-59 months have children's books. The median number of non-children's books is much higher than that of children's books (seven and two books, respectively). Municipal children appear to have more access to both types of books than those living in non-municipal households (72.6 percent and 66.6 percent, respectively). Age differentials exist in terms of children's books. In the households of 51.7 percent of children aged 24-59 months, there are three or more children's books, while the figure is 28.8 percent for children aged 0-23 months.

Table 36 also shows that 31.1 percent of children aged 0-59 months had three or more playthings to play with in their homes, while 8.4 percent had none. In the MICS, four types of playthings were included: (1) household objects, such as plates, bowls, pots, spoons, etc.; (2) objects and materials found outside the home used as toys, such as sticks, stones, rocks, shells, leaves, etc.; (3) homemade toys, dolls, cars, etc.; and (4) toys that came from a store or given as a present. Children aged 0-59 months played with toys from store/present the most (77.3 percent), while all other types of toys accounted for about 32-39 percent. The proportion of male and female children who have three or more playthings to play with is close: 30 percent among male children and 32.2 percent among female children. The proportion of children having three or more playthings to play with is less in municipal households than that in non-municipal homes (27.5 percent and 32.5 percent, respectively), and children aged 24-59 months have more than the 0-23 month old children (37.4 percent and 21.5 percent, respectively).

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

Table 37 shows that 11 percent of children aged 0-59 months were left in the care of other children, while 3 percent were left alone during the week preceding the interview. Combining the two care indicators, it is calculated that 13.2 percent of children were left with inadequate care during the week preceding the survey. Differences were observed by residential areas, sex of the child, socioeconomic status of households, and language used in the household. Inadequate care was more prevalent among children living in municipal households (14.5 percent) than those living in non-municipal areas (10.0 percent), and a higher proportion among children 24-59- months (15.7 percent) than with children 0-23 months (9.4 percent). Children living in very rich households had been left with inadequate care over twice as much as those of very poor households (18.2 percent and 7.2 percent, respectively). Moreover, children living in non-Thai speaking households (21.4 percent) were left under inadequate care more than those in Thai speaking households.

## 4.6 EDUCATION

### 4.6.1 PRE-SCHOOL ATTENDANCE AND SCHOOL READINESS

Receiving a pre-school education in an organized learning or child education programme is important for preparing children to go to school. One of the A World Fit for Children goals is the promotion of early childhood education.

Table 38 shows that over half of the children aged 36-59 months (60.7 percent) are currently attending some form of organized early childhood education programme - participating in early childhood centres or pre-school development programmes organized by private or public sectors, including kindergarten or community child care centres. Differences by residential areas and region are observed. The proportion of municipal children attending a pre-school programme is higher than that of non-municipal children (63.9 percent and 59.4 percent, respectively). Percentage of children in the North who are currently attending pre-school education (78.3 percent) is higher than that of children in other regions (approximately 54-58 percent).

Of the children currently attending a pre-school education programme, 73.5 percent are 48-59 month old children and 67.2 percent are children of mothers having secondary or higher education. Gender differentials are slightly observed. On the other hand, differences in regard to socioeconomic status of the households are found. Attendance of children from poor households is lower than from very rich household children (54.8 percent and 77.6 percent, respectively).

In addition, 99.4 percent of children in the first grade of primary school attended pre-school the previous year (Table 38), an important indicator of school readiness. Differences in term of sex of the child, region and residential areas for pre-schooler in continuing to first grade education are minimal.

#### 4.6.2 PRIMARY AND SECONDARY SCHOOL PARTICIPATION

Universal access to basic education is one of the most important Millennium Development Goals. Education is a vital prerequisite for combating poverty, empowering women, protecting children from exploitative labour and sexual exploitation, promoting human rights and democracy, protecting the environment, and influencing population growth.

The indicators for primary and secondary school attendance include:

- Net intake rate in primary education
- Net primary school attendance rate
- Net secondary school attendance rate
- Net primary school attendance rate of children of secondary school age
- Female to male education ratio (GPI)



The indicators of school progression include:

- Survival rate to grade five
- Transition rate to secondary school
- Net primary completion rate

In Table 39, of children who are of primary school entry age (age 7) in Thailand, 69.6 percent are attending the first grade. Sex differentials are slightly observed at 70.7 percent for boys and 68.6 percent for girls. Significant differentials are present by region and residential areas. In the Northeast and South regions, the percentage of primary school age children attending Grade 1 (Prathom 1) is at about 75 percent, while it is just 63.5 percent in the Central Region (including Bangkok) and lowest, at 61.0 percent, in the North Region. Children's participation in primary school is a little more timely in non-municipal areas (71.1 percent) than in municipal areas (65.6 percent). A positive correlation with mother's education is observed. For children whose mothers have no education, 59.2 percent were attending the first grade, while the figure is about 70 percent among children whose mothers are educated. (See details in Table 39)

### PRIMARY SCHOOL LEVEL

Table 40 provides the percentage of children of primary school age attending primary school. The majority of children of primary school age are attending school (97.9 percent). Differentials by residential areas are very insignificant (98.0 percent for municipal children and 97.8 percent for those living in non-municipal areas). Regional differentials are hardly observed, and children's background characteristics have no impact on the percentage of children of primary school age attending school.

### In the MICS, children aged 7-12 years are classified as being primary school age children due to the following reasons:

In Thailand, the school year starts in May. Data collection for the MICS was carried out from December 2005 to February 2006, which was the end of the 2005 school year. Pursuant to the Compulsory Education Act B.E. 2545, children who are going to be 7 years old must attend the first grade. Therefore, during the data collection period of the MICS, these children may reach 7 years of age. These children, however, would have been 6 years old when they started school in May 2005. As a result, the children identified as being 7 years old in this survey were actually 6 years old when the school year started.

## SECONDARY SCHOOL LEVEL

Table 41 shows that 79.8 percent of the children of secondary school age (age 13-18) are attending secondary school or higher. Girls attend at a higher level than boys (83.1 percent and 76.6 percent, respectively). Differences by region are observed. Children in the Northeast Region have the highest attendance rate at 84.5 percent, followed by those in the North (82.4 percent), with the lowest level in the South (71.5 percent). There is no difference in regard to residential areas, but positive correlation with mother's education and socioeconomic status is observed. Of those boys and girls whose mothers have at least secondary school education, 93.7 percent were attending secondary school or higher, while the proportion dropped to 54.3 percent among children whose mothers have no education. In rich households, the proportion was around 88.5 percent, while 74.9 percent of children living in the poorest households were attending.

The primary school net attendance ratio of children of secondary school age (age 13-18) is presented in Table 42. Only 2.3 percent of the children of secondary school age are attending primary school when they should be attending secondary school (boys at 2.6 percent and girls at 2.0 percent). The highest proportion is found among children in the South, at 3.9 percent, while the lowest is in the Northeast, at 1.5 percent. Of these children, 11.5 percent are 13 years old; 10.6 percent have mothers with no education; and 7.2 percent living in non-Thai speaking households. (See details in Table 42)

The percentage of children entering first grade (Prathom 1) who eventually reach Grade 6 is presented in Table 43. Of all children starting Grade 1, almost all of them (99.8 percent) will eventually reach Grade 6. (Notice that this number includes children that repeat grades and that eventually move up to reach grade five.) Insignificant differences by region, residential area and background characteristics are observed with regard to children's attendance.

The net primary school completion rate and transition rate to secondary education is presented in Table 44. At the time of the survey, only 86.8 percent of the children of primary completion age were attending the last grade of primary education, while 97.2 percent of children who had completed the last grade of primary school were attending the first grade of secondary school. The lowest proportion was found in children living in the south (79.5 percent). Children whose mothers had no education having a lower rate than those having primary, or secondary or higher education (56.4 percent, 87.9 percent and 90.5 percent, respectively). No significant differences in transition rate to secondary education among children with different mother tongues were found.

Table 45 shows the ratio of girls to boys attending primary and secondary education or higher. These ratios are better known as the Gender Parity Index (GPI). Notice that the ratios included here are obtained from net attendance ratios rather than gross attendance ratios. Gross ratios provide an erroneous description of the GPI, mainly because in most of the cases the majority of over-age children attending primary education tend to be boys. The table shows that gender parity for primary school is 1.00 and 1.1 for secondary education. These figures indicate that there is no difference in the attendance of girls and boys in primary and secondary school.

### 4.6.3 ADULT LITERACY

One of the A World Fit for Children goals is to assure adult literacy. Adult literacy is also an MDG indicator, relating to both men and women. In MICS, since only a women's questionnaire was administered, the results are based only on females aged 15-24 years. Literacy was assessed on the ability of women who had never attended school or had only a primary school level of education to read a short simple statement.

From the Table 46, 96.4 percent of women aged 15-24 years in Thailand are literate. Little difference is seen by region, residential area, and women's age. However, differences are found in terms of socio-economic status. The proportion of women from very wealthy households who are literate is higher than that of women from very poor households (97.9 percent and 92.8 percent, respectively). A lower percentage of literacy is shown among women from non-Thai speaking households (at 82.3 percent) as compared to Thai speaking households (at 97.7 percent).

## 4.7 CHILD PROTECTION

### 4.7.1 EARLY MARRIAGE

According to UNICEF's worldwide estimates, over 60 million women aged 20-24 were married/in union before the age of 18. Factors that influence child marriage rates include: the state of the country's civil registration system, which provides proof of age for children; the existence of an adequate legislative framework with an accompanying enforcement mechanism to address cases of child marriage; and the existence of customary or religious laws that condone the practice.

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. These are factors that reinforce the gendered nature of poverty. Women

married at younger ages are more likely to dropout of school, experience higher levels of fertility, domestic violence and maternal mortality.

The percentage of Thai women aged 15-19 years who were married or in union is 14.6 percent. Differences by region, women's education and socioeconomic status of the household are observed. Of these women, the most, 14.6 percent, are in the Central Region (including Bangkok), followed by the North (15.0 percent) and the lowest in the South (12.3 percent). Almost half of the women (47.5 percent) have a primary education. Most of these 15-19 year old women live in very poor households (17.5 percent), compared to 6.9 percent living in very rich households.

The percentage of women aged 15-19 years who were married or in union before 15 years of age is 2.3 percent, rising to 3.0 percent in the North Region, which is the highest. Of these women, 8.1 percent have no education and 2.7 percent live in non-municipal areas.

Women who were married/in union before 18 years of age account for 19.7 percent. Almost one in four (23 percent) of these women are living in the North and the Northeast and more in the non-municipal areas (22.7 percent) than in the municipal areas (13.6 percent). Women with low levels of education tend to get married before reaching 18 years. The rate for women with only a primary education is 32.5 percent and this falls to 27.1 percent for women with a secondary education and 10.6 percent for women with higher education. Similarly, higher levels of very poor women got married before the age of 18 years (28.1 percent), compared to 18.0 percent among rich women and 9.1 percent among the very rich. (See details in Table 47)

Table 48 shows spousal age differences. From the table, 97.8 percent of 15-19 year old married/in union women have an older husband or partner. Half of these women (50.2 percent) have a husband/partner who is 0-4 years older, 33.1 percent have a husband/partner who is 5-9 years older and 14.5 percent have a husband/partner who is 10 or more years older. Only 1.6 percent of married/in union women have a younger husband/partner. Similarly, among married/in union women aged 20-24 years, 48.7 percent have a husband partner who is 0-4 year older, 29.9 percent have a husband/partner who is 5-9 years older and 7.8 percent have younger husband/partner.

#### 4.7.2 CHILD DISABILITY

One of the A World Fit for Children goals is to protect children against abuse, exploitation, and violence, including the elimination of discrimination against children with disabilities. For children between 2-9 years of age, a series of questions were asked to assess a number of

disabilities/impairments, such as sight impairment, deafness and difficulties with speech. This approach rests in the concept of functional disability developed by WHO and aims to identify the implications of any impairment or disability for the development of the child (such as health, nutrition and education).

Table 49 presents the percentage of children aged 2-9 years with a disability reported by their mother/caretaker. Of these children, 12.3 percent are reported to have at least one disability, with the highest proportion (16.1 percent) living in the South and the lowest in the North (7.5 percent). Differences by mother's education and socioeconomic status of households are present. About 15 percent of children aged 2-9 years that reported having at least one disability have mothers with no education and about 14 percent live in poor households. In addition, 11.5 percent of 2-year-old children cannot name at least one object, with the highest percentage (13.7 percent) found in the Central Region (including Bangkok), the lowest in the North (9.8 percent). Figures for children living in municipal areas (14.1 percent) are higher than those for non-municipal children (10.5 percent). In addition, the percentage of 3-9 year old children whose speech is not normal is 2.9 percent. The highest proportion of these children is found in the North (3.8 percent), very poor households (3.8 percent) and among those having mothers with no education (4.1 percent).

#### 4.8 HIV/AIDS INFECTION, ORPHANED AND VULNERABLE CHILDREN

##### 4.8.1 KNOWLEDGE OF HIV/AIDS TRANSMISSION

One of the most important prerequisites for reducing the rate of HIV infection is accurate knowledge of how HIV is transmitted and strategies for preventing transmission. Correct information is the first step toward raising awareness and giving young people the tools to protect themselves from infection. Misconceptions about HIV are common and can confuse young people and hinder prevention efforts. Different regions are likely to have variations in misconceptions although some appear to be universal (for example, that sharing food can transmit HIV or that mosquito bites can transmit HIV).

The UN General Assembly Special Session on HIV/AIDS (UNGASS) called on governments to improve the knowledge and skills of young people to protect themselves from HIV. The indicators to measure this goal, as well as the MDG of reducing HIV infections by half, include improving the level of knowledge of HIV and its prevention and changing behaviours to prevent further spread of the disease. The HIV module was administered to women 15-49 years of age.

One indicator, which is both an MDG and UNGASS indicator, is the percentage of young women who have comprehensive and correct knowledge of HIV prevention and transmission. Women were asked whether they knew of the three main ways of HIV transmission – having only one faithful uninfected partner, using a condom every time you have sex, and abstaining from sex. The results are presented in Table 50.

Table 50 shows that 98.3 percent of women aged 15-49 years in Thailand have heard of AIDS. However, the percentage of women who know all three main ways of preventing HIV transmission is only 49 percent. When asked, 85.5 percent of the women know that transmission of HIV/AIDS could be prevented by using condoms every time they have sex; 80.1 percent of the women know that having only one faithful uninfected sex partner could prevent transmission of HIV/AIDS; and 60.3 percent believe that abstaining from sex could prevent HIV/AIDS transmission. Overall, 94.7 percent of these women know at least one prevention method for HIV/AIDS, and only 5.3 percent do not know any method. Among those who do not know any method, 29.9 percent are women with no education and 12.6 percent live in non-Thai speaking households. The highest prevalence of not knowing any method of prevention is among women in the South (6.6 percent) and the least is in the Northeast (3.8 percent).

Table 51 presents the percentage of women aged 15-49 years who correctly identify misconceptions about HIV/AIDS transmission. Of these, 93.1 percent know that HIV cannot be transmitted by supernatural means; 71.6 percent know that HIV is not caused by mosquito bites; and 77.9 percent know that a healthy-looking person can be infected by HIV.

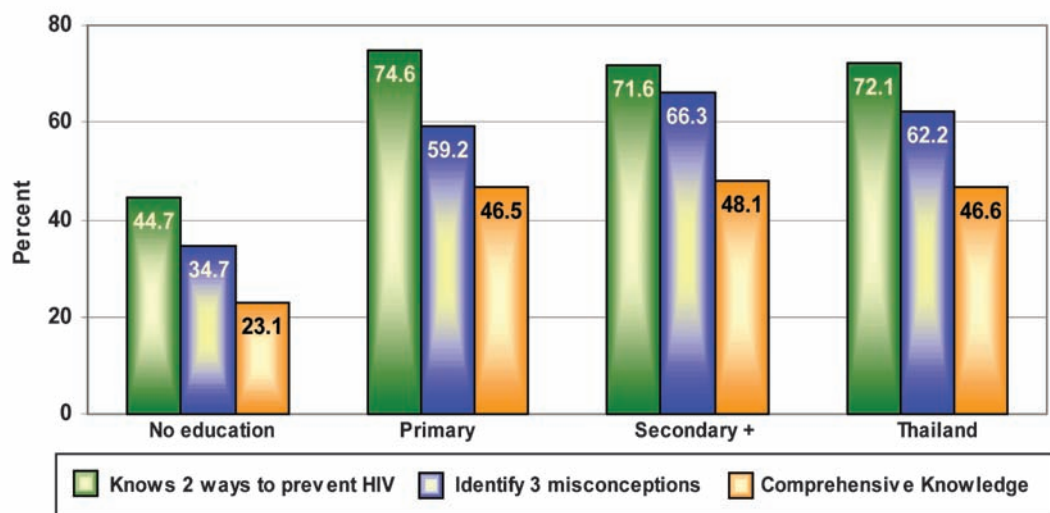
Overall, 62.2 percent of the women reject the two most common misconceptions of HIV transmission and also know that a healthy-looking person could be infected. Level of education is positively associated with knowledge on misconceptions of HIV transmission. Differences by women's education and socioeconomic status of the households are evident. Women with no education (34.7 percent) are less knowledgeable than women with primary education (59.2 percent) and secondary or higher education (66.3 percent); as are very poor women (57.6 percent) compared to rich women (65.7 percent). Women in the South had the lowest percentage to correctly identify the three misconceptions about HIV transmission (56.2 percent).

Table 51 also shows that 78.3 percent of women aged 15-49 years know that HIV cannot be transmitted by sharing food with AIDS patients, and 95.6 percent know that HIV can be transmitted by sharing needles. The correctly identified knowledge is positively related to women's education. The percentage of women with no education who know that HIV cannot

be transmitted by sharing food with AIDS patients is at 49.6 percent, and this rises to 76.2 percent among women with primary education and to 81.8 percent for secondary education or higher.

In summary (Table 52), 72.1 percent of the women know two ways of preventing HIV transmission and 62.2 percent know all three misconceptions about HIV transmission. Only 46.6 percent of the women have comprehensive knowledge of HIV/AIDS transmission, which includes knowing two ways of preventing HIV transmission and rejecting three misconceptions. This comprehensive knowledge of HIV/AIDS transmission is positively correlated with women's education. The percentage of women with no education having comprehensive knowledge of HIV/AIDS transmission (23.1 percent) is lower than that of women with primary education (46.5 percent) and among women with secondary or higher education (48.1 percent).

**Figure 12 Percent of women who have comprehensive knowledge of HIV/AIDS transmission, Thailand, 2005-2006**



Knowledge of mother-to-child transmission of HIV is also an important first step for women to seek HIV testing when they are pregnant in order to avoid infection in the baby. Women should know that HIV can be transmitted during pregnancy, during delivery and through breastfeeding.

The level of knowledge among women age 15-49 years concerning mother-to-child transmission is presented in Table 53. Overall, 93.3 percent of women in Thailand know that HIV can be transmitted from mother to child. The percentages of women knowing that

HIV is transmitted from mother to child during pregnancy, at delivery and through breast milk are 87.6 percent, 82.4 percent, and 76.3 percent, respectively. In addition, 68.3 percent of the women know all three methods of mother-to-child transmission of HIV, while about 5 percent of the women do not know a method. The knowledge of mother-to-child transmission of HIV is associated with women's education: the percentage of women with no education (55.1 percent) is lower than that of women with a primary education (70.8 percent)

In the MICS, women were interviewed for their attitudes toward people having HIV/AIDS by being asked four questions on whether they: 1) would care for a family member infected with AIDS; 2) would buy food from a vendor who was HIV positive; 3) think that a female teacher who is HIV positive should be allowed to teach in school; and 4) would want to keep the HIV status of a family member a secret.

Table 54 shows that 36.7 percent of women aged 15-49 years would want to keep the HIV status of a family member a secret, 29.2 percent thought that an HIV positive teacher should not be allowed to work and 65.3 percent would not buy food from a vendor with HIV/AIDS. It is noted that almost all groups of women give more importance to the issue of not buying food from a vendor with HIV/AIDS than allowing an HIV positive teacher to work.

Overall, note should be taken that 79.3 percent of the women agreed with at least one of the four discriminatory statements, and the highest is found among the women in the South (82.2 percent). One in five women (20.7 percent) agrees with none of the discriminatory statements, the highest rate being found among women in the North (27.4 percent).

#### 4.8.2 TEST FOR HIV

HIV testing is necessary for pregnant women because it can prevent transmission of the disease from mother to child. It has to be done with the women's consent. Table 55 shows that 97.8 percent of women aged 15-49 years who had given birth within the two years preceding the survey received antenatal care from a health professional. From the table, 86.2 percent of the women received counselling and information about HIV prevention during their antenatal visit; and 87.5 percent were tested for HIV. Of those who were tested for HIV, 84.0 percent received the results of HIV testing during the visit. It is noted that the percentage of women receiving HIV test results is different by region, women's education and language used in the households. Of all the regions, the percentage of women in the South receiving the test results is the lowest at 74.9 percent, while 88.6 percent of women in the Central Region (including Bangkok) received the test results. Women with no education



(58.3 percent) received the test results less than women with secondary or higher education (88.2 percent); and a higher percentage of Thai speaking women received test results than non-Thai speaking women (86.4 percent and 67.7 percent, respectively).

### 4.8.3 ORPHANS AND VULNERABLE CHILDREN

**Orphans** are children who have experienced the death of either parent or both parents.

**Vulnerable** children include children with a parent who is chronically ill, and children having an adult (aged 18-59) in the household who either died (after being chronically ill) or who was chronically ill in the year prior to the survey.

Children who are orphaned or living away from their parents may be at increased risk of discrimination, neglect or various forms of exploitation – including harmful labour or sexual exploitation. Monitoring the children and the living arrangements for children who have lost both parents as compared to children whose parents are alive (and who live with at least one of these parents), is one way to identify children who are at risk and ensure that children's rights are being met.

In Thailand, of children aged 0-17 years, 63.0 percent are living with both parents; 19.3 percent are not living with a parent; 4.7 percent are orphaned, with one or both parents dead. In addition, 11.5 percent of children are living with only their mother while their father is still alive. Children living with neither parent, while both are alive, account for 17.5 percent. Younger children, aged 5-9 years, are not living with parents the most (21.3 percent), followed by 0-4 year old children (19.6 percent) and 10-14 years (18.6 percent).

Differences in living with neither parent exist by region, residential area and socio-economic status. Children living with neither parent are mostly found in the Northeast (25.6 percent), followed by the North (21.3), The lowest rate is in the South (9.8 percent). Non-municipal children live with neither parent more often than municipal children (20.9 percent and 15.2 percent, respectively). The percentage of children living in the poorest households with neither parent is higher than that of the very wealthy households (25.4 percent and 10.5 percent, respectively).

Table 57 shows the percentage of orphaned and vulnerable children aged 0-17 years. In Thailand, 7.1 percent of the children are considered orphaned and vulnerable. Of these children, 4.7 percent are orphans and 2.7 percent vulnerable children.

#### 4.8.4 ORPHANS AND VULNERABLE CHILDREN SCHOOL ATTENDANCE

Children who are orphaned or in vulnerable households may be at increased risk of neglect or exploitation if the parents are not available to assist them. One of the measures developed for the assessment of the status of orphaned and vulnerable children relative to their peers looks at the school attendance of children aged 10-14 for children who have lost both parents versus children whose parents are alive (and who live with at least one of these parents). If children whose parents have died do not have the same access to school as their peers, then families and schools are not ensuring that these children's rights are being met

Data collected on orphaned or vulnerable children include not only those who have parents who are sick with HIV/AIDS or have died from the virus, but also children aged 0-17 years whose parents have died or who were too ill to work for three consecutive months during the 12 months preceding the survey.

In Thailand, of children aged 10-14 years whose parents have died, 95.5 percent are currently attending school, which is slightly lower than that of children whose parents are still alive and who are living with one or both parents (96.4 percent).

When the school attendance ratio of double orphans is compared to non-orphans and the ratio of orphaned/vulnerable children is compared to non-orphans, the value is 1.0, indicating that both groups of children have the same opportunity to attend school. (See details in Table 58)

The level and type of support provided to households caring for orphaned and vulnerable children is presented in Table 59. In Thailand, among families that have taken in children who are orphaned or vulnerable, 78.6 percent of these families received no support at all. Children whose families receive any support (medical, emotional and psychosocial, social/material, or educational) account for 21.4 percent. The percentage of orphaned and vulnerable children whose households have received all four types of support is only 0.1 percent. (See details in Table 59)

The prevalence of malnutrition among orphans and vulnerable children 0-4 years of age is presented in Table 60. In Thailand, the proportion of orphaned and vulnerable children who are underweight, moderately or severely stunted or wasted is higher than that of non-orphaned or non-vulnerable children. The ratio for each type of malnutrition between the two groups is 1.4, 1.2 and 1.4, respectively.

## List of References

- Boerma, J. T., Weinstein, K. I., Rutstein, S.O., and Sommerfelt, A. E. , 1996. Data on Birth Weight in Developing Countries: Can Surveys Help? *Bulletin of the World Health Organization*, 74(2), 209-16.
- Blanc, A. and Wardlaw, T. 2005. “Monitoring Low Birth Weight: An Evaluation of International Estimates and an Updated Estimation Procedure”. *WHO Bulletin*, 83 (3), 178-185.
- Filmer, D. and Pritchett, L., 2001. Estimating wealth effects without expenditure data – or tears: An application to educational enrolments in states of India. *Demography* 38(1): 115-132.
- Rutstein, S.O. and Johnson, K., 2004. *The DHS Wealth Index*. DHS Comparative Reports No. 6. Calverton, Maryland: ORC Macro.
- UNICEF, 2006. *Monitoring the Situation of Children and Women. Multiple Indicator Cluster Survey Manual*, New York.
- United Nations, 1983. *Manual X: Indirect Techniques for Demographic Estimation* (United Nations publication, Sales No. E.83.XIII.2).
- United Nations, 1990a. *QFIVE, United Nations Program for Child Mortality Estimation*. New York, UN Pop Division
- United Nations, 1990b. *Step-by-step Guide to the Estimation of Child Mortality*. New York, UN
- WHO and UNICEF, 1997. [The Sisterhood Method for Estimating Maternal Mortality. Guidance notes for potential users](#), Geneva.
- [www.Childinfo.org](http://www.Childinfo.org).



Photo by : NSO-Thailand/2006/Siwaporn

# STATISTICAL TABLES

**Table 1 Results of household and individual interviews**  
**Number of households, women, and children under 5 by results of the household, women's and under-five's interviews, and household, women's and under-five's response rates, Thailand, 2005-2006**

	Residence		Region				Total
	Urban	Rural	Central (incl.BKK)	North	Northeast	South	
<b>Number of households</b>							
Sampled	25,020	18,420	17,070	9,270	9,720	7,380	43,440
Occupied	24,248	18,054	16,536	9,105	9,509	7,152	42,302
Interviewed	23,019	17,492	15,501	9,000	9,332	6,678	40,511
Response rate	94.9	96.9	93.7	98.8	98.1	93.4	95.8
<b>Number of women</b>							
Eligible	21,402	15,785	15,052	7,358	8,337	6,440	37,187
Interviewed	21,265	15,695	14,925	7,353	8,313	6,369	36,960
Response rate	99.4	99.4	99.2	99.9	99.7	98.9	99.4
Overall response rate	94.3	96.3	92.9	98.8	97.9	92.3	95.2
<b>Number of children under 5</b>							
Eligible	4,636	4,808	3,232	1,667	2,479	2,066	9,444
Mother/Caretaker interviewed	4,624	4,785	3,223	1,664	2,470	2,052	9,409
Response rate	99.7	99.5	99.7	99.8	99.6	99.3	99.6
Overall response rate	94.7	96.4	93.5	98.7	97.8	92.7	95.4

**Table 2 Household age distribution by sex**  
**Percent distribution of the household population by five-year age groups and dependency age groups, and**  
**number of children aged 0-17 years, by sex, Thailand, 2005-2006**

	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
<b>Age</b>						
0-4	2,472,620	7.7	2,384,674	7.2	4,857,293	7.5
5-9	2,450,477	7.7	2,331,078	7.0	4,781,554	7.3
10-14	2,662,506	8.3	2,546,564	7.7	5,209,069	8.0
15-19	2,677,765	8.4	2,566,527	7.8	5,244,291	8.1
20-24	2,699,298	8.4	2,623,789	7.9	5,323,087	8.2
25-29	2,697,061	8.4	2,661,753	8.0	5,358,813	8.2
30-34	2,677,058	8.4	2,796,744	8.4	5,473,801	8.4
35-39	2,650,692	8.3	2,867,209	8.7	5,517,900	8.5
40-44	2,520,844	7.9	2,721,855	8.2	5,242,698	8.1
45-49	2,261,829	7.1	2,441,433	7.4	4,703,261	7.2
50-54	1,795,196	5.6	1,949,818	5.9	3,745,014	5.8
55-59	1,348,938	4.2	1,475,604	4.5	2,824,542	4.3
60-64	1,033,267	3.2	1,167,612	3.5	2,200,879	3.4
65-69	825,958	2.6	981,160	3.0	1,807,118	2.8
70+	1,177,691	3.7	1,597,057	4.8	2,774,748	4.3
<b>Dependency age groups</b>						
< 15	7,585,602	23.7	7,262,315	21.9	14,847,917	22.8
15-64	22,361,946	70.0	23,272,341	70.3	45,634,287	70.1
65 +	2,003,649	6.3	2,578,217	7.8	4,581,865	7.0
Children aged 0-17	9,262,792	29.0	8,912,013	26.9	18,174,805	27.9
Adults 18+/Missing/ DK	22,688,405	71.0	24,200,860	73.1	46,889,264	72.1
<b>Total</b>	<b>31,951,196</b>	<b>100.0</b>	<b>33,112,873</b>	<b>100.0</b>	<b>65,064,070</b>	<b>100.0</b>

**Table 3 Household composition**  
**Percent distribution of households by selected characteristics, Thailand, 2005-2006**

	Weighted percent	Number of households	
		Weighted	Unweighted
<b>Sex of household head</b>			
Male	70.0	12,622,526	27,490
Female	30.0	5,408,544	13,021
<b>Region</b>			
Central (incl.BKK)	35.4	6,375,706	15,501
North	19.6	3,532,411	9,000
Northeast	32.1	5,787,064	9,332
South	13.0	2,335,889	6,678
<b>Residence</b>			
Urban	31.5	5,677,957	23,019
Rural	68.5	12,353,113	17,492
<b>Number of household members</b>			
1	10.6	1,910,984	4,867
2-3	44.4	8,003,939	18,185
4-5	33.9	6,120,793	13,246
6-7	9.0	1,626,472	3,379
8-9	1.6	280,799	621
10+	0.5	88,083	213
<b>Language</b>			
Thai	93.8	16,907,969	38,407
Other Languages	6.2	1,123,101	2,104
<b>Total</b>	<b>100.0</b>	<b>18,031,070</b>	<b>40,511</b>
At least one child aged < 18 years	58.8	18,031,070	40,511
At least one child aged < 5 years	21.5	18,031,070	40,511
At least one woman aged 15-49 years	71.8	18,031,070	40,511



**Table 4 Women's background characteristics**  
**Percent distribution of women aged 15-49 years by background characteristics, Thailand, 2005-2006**

	Weighted percent	Number of women	
		Weighted	Unweighted
<b>Region</b>			
Central (incl.BKK)	37.7	6,991,862	14,925
North	17.4	3,229,399	7,353
Northeast	31.7	5,883,420	8,313
South	13.1	2,437,448	6,369
<b>Residence</b>			
Urban	32.6	6,042,565	21,265
Rural	67.4	12,499,563	15,695
<b>Age</b>			
15-19	13.7	2,542,192	4,788
20-24	14.0	2,598,520	3,996
25-29	14.2	2,639,148	4,969
30-34	15.0	2,788,662	5,581
35-39	15.3	2,842,828	6,089
40-44	14.6	2,707,544	6,161
45-49	13.1	2,423,234	5,376
<b>Marital/Union status</b>			
Currently married/in union	66.9	12,411,412	24,383
Formerly married/in union	6.1	1,132,616	2,601
Never married/in union	27.0	4,998,100	9,976
<b>Motherhood status</b>			
Ever gave birth	64.4	11,950,256	24,018
Never gave birth	35.6	6,591,872	12,942
<b>Education</b>			
None	2.9	546,232	1,197
Primary	44.6	8,265,232	15,492
Secondary +	52.4	9,712,623	20,225
<b>Wealth index quintiles</b>			
Poorest	16.6	3,086,179	4,264
Second	18.1	3,351,453	5,603
Middle	19.8	3,675,322	7,352
Fourth	22.4	4,145,686	9,359
Richest	23.1	4,283,487	10,382
<b>Language</b>			
Thai	93.3	17,298,134	34,775
Other Languages	6.7	1,243,995	2,185
<b>Total</b>	<b>100.0</b>	<b>18,542,128</b>	<b>36,960</b>

**Table 5 Children's background characteristics**  
**Percent distribution of children under five years of age by background characteristics, Thailand, 2005-2006**

	Weighted percent	Number of under-5 children	
		Weighted	Unweighted
<b>Sex</b>			
Male	50.9	2,462,868	4,857
Female	49.1	2,374,812	4,552
<b>Region</b>			
Central (incl.BKK)	30.7	1,486,052	3,223
North	15.7	761,416	1,664
Northeast	37.2	1,799,842	2,470
South	16.3	790,370	2,052
<b>Residence</b>			
Urban	28.3	1,368,046	4,624
Rural	71.7	3,469,634	4,785
<b>Age</b>			
< 6 months	9.4	452,889	873
6-11 months	10.4	504,390	981
12-23 months	20.2	974,861	1,932
24-35 months	19.9	961,118	1,872
36-47 months	20.2	975,476	1,907
48-59 months	20.0	968,946	1,844
<b>Mother's education</b>			
None	4.2	204,334	409
Primary	51.9	2,506,123	4,468
Secondary +	43.9	2,119,833	4,509
<b>Wealth index quintiles</b>			
Poorest	22.0	1,066,064	1,530
Second	21.4	1,033,595	1,747
Middle	21.2	1,027,632	2,111
Fourth	18.7	903,767	2,147
Richest	16.7	806,622	1,874
<b>Language</b>			
Thai	89.3	4,320,845	8,459
Other Languages	10.7	516,835	950
<b>Total</b>	<b>100.0</b>	<b>4,837,680</b>	<b>9,409</b>

**Table 6 Child malnourishment**  
**Percentage of children aged 0-59 months who are severely or moderately malnourished, Thailand, 2005-2006**

	Weight for age		Height for age		Weight for height			Number of children aged 0-59 months
	% below - 2 SD*	% below - 3 SD*	% below - 2 SD**	% below - 3 SD**	% below - 2 SD***	% below - 3 SD***	% above + 2 SD	
<b>Sex</b>								
Male	9.0	0.5	11.8	1.8	3.9	0.8	7.0	2,348,863
Female	9.6	0.4	12.0	1.9	4.3	0.5	6.7	2,283,349
<b>Region</b>								
Central (incl.BKK)	6.1	0.2	8.9	1.5	3.9	0.6	10.0	1,392,369
North	7.1	0.6	10.4	1.5	3.9	0.7	5.2	751,874
Northeast	11.5	0.4	12.3	1.8	3.8	0.5	4.5	1,736,991
South	12.5	0.8	18.3	3.2	5.4	1.1	8.3	750,977
<b>Residence</b>								
Urban	5.6	0.3	8.7	1.0	3.9	0.6	10.4	1,282,847
Rural	10.7	0.5	13.2	2.2	4.2	0.7	5.5	3,349,365
<b>Age</b>								
< 6 months	1.7	0.0	7.0	1.4	3.0	0.4	8.5	427,670
6-11 months	6.1	0.2	10.2	2.1	5.6	0.5	6.4	489,182
12-23 months	10.9	1.2	18.2	2.4	6.2	1.1	6.2	932,725
24-35 months	9.0	0.3	8.6	1.5	2.4	0.3	7.0	922,950
36-47 months	10.7	0.1	11.5	2.0	3.1	0.5	6.0	927,148
48-59 months	11.8	0.4	12.5	1.6	4.4	0.8	7.9	932,537
<b>Mother's education</b>								
None	13.1	1.2	17.6	3.4	8.0	2.0	5.6	197,735
Primary	11.3	0.4	13.3	2.1	3.6	0.5	5.4	2,419,111
Secondary +	6.4	0.4	9.7	1.4	4.2	0.6	8.8	2,007,974
<b>Wealth index quintiles</b>								
Poorest	15.2	0.4	15.7	2.0	4.6	0.5	3.0	1,029,191
Second	9.7	0.5	13.3	1.9	3.6	0.6	4.4	989,378
Middle	9.7	0.7	12.9	2.5	4.5	1.0	7.2	995,318
Fourth	6.0	0.2	9.3	1.6	3.7	0.8	10.1	869,199
Richest	4.1	0.2	6.7	0.9	3.9	0.3	11.3	749,125
<b>Language</b>								
Thai	8.0	0.3	10.4	1.5	3.8	0.6	7.3	4,134,170
Other Languages	20.0	1.6	24.5	4.4	6.8	1.3	3.5	498,041
<b>Total</b>	<b>9.3</b>	<b>0.4</b>	<b>11.9</b>	<b>1.9</b>	<b>4.1</b>	<b>0.6</b>	<b>6.9</b>	<b>4,632,212</b>

\* MICS indicator 6; MDG indicator 4

\*\* MICS indicator 7

\*\*\* MICS indicator 8

**Table 7 Initial breastfeeding**  
**Percentage of women aged 15-49 years with a birth in the two years preceding the survey who breastfed their baby within one hour of birth and within one day of birth, Thailand, 2005-2006**

	Percentage who started breastfeeding within one hour of birth*	Percentage who started breastfeeding within one day of birth**	Number of women with a live birth in the two years preceding the survey
<b>Region</b>			
Central (incl.BKK)	43.0	79.4	601,010
North	41.6	81.1	261,631
Northeast	54.4	89.1	657,569
South	58.3	89.3	328,568
<b>Residence</b>			
Urban	43.6	78.2	485,353
Rural	51.7	87.2	1,363,425
<b>Months since birth</b>			
< 6 months	51.2	85.7	488,740
6-11 months	50.9	85.7	479,847
12-23 months	48.0	83.9	880,075
<b>Mother's education</b>			
None	52.8	89.0	55,531
Primary	48.8	88.0	679,618
Secondary +	49.8	82.7	1,112,114
<b>Wealth index quintiles</b>			
Poorest	53.8	87.4	382,922
Second	54.2	91.1	391,831
Middle	47.2	84.0	389,377
Fourth	48.5	84.0	369,375
Richest	42.7	76.0	315,273
<b>Language</b>			
Thai	48.1	84.0	1,614,236
Other Languages	59.6	90.4	234,542
<b>Total</b>	<b>49.6</b>	<b>84.8</b>	<b>1,848,778</b>

\* MICS indicator 45

**Table 8 Breastfeeding**  
**Percentage of living children according to breastfeeding status at each age group, Thailand, 2005-2006**

	Children 0-3 months		Children 0-5 months		Children 6-9 months		Children 12-15 months		Children 20-23 months	
	Percent exclusively breastfed	Number of children	Percent exclusively breastfed*	Number of children	% receiving breastmilk & solid/mushy food**	Number of children	Percent breastfed***	Number of children	Percent breastfed***	Number of children
<b>Sex</b>										
Male	7.1	146,310	5.4	233,838	42.7	187,566	30.3	173,525	18.2	147,469
Female	8.1	137,252	5.3	219,052	42.4	162,200	33.0	159,428	19.1	140,788
<b>Region</b>										
Central (incl.BKK)	3.7	87,585	2.4	146,216	25.6	110,733	24.3	119,273	18.5	89,490
North	14.5	37,596	10.9	59,775	50.0	48,253	36.1	54,890	12.3	61,466
Northeast	8.4	105,828	6.0	164,653	46.2	130,317	30.5	107,217	15.0	89,817
South	7.3	52,554	5.2	82,245	59.9	60,463	46.0	51,573	34.3	47,485
<b>Residence</b>										
Urban	5.0	79,981	3.5	135,748	30.5	99,064	24.1	103,033	16.5	77,974
Rural	8.5	203,581	6.2	317,141	47.4	250,702	34.9	229,920	19.5	210,283
<b>Mother's education</b>										
None	2.1	11,223	1.6	14,299	55.7	9,296	54.4	12,927	34.6	13,096
Primary	6.5	96,831	4.0	177,799	42.4	158,055	33.9	160,126	21.1	145,554
Secondary +	8.5	175,155	6.5	260,177	42.2	182,204	27.2	159,547	14.3	129,607
<b>Wealth index quintiles</b>										
Poorest	9.4	56,557	7.3	83,518	49.3	70,571	40.9	82,665	16.3	67,210
Second	8.0	67,549	5.4	100,313	48.4	77,813	33.1	59,510	19.9	53,890
Middle	6.1	57,034	4.6	104,371	41.1	74,040	31.5	73,645	26.1	62,144
Fourth	4.2	52,003	2.6	87,957	42.4	65,188	26.3	57,488	15.4	58,555
Richest	10.0	50,420	7.3	76,730	29.7	62,154	22.5	59,646	14.7	46,459
<b>Language</b>										
Thai	8.5	249,550	5.8	401,109	39.1	307,175	28.6	293,500	16.6	265,636
Other Languages	0.4	34,013	2.0	51,780	67.5	42,590	53.5	39,453	42.9	22,621
<b>Total</b>	<b>7.6</b>	<b>283,563</b>	<b>5.4</b>	<b>452,889</b>	<b>42.6</b>	<b>349,766</b>	<b>31.6</b>	<b>332,953</b>	<b>18.7</b>	<b>288,257</b>

\* MICS indicator 15

\*\* MICS indicator 17

\*\*\* MICS indicator 16

**Table 9 Adequately fed infants**  
**Percentage of infants under 6 months of age exclusively breastfed, percentage of infants 6-11 months who are breastfed and who ate solid/semi-solid food at least the minimum recommended number of times yesterday and percentage of infants adequately fed, Thailand, 2005-2006**

	Percent of infants					Number of infants aged 0-11 months
	0-5 months exclusively breastfed	6-8 months who received breastmilk and complementary food at least 2 times in prior 24 hours	9-11 months who received breastmilk and complementary food at least 3 times in prior 24 hours	6-11 months who received breastmilk and complementary food at least the minimum recommended number of times per day*	0-11 months who were appropriately fed**	
<b>Sex</b>						
Male	5.4	40.9	27.6	34.8	21.2	503,833
Female	5.3	37.4	32.1	34.7	20.5	453,446
<b>Region</b>						
Central (incl.BKK)	2.4	20.0	19.5	19.8	11.5	308,601
North	10.9	47.4	44.4	45.9	30.7	137,130
Northeast	6.0	46.2	30.0	38.3	23.0	348,858
South	5.2	52.3	37.7	46.4	25.6	162,689
<b>Residence</b>						
Urban	3.5	26.7	19.4	22.9	13.5	280,536
Rural	6.2	44.0	34.5	39.5	23.9	676,743
<b>Mother's education</b>						
None	1.6	72.0	19.4	41.6	23.4	31,344
Primary	4.0	42.5	29.7	36.1	21.9	401,128
Secondary +	6.5	35.2	30.7	33.1	19.9	523,629
<b>Wealth index quintiles</b>						
Poorest	7.3	44.4	34.7	39.6	25.1	186,274
Second	5.4	51.2	40.0	46.1	27.1	214,980
Middle	4.6	39.3	30.7	35.4	19.8	205,999
Fourth	2.6	31.5	26.6	29.2	16.3	181,026
Richest	7.3	25.4	15.9	20.3	14.4	169,000
<b>Language</b>						
Thai	5.8	34.6	27.6	31.0	19.1	851,062
Other Languages	2.0	68.1	59.9	65.5	34.5	106,217
<b>Total</b>	<b>5.4</b>	<b>39.4</b>	<b>29.9</b>	<b>34.8</b>	<b>20.9</b>	<b>957,279</b>

\* MICS indicator 18

\*\* MICS indicator 19

**Table 10 Iodized salt consumption**  
**Percentage of households consuming adequately iodized salt, Thailand, 2005-2006**

	Percent of households in which salt was tested	Number of households interviewed	Percent of households with			Total	Number of households in which salt was tested or with no salt
			Salt test result				
			No salt	No Colour	Colour		
<b>Region</b>							
Central (incl.BKK)	81.6	6,375,706	18.4	16.0	65.6	100.0	6,375,706
North	94.3	3,532,411	5.7	26.7	67.7	100.0	3,532,411
Northeast	95.5	5,787,064	4.5	60.1	35.4	100.0	5,787,064
South	94.0	2,335,889	6.0	18.6	75.4	100.0	2,335,752
<b>Residence</b>							
Urban	81.1	5,677,957	18.9	17.7	63.3	100.0	5,677,821
Rural	94.3	12,353,113	5.7	39.4	54.9	100.0	12,353,113
<b>Wealth index quintiles</b>							
Poorest	95.9	3,671,968	4.1	53.9	41.9	100.0	3,671,968
Second	94.5	3,501,742	5.5	45.0	49.5	100.0	3,501,742
Middle	89.5	3,587,851	10.5	31.5	58.1	100.0	3,587,851
Fourth	83.9	3,820,422	16.1	19.6	64.3	100.0	3,820,422
Richest	87.2	3,449,088	12.8	12.8	74.5	100.0	3,448,952
<b>Language</b>							
Thai	89.7	16,907,969	10.3	32.7	57.0	100.0	16,907,832
Other Languages	96.4	1,123,101	3.6	30.9	65.5	100.0	1,123,101
<b>Total</b>	<b>90.1</b>	<b>18,031,070</b>	<b>9.9</b>	<b>32.6</b>	<b>57.6</b>	<b>100.0</b>	<b>18,030,933</b>

\* MICS indicator 41

**Table 11 Iodized salt consumption**  
**Percentage of households consuming adequately iodized salt, Thailand, 2005-2006**

Region	Percent of households in which salt was tested	Number of households interviewed	Number of households in which salt was labtested	Percent of households with salt test result in lab.			Total	Number of households in which salt was tested or with no salt
				Non iodized <sup>1/</sup>	Inadequately iodized <sup>2/</sup>	Adequately iodized <sup>3/</sup>		
Central (incl.BKK)	81.6	6,375,706	732,565	30.9	9.3	59.7	100.0	6,375,706
North	94.3	3,532,411	365,640	38.6	7.7	53.7	100.0	3,532,411
Northeast	95.5	5,787,064	604,119	73.9	3.6	22.6	100.0	5,787,064
South	94.0	2,335,889	258,020	27.0	12.8	60.3	100.0	2,335,752
<b>Residence</b>								
Urban	81.1	5,677,957	651,507	29.0	9.0	62.0	100.0	5,677,821
Rural	94.3	12,353,113	1,308,837	53.1	7.1	39.9	100.0	12,353,113
<b>Wealth index quintiles</b>								
Poorest	95.9	3,671,968	380,585	69.9	6.5	23.6	100.0	3,671,968
Second	94.5	3,501,742	367,083	57.9	5.9	36.2	100.0	3,501,742
Middle	89.5	3,587,851	364,909	46.1	7.3	46.7	100.0	3,587,851
Fourth	83.9	3,820,422	445,261	32.6	9.8	57.6	100.0	3,820,422
Richest	87.2	3,449,088	402,506	22.8	8.6	68.6	100.0	3,448,952
<b>Language</b>								
Thai	89.7	16,907,969	1,851,695	45.3	7.9	46.9	100.0	16,907,832
Other Languages	96.4	1,123,101	108,649	41.4	5.0	53.6	100.0	1,123,101
<b>Total</b>	<b>90.1</b>	<b>18,031,070</b>	<b>1,960,344</b>	<b>45.1</b>	<b>7.7</b>	<b>47.2</b>	<b>100.0</b>	<b>18,030,933</b>

1/ Non iodized mean 0-4.9 ppm

2/ Inadequately iodized mean 5-14.9 ppm

3/ Adequately iodized mean 15 + ppm.



**Table 12 Low birth weight infants**  
**Percentage of live births in the 2 years preceding the survey that weighed below 2500 grams at birth,**  
**Thailand, 2005-2006**

Region	Percent of live births:		Number of live births
	Below 2500 grams*	Weighed at birth**	
<b>Region</b>			
Central (incl.BKK)	8.9	99.5	601,010
North	9.1	98.0	261,631
Northeast	9.5	98.4	657,569
South	9.3	98.5	328,568
<b>Residence</b>			
Urban	8.8	99.5	485,353
Rural	9.4	98.4	1,363,425
<b>Mother's education</b>			
None	9.6	87.5	55,531
Primary	9.0	98.6	679,618
Secondary +	9.3	99.4	1,112,114
<b>Wealth index quintiles</b>			
Poorest	10.0	97.2	382,922
Second	8.8	99.0	391,831
Middle	9.0	99.0	389,377
Fourth	9.6	99.1	369,375
Richest	8.5	99.5	315,273
<b>Language</b>			
Thai	9.1	99.4	1,614,236
Other Languages	9.7	94.2	234,542
<b>Total</b>	<b>9.2</b>	<b>98.7</b>	<b>1,848,778</b>

\* MICS indicator 9

\*\* MICS indicator 10

**Table 13 Vaccinations in first year of life**  
**Percentage of children age 12-23 months immunized against childhood diseases at any time before the survey**  
**and before the first birthday, Thailand, 2005-2006**

	Percentage of children who received:										Number of children
	BCG*	DPT1	DPT2	DPT3**	Polio1	Polio2	Polio3***	Measles****	All *****	None	
<b>Vaccinated at any time before the survey</b>											
<i>According to:</i>											
Vaccination card	88.3	88.3	88.3	88.2	88.3	88.3	88.2	85.8	85.7	0.0	974,861
Mother's report	9.7	9.1	7.8	5.3	9.6	8.2	5.4	10.3	3.9	1.3	974,861
Either	98.1	97.5	96.1	93.5	97.9	96.5	93.6	96.1	89.7	1.3	974,861
Vaccinated by 12 months of age	98.0	97.1	95.6	91.4	97.6	95.9	91.5	91.4	83.3	1.3	974,861

\* MICS indicator 25

\*\* MICS indicator 27

\*\*\* MICS indicator 26

\*\*\*\* MICS indicator 28; MDG indicator 15

\*\*\*\*\* MICS indicator 31

**Table 13 Vaccinations in first year of life (continued)**  
**Percentage of children aged 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, Thailand, 2005-2006**

	Percentage of children who received:			Number of children aged 12-23 months
	HepB1	HepB2	HepB3*	
<b>Vaccinated at any time before the survey</b>				
<i>According to:</i>				
Vaccination card	88.2	87.8	87.5	974,861
Mother's report	0.2	0.6	0.8	974,861
Either	88.4	88.4	88.3	974,861
Vaccinated by 12 months of age	88.3	87.6	85.7	974,861

\* MICS indicator 29

**Table 14 Vaccinations by background characteristics**  
**Percentage of children aged 12-23 months currently vaccinated against childhood diseases, Thailand, 2005-2006**

	Percentage of children who received:										Percent with health card	Number of children aged 12-23 months
	BCG	DPT1	DPT2	DPT3	Polio1	Polio2	Polio3	Measles	All	None		
<b>Sex</b>												
Male	97.9	96.7	95.6	93.3	97.8	96.6	94.7	96.0	91.0	1.6	89.4	494,092
Female	98.3	98.2	96.8	93.7	98.1	96.4	92.4	96.3	88.3	0.9	87.3	480,770
<b>Region</b>												
Central (incl.BKK)	97.6	96.9	94.7	90.7	97.2	94.7	88.9	94.6	83.9	1.7	81.9	314,450
North	98.8	98.0	97.8	97.5	99.3	98.7	96.8	97.7	95.4	0.7	96.0	167,940
Northeast	98.6	98.9	98.1	96.9	98.1	97.3	96.0	96.7	94.0	1.1	92.4	330,929
South	97.1	95.0	93.3	88.0	97.5	96.2	94.4	96.3	86.0	1.6	84.6	161,542
<b>Residence</b>												
Urban	97.5	97.1	95.5	91.8	97.0	95.2	90.1	96.2	87.0	1.7	84.5	278,651
Rural	98.3	97.6	96.4	94.2	98.3	97.0	95.0	96.1	90.7	1.1	89.9	696,210
<b>Mother's education</b>												
None	96.1	96.1	95.7	93.4	98.6	96.8	90.7	90.3	87.7	1.4	87.7	45,167
Primary	98.1	98.0	96.6	93.7	97.6	96.4	94.1	96.5	90.5	1.3	89.4	483,522
Secondary	98.2	97.1	95.8	93.5	98.2	96.6	93.3	96.4	89.0	1.3	87.3	445,658
<b>Wealth index quintiles</b>												
Poorest	96.5	96.6	95.9	93.9	96.8	95.6	94.5	95.9	91.7	2.1	89.7	228,504
Second	99.1	98.9	98.1	95.8	98.8	97.9	96.0	96.9	93.4	0.9	93.1	194,161
Middle	99.2	98.1	95.3	92.0	98.3	96.7	94.2	93.9	87.2	0.6	85.4	204,290
Fourth	97.5	96.2	95.4	94.7	97.3	95.7	92.1	95.4	89.2	2.1	90.1	186,044
Richest	98.3	97.6	96.1	90.8	98.7	96.9	90.2	99.2	86.0	0.6	82.4	161,862
<b>Language</b>												
Thai	98.2	98.0	96.8	94.9	98.0	96.6	93.7	96.4	90.8	1.3	89.5	863,605
Other Languages	96.9	93.5	90.8	82.5	97.2	95.4	92.9	94.2	80.9	1.3	79.6	111,256
<b>Total</b>	<b>98.1</b>	<b>97.5</b>	<b>96.1</b>	<b>93.5</b>	<b>97.9</b>	<b>96.5</b>	<b>93.6</b>	<b>96.1</b>	<b>89.7</b>	<b>1.3</b>	<b>88.4</b>	<b>974,861</b>

**Table 14 Vaccinations by background characteristics (continued)**  
**Percentage of children aged 12-23 months currently vaccinated against childhood diseases, Thailand, 2005-2006**

	Percentage of children who received:			Percent with health card	Number of children aged 12-23 months
	HepB1	HepB2	HepB3		
<b>Sex</b>					
Male	89.4	89.4	89.4	89.4	494,092
Female	87.3	87.3	87.2	87.3	480,770
<b>Region</b>					
Central (incl.BKK)	81.9	81.9	81.9	81.9	314,450
North	96.0	96.0	95.9	96.0	167,940
Northeast	92.4	92.4	92.4	92.4	330,929
South	84.6	84.6	84.6	84.6	161,542
<b>Residence</b>					
Urban	84.5	84.5	84.4	84.5	278,651
Rural	89.9	89.9	89.9	89.9	696,210
<b>Mother's education</b>					
None	87.7	87.7	87.7	87.7	45,167
Primary	89.4	89.4	89.4	89.4	483,522
Secondary +	87.3	87.3	87.3	87.3	445,658
<b>Wealth index quintiles</b>					
Poorest	89.7	89.7	89.7	89.7	228,504
Second	93.1	93.1	93.1	93.1	194,161
Middle	85.4	85.4	85.3	85.4	204,290
Fourth	90.1	90.1	90.1	90.1	186,044
Richest	82.4	82.4	82.4	82.4	161,862
<b>Language</b>					
Thai	89.5	89.5	89.5	89.5	863,605
Other Languages	79.6	79.6	79.6	79.6	111,256
<b>Total</b>	<b>88.4</b>	<b>88.4</b>	<b>88.3</b>	<b>88.4</b>	<b>974,861</b>

**Table 15 Neonatal tetanus protection**  
**Percentage of mothers with a birth in the last 12 months protected against neonatal tetanus, Thailand, 2005-2006**

<b>Percent of mothers with a birth in the last 12 months who:</b>					
	Received at least 2 doses during last pregnancy	Received at least 2 doses, the last within prior 3 years	Received at least 3 doses, last within prior 5 years	Protected against tetanus*	Number of mothers
<b>Region</b>					
Central (incl.BKK)	78.8	9.0	0.2	88.0	601,010
North	84.3	5.7	0.7	90.7	261,631
Northeast	80.4	7.7	0.8	89.0	657,569
South	82.2	7.2	1.1	90.4	328,568
<b>Residence</b>					
Urban	79.2	8.1	0.5	87.8	485,353
Rural	81.3	7.6	0.7	89.6	1,363,425
<b>Education</b>					
None	72.7	9.7	0.2	82.6	55,531
Primary	80.9	7.5	0.6	89.0	679,618
Secondary +	81.1	7.8	0.7	89.7	1,112,114
<b>Wealth index quintiles</b>					
Poorest	79.8	6.1	0.0	85.9	382,922
Second	83.5	7.0	0.6	91.0	391,831
Middle	82.1	7.2	1.9	91.1	389,377
Fourth	79.3	9.7	0.3	89.3	369,375
Richest	78.7	9.0	0.5	88.2	315,273
<b>Language</b>					
Thai	81.4	7.9	0.6	89.9	1,614,236
Other Languages	76.5	6.4	1.3	84.3	234,542
<b>Total</b>	<b>80.8</b>	<b>7.7</b>	<b>0.7</b>	<b>89.2</b>	<b>1,848,778</b>

\* MICS indicator 32

**Table 16 Oral rehydration treatment**  
**Percentage of children aged 0-59 months with diarrhoea in the last two weeks and treatment with oral rehydration solution (ORS) or other oral rehydration treatment (ORT), Thailand, 2005-2006**

	Had diarrhoea in last two weeks	Number of children aged 0-59 months	Children with diarrhoea who received:				ORT Use Rate *	Number of children aged 0-59 months with diarrhoea
			Fluid from ORS packet	Recommended homemade fluid	Prepackaged ORS fluid	No treatment		
<b>Sex</b>								
Male	9.3	2,462,868	26.0	23.7	42.3	29.0	71.0	228,616
Female	8.0	2,374,812	22.4	21.0	43.9	35.0	65.0	191,130
<b>Region</b>								
Central (incl.BKK)	8.0	1,486,052	25.2	22.8	32.9	35.5	64.5	118,304
North	8.9	761,416	17.9	23.7	39.6	36.9	63.1	67,911
Northeast	9.2	1,799,842	23.9	23.7	55.4	21.9	78.1	166,024
South	8.5	790,370	30.3	17.8	33.5	44.1	55.9	67,508
<b>Residence</b>								
Urban	8.0	1,368,046	26.0	22.0	29.8	36.1	63.9	109,545
Rural	8.9	3,469,634	23.7	22.6	47.7	30.2	69.8	310,201
<b>Age</b>								
0-11 months	10.7	957,279	26.7	19.8	38.1	35.2	64.8	102,718
12-23 months	15.0	974,861	21.1	22.0	42.3	33.5	66.5	146,437
24-35 months	7.6	961,118	24.7	19.5	48.0	22.8	77.2	73,258
36-47 months	6.6	975,476	23.0	31.7	45.5	30.9	69.1	64,868
48-59 months	3.4	968,946	33.3	21.1	45.6	35.0	65.0	32,467
<b>Mother's education</b>								
None	9.5	204,334	34.7	15.1	51.0	30.1	69.9	19,495
Primary	8.5	2,506,123	27.9	22.4	39.5	32.2	67.8	213,414
Secondary +	8.8	2,119,833	19.3	23.2	46.2	31.4	68.6	186,677
<b>Wealth index quintiles</b>								
Poorest	10.2	1,066,064	18.7	25.0	44.5	31.0	69.0	108,864
Second	7.3	1,033,595	25.3	19.4	48.7	32.2	67.8	75,357
Middle	10.3	1,027,632	24.9	19.3	44.8	34.6	65.4	105,504
Fourth	9.1	903,767	28.5	19.4	37.6	32.8	67.2	82,433
Richest	5.9	806,622	27.3	33.7	36.0	24.6	75.4	47,589
<b>Language</b>								
Thai	8.6	4,320,845	24.6	22.3	42.6	31.3	68.7	370,616
Other Languages	9.5	516,835	22.2	23.4	46.1	34.8	65.2	49,131
<b>Total</b>	<b>8.7</b>	<b>4,837,680</b>	<b>24.3</b>	<b>22.5</b>	<b>43.0</b>	<b>31.7</b>	<b>68.3</b>	<b>419,746</b>

\* MICS indicator 33

**Table 17 Home management of diarrhoea**  
**Percentage of children aged 0-59 months with diarrhoea in the last two weeks who took increased fluids and continued to feed during the episode, Thailand, 2005-2006**

	Children with diarrhoea who:						Home management of diarrhoea*	Received ORT or increased fluids AND continued feeding**	Number of children aged 0-59 months with diarrhoea
	Had diarrhoea in last two weeks	Number of children aged 0-59 months	Drank more	Drank the same or less	Ate somewhat less, same or more	Ate much less or none			
<b>Sex</b>									
Male	9.3	2,462,868	8.1	91.7	65.2	34.8	3.4	44.1	228,616
Female	8.0	2,374,812	5.9	93.8	73.5	26.5	4.3	49.1	191,130
<b>Region</b>									
Central (incl.BKK)	8.0	1,486,052	3.8	95.9	70.7	29.3	2.4	44.8	118,304
North	8.9	761,416	11.4	88.6	70.1	29.9	4.9	44.6	67,911
Northeast	9.2	1,799,842	6.7	93.0	67.2	32.8	2.9	50.8	166,024
South	8.5	790,370	9.3	90.5	69.4	30.6	7.3	40.4	67,508
<b>Residence</b>									
Urban	8.0	1,368,046	5.9	94.1	69.8	30.2	4.2	42.1	109,545
Rural	8.9	3,469,634	7.5	92.2	68.7	31.3	3.6	47.9	310,201
<b>Age</b>									
0-11 months	10.7	957,279	7.9	92.1	70.5	29.5	3.7	45.3	102,718
12-23 months	15.0	974,861	7.6	92.1	70.0	30.0	4.2	46.4	146,437
24-35 months	7.6	961,118	6.6	93.4	63.9	36.1	4.5	49.3	73,258
36-47 months	6.6	975,476	6.9	93.1	68.7	31.3	2.2	42.1	64,868
48-59 months	3.4	968,946	3.6	94.9	72.1	27.9	3.6	52.2	32,467
<b>Mother's education</b>									
None	9.5	204,334	1.3	98.7	72.5	27.5	0.0	54.4	19,495
Primary	8.5	2,506,123	6.7	93.3	65.3	34.7	3.0	43.9	213,414
Secondary +	8.8	2,119,833	8.1	91.4	72.9	27.1	5.0	48.4	186,677
<b>Wealth index quintiles</b>									
Poorest	10.2	1,066,064	7.2	92.8	63.6	36.4	3.2	42.5	108,864
Second	7.3	1,033,595	8.7	90.6	78.5	21.5	6.3	55.5	75,357
Middle	10.3	1,027,632	5.7	94.3	70.6	29.4	4.1	44.2	105,504
Fourth	9.1	903,767	2.9	96.5	69.9	30.1	2.1	46.6	82,433
Richest	5.9	806,622	14.2	85.8	61.5	38.5	3.3	45.4	47,589
<b>Language</b>									
Thai	8.6	4,320,845	6.9	92.8	69.1	30.9	3.2	45.9	370,616
Other Languages	9.5	516,835	8.4	91.6	68.0	32.0	7.8	49.9	49,131
<b>Total</b>	<b>8.7</b>	<b>4,837,680</b>	<b>7.1</b>	<b>92.7</b>	<b>69.0</b>	<b>31.0</b>	<b>3.8</b>	<b>46.4</b>	<b>419,746</b>

\* MICS indicator 34



**Table 18 Care seeking for suspected pneumonia in the last two weeks taken to a health provider, Thailand, 2005-2006**

	Had acute respiratory infection	Number of children aged 0-59 months	Children with suspected pneumonia who were taken to:										No. children 0-59 months with suspected pneumonia										
			Public sources					Private sources						Other source									
			Govt. Hospital	Govt. health centre	Govt. health post	Village health worker	Private hospital/clinic	Private physician	Pharmacy	Relative / friend	Shop	Any appropriate provider*											
<b>Sex</b>																							
Male	5.1	2,462,868	30.8	8.7	29.1	3.6	24.6	2.6	2.3	0.0	1.5	0.0	83.0	126,267									
Female	3.9	2,374,812	43.7	8.5	22.3	2.8	21.6	1.7	0.8	2.7	3.8	2.7	85.3	93,323									
<b>Region</b>																							
Central (incl.BKK)	2.9	1,486,052	43.2	6.3	24.9	1.4	17.1	5.1	2.4	0.0	4.4	0.0	83.5	42,959									
North	6.5	761,416	32.2	4.8	25.5	4.1	36.5	1.7	3.2	0.0	1.8	0.0	84.5	49,740									
Northeast	5.6	1,799,842	33.1	12.4	32.8	4.2	18.3	1.1	0.2	1.8	1.8	2.5	84.6	101,248									
South	3.2	790,370	45.4	4.7	3.8	1.0	28.0	3.1	2.7	0.0	3.7	0.0	81.3	25,642									
<b>Residence</b>																							
Urban	3.1	1,368,046	42.4	6.3	4.5	0.0	32.5	3.6	2.5	0.0	1.5	0.0	79.9	42,929									
Rural	5.1	3,469,634	34.8	9.1	31.5	4.0	21.1	1.9	1.4	1.4	2.8	1.4	85.0	176,660									
<b>Age</b>																							
0-11 months	2.3	957,279	37.1	2.7	16.6	0.0	33.7	1.5	5.6	0.0	4.6	0.0	84.5	21,607									
12-23 months	6.2	974,861	39.6	10.7	29.3	8.1	24.3	1.1	0.4	1.7	2.5	0.0	89.1	60,127									
24-35 months	5.2	961,118	36.1	5.5	24.8	0.0	26.6	2.0	2.1	0.0	2.5	0.0	84.1	50,252									
36-47 months	4.3	975,476	26.9	20.9	15.3	2.9	24.5	1.0	1.4	3.4	0.6	0.0	79.1	42,292									
48-59 months	4.7	968,946	40.7	0.5	38.3	2.3	12.2	5.6	1.0	0.0	3.3	0.0	81.4	45,312									
<b>Mother's education</b>																							
None	4.0	204,334	62.1	0.0	12.4	0.0	26.2	4.0	0.0	0.0	4.0	0.0	88.2	8,130									
Primary	5.0	2,506,123	32.1	7.0	33.0	4.3	23.4	2.6	1.3	0.8	2.9	0.8	83.6	125,055									
Secondary +	4.1	2,119,833	40.0	11.7	17.7	2.0	23.0	1.6	2.2	1.7	1.8	1.7	84.2	86,404									
<b>Wealth index quintiles</b>																							
Poorest	6.6	1,066,064	32.1	7.3	38.6	2.3	15.1	1.4	2.5	1.5	5.5	1.5	84.9	70,187									
Second	4.5	1,033,595	39.5	9.2	30.4	12.1	20.3	2.5	0.5	3.1	0.7	0.0	88.0	46,126									
Middle	4.7	1,027,632	38.6	11.2	26.7	0.0	32.1	1.9	1.4	0.0	0.0	0.0	86.8	48,272									
Fourth	3.3	903,767	33.1	4.4	8.3	0.0	30.8	5.3	1.3	0.0	0.9	0.0	76.0	29,722									
Richest	3.1	806,622	41.7	11.1	4.0	0.0	26.2	1.1	1.8	0.0	4.1	0.0	78.0	25,282									
<b>Language</b>																							
Thai	4.7	4,320,845	33.8	9.2	26.9	3.4	24.7	2.0	1.8	1.2	2.7	1.2	84.5	201,116									
Other Languages	3.6	516,835	63.2	1.8	18.0	1.4	8.0	5.3	0.0	0.0	0.0	0.0	78.2	18,473									
<b>Total</b>	<b>4.5</b>	<b>4,837,680</b>	<b>36.3</b>	<b>8.6</b>	<b>26.2</b>	<b>3.3</b>	<b>23.3</b>	<b>2.2</b>	<b>1.6</b>	<b>1.1</b>	<b>2.5</b>	<b>1.1</b>	<b>84.0</b>	<b>219,589</b>									

\* MICS indicator 23

**Table 19 Antibiotic treatment of pneumonia**  
**Percentage of children aged 0-59 months with suspected pneumonia who received antibiotic treatment,**  
**Thailand, 2005-2006**

	Percentage of under fives with suspected pneumonia who received antibiotics in the last two weeks*	Number of children with suspected pneumonia in the two weeks prior to the survey
<b>Sex</b>		
Male	64.4	126,267
Female	65.5	93,323
<b>Region</b>		
Central (incl.BKK)	70.1	42,959
North	54.7	49,740
Northeast	69.3	101,248
South	58.1	25,642
<b>Residence</b>		
Urban	68.1	42,929
Rural	64.0	176,660
<b>Age</b>		
0-11 months	59.8	21,607
12-23 months	65.6	60,127
24-35 months	70.9	50,252
36-47 months	60.0	42,292
48-59 months	64.1	45,312
<b>Mother's education</b>		
None	71.2	8,130
Primary	65.4	125,055
Secondary +	63.5	86,404
<b>Wealth index quintiles</b>		
Poorest	66.3	70,187
Second	49.2	46,126
Middle	69.0	48,272
Fourth	84.8	29,722
Richest	58.2	25,282
<b>Language</b>		
Thai	65.6	201,116
Other Languages	56.3	18,473
<b>Total</b>	<b>64.8</b>	<b>219,589</b>

\* MICS indicator 22

**Table 20 Knowledge of the two danger signs of pneumonia  
Percentage of mothers/caretakers of children aged 0-59 months by knowledge of types of symptoms for taking a child immediately to a health facility, and percentage of mothers/caretakers who recognize fast and difficult breathing as signs for seeking care immediately, Thailand, 2005-2006**

Region	Percentage of mothers/caretakers of children aged 0-59 months who think that a child should be taken immediately to a health facility if the child:										Mothers/caretakers who recognize the two danger signs of pneumonia*	Number of mothers/caretakers of children aged 0-59 months
	Is not able to drink or breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficult breathing	Has blood in stool	Is drinking poorly	Has other symptoms				
<b>Central (incl.BKK)</b>	14.3	36.2	87.8	25.6	25.5	23.8	10.0	46.6	17.8	1,486,052		
North	6.5	27.7	92.0	16.6	15.2	17.9	3.6	36.5	6.8	761,416		
Northeast	11.8	37.5	86.4	27.1	29.1	24.8	9.1	44.3	16.0	1,799,842		
South	15.5	44.2	86.2	28.6	22.6	22.4	8.7	46.2	15.8	790,370		
<b>Residence</b>												
Urban	13.8	33.9	86.8	27.1	26.4	23.9	9.0	47.0	17.6	1,368,046		
Rural	11.8	37.8	88.0	24.5	24.1	22.7	8.2	43.0	14.1	3,469,634		
<b>Mother's education</b>												
None	9.7	45.1	90.8	23.2	20.2	20.8	8.3	45.1	14.1	204,334		
Primary	11.1	36.1	87.8	24.2	24.8	22.2	8.2	42.4	14.0	2,506,123		
Secondary +	14.1	36.3	87.2	26.6	25.1	24.3	8.7	45.9	16.4	2,119,833		
<b>Wealth index quintiles</b>												
Poorest	10.6	35.2	88.9	24.4	24.8	20.3	7.1	40.8	13.0	1,066,064		
Second	12.7	39.0	86.8	26.3	28.0	26.9	9.6	44.8	16.3	1,033,595		
Middle	12.1	37.1	89.5	25.2	21.9	21.8	7.3	42.5	13.5	1,027,632		
Fourth	13.1	36.3	85.2	23.1	23.0	21.3	8.8	44.5	14.4	903,767		
Richest	13.7	35.4	87.6	27.4	26.1	25.1	10.0	49.0	19.0	806,622		
<b>Language</b>												
Thai	11.4	34.3	88.0	24.9	24.6	22.7	8.2	43.4	14.8	4,320,845		
Other Languages	19.8	56.5	85.2	27.7	26.3	26.0	10.4	50.0	17.3	516,835		
<b>Total</b>	<b>12.3</b>	<b>36.7</b>	<b>87.7</b>	<b>25.2</b>	<b>24.8</b>	<b>23.0</b>	<b>8.5</b>	<b>44.1</b>	<b>15.1</b>	<b>4,837,680</b>		

**Table 21 Solid fuel use**  
**Percent distribution of households according to type of cooking fuel, and percentage of households using solid fuels for cooking, Thailand, 2005-2006**

Region	Percentage of households using:										Solid fuels for cooking*	Number of households have cooking	Percentage of households have no cooking	Number of households
	Electricity	Liquidified Petroleum Gas (LPG)	Biogas	Coal, lignite	Charcoal	Wood	Agricultural crop residue	Total						
Central (incl.BKK)	6.0	84.5	0.4	0.0	6.8	2.2	0.0	100.0	9.1	5,563,842	12.7	6,375,706		
North	2.3	45.8	0.3	0.1	24.3	27.0	0.2	100.0	51.6	3,396,286	3.9	3,532,411		
Northeast	1.1	32.0	0.2	0.1	32.6	33.9	0.1	100.0	66.6	5,616,546	2.9	5,787,064		
South	4.3	86.2	0.4	0.0	5.3	3.6	0.0	100.0	9.0	2,221,011	4.9	2,335,889		
<b>Residence</b>														
Urban	7.1	81.3	0.2	0.0	6.2	5.1	0.0	100.0	11.3	4,834,989	14.8	5,677,957		
Rural	1.9	50.5	0.3	0.1	23.9	23.2	0.1	100.0	47.3	11,962,697	3.2	12,353,113		
<b>Education of household head</b>														
None	2.7	44.5	0.2	0.1	21.7	30.7	0.1	100.0	52.6	1,039,422	4.5	1,088,532		
Primary	2.0	52.3	0.3	0.1	23.4	21.9	0.1	100.0	45.5	11,166,671	3.3	11,546,208		
Secondary +	7.0	80.1	0.4	0.0	6.9	5.6	0.1	100.0	12.5	4,542,111	14.9	5,336,191		
<b>Wealth index quintiles</b>														
Poorest	1.7	8.0	0.1	0.0	44.7	45.3	0.2	100.0	90.1	3,578,713	2.5	3,671,968		
Second	2.6	41.3	0.4	0.1	29.4	25.9	0.2	100.0	55.6	3,390,682	3.2	3,501,742		
Middle	4.3	68.5	0.4	0.1	14.4	12.4	0.1	100.0	26.8	3,336,957	7.0	3,587,851		
Fourth	5.9	88.3	0.4	0.0	2.2	3.2	0.0	100.0	5.4	3,343,023	12.5	3,820,422		
Richest	2.6	96.7	0.2	0.0	0.3	0.2	0.0	100.0	0.4	3,148,310	8.7	3,449,088		
<b>Language</b>														
Thai	3.3	60.4	0.3	0.1	18.5	17.3	0.1	100.0	35.9	15,696,318	7.2	16,907,969		
Other Languages	4.3	44.3	0.2	0.0	23.3	27.8	0.0	100.0	51.1	1,101,368	1.9	1,123,101		
<b>Total</b>	<b>3.4</b>	<b>59.4</b>	<b>0.3</b>	<b>0.0</b>	<b>18.8</b>	<b>18.0</b>	<b>0.1</b>	<b>100.0</b>	<b>36.9</b>	<b>16,797,685</b>	<b>6.8</b>	<b>18,031,070</b>		

\* MICS indicator 24; MDG Indicator 29

**Table 22 Solid fuel use by type of stove or fire**  
**Percentage of households using solid fuels for cooking by type of stove or fire, Thailand, 2005-2006**

	Percentage of households using solid fuels for cooking:				Total	Number of households using solid fuels for cooking
	Closed stove with chimney	Open stove or fire with chimney or hood	Open stove or fire with no chimney or hood	Other stove		
<b>Region</b>						
Central (incl.BKK)	95.8	1.1	2.6	0.4	100.0	505,253
North	96.1	0.7	3.1	0.0	100.0	1,753,101
Northeast	93.7	1.5	4.8	0.0	100.0	3,743,276
South	87.6	2.8	8.8	0.8	100.0	199,557
<b>Residence</b>						
Urban	95.4	0.9	3.4	0.3	100.0	546,306
Rural	94.3	1.3	4.4	0.0	100.0	5,654,881
<b>Education of household head</b>						
None	93.2	0.7	6.1	0.0	100.0	546,230
Primary	94.4	1.4	4.1	0.1	100.0	5,079,076
Secondary +	94.8	1.0	4.2	0.0	100.0	569,274
<b>Wealth index quintiles</b>						
Poorest	93.4	1.7	4.9	0.0	100.0	3,224,655
Second	94.5	1.1	4.3	0.0	100.0	1,885,983
Middle	96.7	0.6	2.6	0.1	100.0	895,893
Fourth	98.2	0.2	0.8	0.7	100.0	180,612
Richest	99.3	0.3	0.4	0.0	100.0	14,044
<b>Language</b>						
Thai	94.5	1.3	4.1	0.1	100.0	5,638,065
Other Languages	92.6	1.0	6.4	0.0	100.0	563,122
<b>Total</b>	<b>94.4</b>	<b>1.3</b>	<b>4.3</b>	<b>0.0</b>	<b>100.0</b>	<b>6,201,187</b>

Table 23 Use of improved water sources according to main source of drinking water and percentage of household members using improved drinking water sources, Thailand, 2005-2006

	Main source of drinking water											Total	Improved source of drinking water*	Number of household members	
	Improved sources					Unimproved sources									
	Piped into dwelling	Piped into yard/plot and Public tap/standpipe	Tubewell/ borehole	Protected well	Rainwater	Bottled water <sup>1</sup>	Unprotected well	Tanker truck	Surface water	Bottled water <sup>1</sup>	Other				
<b>Region</b>															
Central (incl.BKK)	33.8	1.9	2.2	1.9	21.8	36.5	0.4	0.2	0.1	0.8	0.3	100.0	98.1	22,559,762	
North	25.8	3.5	6.6	9.2	23.0	26.9	1.3	0.0	2.7	0.8	0.2	100.0	95.0	11,719,885	
Northeast	9.6	0.8	4.1	3.0	66.3	10.6	2.6	1.8	0.4	0.6	0.1	100.0	94.4	21,953,181	
South	10.4	1.1	6.4	14.2	20.9	28.3	11.6	0.1	1.1	5.7	0.0	100.0	81.5	8,831,242	
<b>Residence</b>															
Urban	37.0	2.2	2.3	1.9	10.6	43.5	0.6	0.2	0.1	1.2	0.3	100.0	97.6	19,630,255	
Rural	14.1	1.5	5.0	6.7	48.3	16.9	3.8	0.9	1.1	1.5	0.1	100.0	92.5	45,433,815	
<b>Education of household head</b>															
None	22.5	3.4	5.0	10.9	26.9	13.8	9.0	1.2	4.9	2.0	0.5	100.0	82.4	3,904,263	
Primary	18.1	1.7	4.8	5.8	45.0	18.6	3.1	0.9	0.6	1.3	0.2	100.0	93.9	43,177,628	
Secondary +	27.7	1.5	2.6	2.8	19.8	42.5	1.0	0.2	0.4	1.4	0.2	100.0	96.9	17,782,272	
<b>Wealth index quintiles</b>															
Poorest	10.8	2.7	4.7	5.6	64.8	1.8	4.6	2.0	2.2	0.3	0.3	100.0	90.5	12,759,399	
Second	16.6	1.8	5.2	6.1	56.2	7.7	3.4	0.7	1.2	1.0	0.1	100.0	93.6	12,927,408	
Middle	21.5	1.3	4.7	6.5	38.4	21.1	3.5	0.4	0.5	1.8	0.2	100.0	93.6	13,088,653	
Fourth	20.4	1.3	4.3	5.8	20.9	41.7	2.6	0.4	0.2	2.3	0.2	100.0	94.3	13,162,186	
Richest	35.4	1.5	2.1	2.3	5.5	51.2	0.2	0.1	0.0	1.6	0.1	100.0	98.0	13,126,424	
<b>Language</b>															
Thai	21.9	1.6	4.2	4.7	37.4	26.3	1.6	0.3	0.4	1.3	0.2	100.0	96.2	60,236,364	
Other Languages	9.9	3.0	3.6	12.0	31.1	7.8	18.2	5.3	6.2	2.3	0.4	100.0	67.6	4,827,706	
<b>Total</b>	<b>21.0</b>	<b>1.8</b>	<b>4.2</b>	<b>5.3</b>	<b>36.9</b>	<b>24.9</b>	<b>2.8</b>	<b>0.7</b>	<b>0.8</b>	<b>1.4</b>	<b>0.2</b>	<b>100.0</b>	<b>94.0</b>	<b>65,064,070</b>	

\* MICS indicator 11; MDG indicator 30

Table 24 Household water treatment  
Percent distribution of household population according to drinking water treatment method used in the household, and percentage of household population that applied an appropriate water treatment method, Thailand, 2005-2006

	Water treatment method used in the household						All drinking water sources			Improved drinking water sources			Unimproved drinking water sources		
	None	Boil	Add bleach/ chlorine	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle			Appropriate water treatment method*	Number of household members	Appropriate water treatment method	Number of household members	Appropriate water treatment method	Number of household members
							Other	Other	Other						
<b>Region</b>															
Central (incl.BKK)	55.1	13.6	0.2	2.3	27.4	0.6	5.2	0.1	38.6	22,559,762	54.9	13,897,825	12.4	8,661,936	
North	53.2	7.3	1.0	7.2	12.5	5.4	19.7	0.2	25.4	11,719,885	30.4	7,982,853	14.7	3,737,031	
Northeast	56.1	8.0	0.9	10.0	5.2	2.5	22.1	0.3	16.2	21,953,181	16.8	18,397,949	13.4	3,555,232	
South	62.6	18.9	0.4	7.0	10.9	0.3	2.8	0.1	29.3	8,831,242	36.5	4,695,994	21.2	4,135,247	
<b>Residence</b>															
Urban	50.2	14.2	0.3	2.7	31.8	0.6	4.7	0.2	43.4	19,630,255	68.9	10,613,466	13.5	9,016,789	
Rural	58.7	10.1	0.8	8.0	7.7	2.7	16.8	0.2	20.5	45,433,815	21.9	34,361,156	15.9	11,072,659	
<b>Education of household head</b>															
None	56.1	19.8	0.3	8.2	8.6	2.1	10.2	0.0	30.2	3,904,263	30.8	2,678,104	28.7	1,226,159	
Primary	57.3	10.1	0.6	7.4	10.8	2.5	15.9	0.2	22.9	43,177,628	26.0	32,539,527	13.6	10,638,101	
Secondary +	53.2	12.3	0.6	3.6	26.5	1.1	7.5	0.1	37.6	17,782,272	57.0	9,674,879	14.4	8,107,393	
<b>Wealth index quintiles</b>															
Poorest	56.9	9.0	0.6	9.4	1.9	4.0	24.2	0.2	15.3	12,759,399	15.1	11,311,725	16.9	1,447,674	
Second	55.3	9.0	0.5	10.1	5.7	3.1	20.7	0.4	17.7	12,927,408	18.3	11,103,085	14.2	1,824,323	
Middle	56.6	11.9	1.2	7.4	12.5	2.0	12.6	0.2	26.8	13,088,653	31.2	9,489,196	15.1	3,599,457	
Fourth	61.3	12.1	0.4	3.9	18.2	1.0	6.0	0.1	30.4	13,162,186	45.7	6,926,031	13.4	6,236,155	
Richest	50.4	14.4	0.4	1.4	36.0	0.3	2.8	0.0	46.3	13,126,424	81.1	6,144,586	15.7	6,981,838	
<b>Language</b>															
Thai	55.0	10.3	0.6	6.8	16.0	2.2	13.9	0.2	27.5	60,236,364	33.5	42,087,546	13.4	18,148,817	
Other Languages	70.9	24.1	0.2	1.9	2.7	0.2	4.0	0.0	26.6	4,827,706	25.5	2,887,076	28.3	1,940,630	
<b>Total</b>	<b>56.1</b>	<b>11.3</b>	<b>0.6</b>	<b>6.4</b>	<b>15.0</b>	<b>2.1</b>	<b>13.2</b>	<b>0.2</b>	<b>27.4</b>	<b>65,064,070</b>	<b>33.0</b>	<b>44,974,622</b>	<b>14.8</b>	<b>20,089,447</b>	

\* MICS indicator 13

**Table 25 Time to source of water**  
**Percent distribution of households according to time to go to source of drinking water, get water and return, and mean time to source of drinking water, Thailand, 2005-2006**

	Time to source of drinking water						Total	Mean time to source of drinking water*	Number of households
	Water on premises	Less than 15 minutes	15 minutes to less than 30 minutes	30 minutes to less than 1 hour	1 hour or more	Don't know			
<b>Region</b>									
Central (incl.BKK)	96.4	2.7	0.1	0.1	0.0	0.6	100.0	6.8	6,375,706
North	91.4	7.3	0.8	0.2	0.1	0.2	100.0	7.5	3,532,411
Northeast	88.5	8.2	0.9	1.1	0.9	0.5	100.0	13.9	5,787,064
South	89.1	9.6	0.8	0.4	0.0	0.1	100.0	6.9	2,335,889
<b>Residence</b>									
Urban	95.5	3.7	0.5	0.3	0.0	0.1	100.0	8.8	5,677,957
Rural	90.3	7.5	0.7	0.6	0.5	0.5	100.0	10.8	12,353,113
<b>Education of household head</b>									
None	90.3	7.2	1.0	0.6	0.7	0.3	100.0	13.2	1,088,532
Primary	90.7	7.1	0.7	0.6	0.4	0.4	100.0	10.8	11,546,208
Secondary +	94.0	4.9	0.4	0.2	0.1	0.5	100.0	8.2	5,336,191
<b>Wealth index quintiles</b>									
Poorest	88.1	8.8	1.0	0.8	1.0	0.3	100.0	13.4	3,671,968
Second	90.0	8.0	0.7	0.7	0.3	0.2	100.0	9.9	3,501,742
Middle	91.7	6.8	0.6	0.4	0.1	0.4	100.0	8.2	3,587,851
Fourth	94.0	5.0	0.2	0.3	0.0	0.5	100.0	7.1	3,820,422
Richest	96.9	1.8	0.2	0.2	0.1	0.9	100.0	11.1	3,449,088
<b>Language</b>									
Thai	91.8	6.6	0.6	0.4	0.2	0.4	100.0	8.7	16,907,969
Other Languages	86.9	6.4	1.3	2.1	3.1	0.2	100.0	24.7	1,123,101
<b>Total</b>	<b>91.5</b>	<b>6.6</b>	<b>0.6</b>	<b>0.5</b>	<b>0.4</b>	<b>0.4</b>	<b>100.0</b>	<b>10.6</b>	<b>18,031,070</b>

\* The mean time to source of drinking water is calculated based on those households that do not have water on the premises.



**Table 26 Person collecting water**  
**Percent distribution of households according to the person collecting drinking water used in the household,**  
**Thailand, 2005-2006**

	Person collecting drinking water					Total	Number of households
	Adult woman	Adult man	Female child under age 15	Male child under age 15	Don't know		
<b>Region</b>							
Central (incl.BKK)	54.9	37.1	0.5	1.6	6.0	100.0	148,752
North	61.0	33.3	2.9	1.2	1.6	100.0	246,530
Northeast	66.2	26.1	3.9	3.1	0.7	100.0	603,401
South	52.1	44.4	1.0	1.0	0.6	100.0	201,985
<b>Residence</b>							
Urban	57.7	36.8	2.6	1.6	1.3	100.0	146,032
Rural	61.9	31.4	2.8	2.3	1.5	100.0	1,054,636
<b>Education of household head</b>							
None	57.8	33.7	5.1	2.6	0.8	100.0	93,973
Primary	61.7	31.3	2.8	2.5	1.6	100.0	910,426
Secondary +	61.5	34.8	1.8	0.6	1.3	100.0	193,828
<b>Wealth index quintiles</b>							
Poorest	58.0	33.0	4.9	2.7	1.4	100.0	432,437
Second	66.0	29.3	1.8	1.7	1.0	100.0	324,812
Middle	61.4	32.2	1.5	2.5	2.1	100.0	241,807
Fourth	61.3	33.3	2.1	1.8	1.3	100.0	141,365
Richest	60.8	35.6	0.0	0.0	3.6	100.0	60,247
<b>Language</b>							
Thai	62.6	30.4	3.0	2.0	1.7	100.0	1,062,936
Other Languages	51.7	44.2	1.0	3.1	0.0	100.0	137,732
<b>Total</b>	<b>61.4</b>	<b>32.0</b>	<b>2.8</b>	<b>2.2</b>	<b>1.5</b>	<b>100.0</b>	<b>1,200,668</b>

**Table 27 Use of sanitary means of excreta disposal**  
**Percent distribution of household members according to type of toilet facility used by the household, and the percentage of household members using sanitary means of excreta disposal, Thailand, 2005-2006**

Region	Type of toilet facility used by household						Percentage of population using sanitary means of excreta disposal*	Number of household members
	Improved sanitation facility			Unimproved sanitation facility				
	Flush/pour flush to:			Flush/ pour flush to some-where else, Pit latrine without slab/ open pit, No facilities/bush/field and other				
	Piped sewer system	Septic tank	Pit latrine and Pit latrine with slab			Total		
Central (incl.BKK)	10.7	87.8	1.3	0.2		100.0	22,559,762	
North	3.6	95.9	0.2	0.3		100.0	11,719,885	
Northeast	5.3	94.0	0.2	0.5		100.0	21,953,181	
South	6.1	84.9	5.6	3.3		100.0	8,831,242	
<b>Residence</b>								
Urban	9.4	89.5	0.9	0.3		100.0	19,630,255	
Rural	5.9	91.6	1.6	1.0		100.0	45,433,815	
<b>Education of household head</b>								
None	5.0	89.5	2.0	3.5		100.0	3,904,263	
Primary	5.7	92.2	1.3	0.7		100.0	43,177,628	
Secondary +	10.3	88.2	1.3	0.1		100.0	17,782,272	
<b>Wealth index quintiles</b>								
Poorest	3.8	93.1	0.9	2.1		100.0	12,759,399	
Second	4.6	93.7	0.9	0.9		100.0	12,927,408	
Middle	5.8	92.1	1.4	0.7		100.0	13,088,653	
Fourth	9.9	87.9	2.1	0.1		100.0	13,162,186	
Richest	10.5	88.1	1.4	0.0		100.0	13,126,424	
<b>Language</b>								
Thai	7.3	91.1	1.2	0.3		100.0	60,236,364	
Other Languages	2.7	88.9	2.1	6.2		100.0	4,827,706	
<b>Total</b>	<b>6.9</b>	<b>90.9</b>	<b>1.4</b>	<b>0.8</b>		<b>100.0</b>	<b>65,064,070</b>	

\* MICS indicator 12; MDG indicator 31

**Table 28 Disposal of child's faeces**  
**Percent distribution of children aged 0-2 years according to place of disposal of child's faeces, and the percentage of children aged 0-2 years whose stools are disposed of safely, Thailand, 2005-2006**

	Place of disposal of child's faeces									Proportion of children whose stools are disposed of safely*	Number of children aged 0-2 years	
	Child used toilet	Put/rinsed into toilet or latrine	Put/rinsed into drain or ditch	Thrown into garbage	Buried	Left in the open	Other	Don't know	Total			
<b>Region</b>												
Central (incl.BKK)	22.0	41.3	1.0	26.3	2.6	5.2	1.4	0.2	100.0	63.3	928,558	
North	23.3	48.1	0.8	10.9	5.4	7.6	2.6	1.2	100.0	71.4	461,581	
Northeast	28.2	40.3	1.2	8.4	15.9	5.4	0.6	0.0	100.0	68.5	1,046,266	
South	20.5	31.3	2.6	20.0	10.4	14.6	0.4	0.2	100.0	51.8	466,569	
<b>Residence</b>												
Urban	23.4	39.9	1.2	30.7	1.7	2.3	0.5	0.3	100.0	63.3	831,538	
Rural	24.5	40.6	1.3	10.7	12.0	9.1	1.4	0.3	100.0	65.1	2,071,438	
<b>Mother's education</b>												
None	22.6	29.3	2.1	13.6	10.6	20.8	0.7	0.3	100.0	51.9	121,459	
Primary	25.9	38.9	1.4	11.3	13.2	8.0	0.8	0.4	100.0	64.9	1,400,630	
Secondary +	22.6	42.8	1.1	21.8	4.7	5.2	1.5	0.2	100.0	65.4	1,378,500	
<b>Wealth index quintiles</b>												
Poorest	24.3	38.3	0.9	5.2	18.6	10.0	2.2	0.5	100.0	62.5	640,538	
Second	25.0	39.3	2.5	11.0	11.6	9.7	0.5	0.4	100.0	64.3	607,044	
Middle	23.9	41.7	1.4	15.4	8.5	8.0	1.1	0.0	100.0	65.7	615,425	
Fourth	24.6	41.6	0.9	23.9	3.1	5.1	0.4	0.4	100.0	66.3	550,953	
Richest	22.8	41.6	0.7	30.7	0.9	1.8	1.4	0.1	100.0	64.4	489,015	
<b>Language</b>												
Thai	24.8	42.2	1.2	16.5	7.9	6.1	1.0	0.3	100.0	66.9	2,591,770	
Other Languages	19.1	25.8	2.5	16.0	18.6	16.0	2.0	0.1	100.0	44.9	311,205	
<b>Total</b>	<b>24.2</b>	<b>40.4</b>	<b>1.3</b>	<b>16.4</b>	<b>9.1</b>	<b>7.2</b>	<b>1.1</b>	<b>0.3</b>	<b>100.0</b>	<b>64.6</b>	<b>2,902,975</b>	

\* MICS indicator 14

**Table 30 Slum housing**  
**Percentage of households and household members in urban areas (or in capital city) that are considered as living in slum housing, by background characteristics,**  
**Thailand, 2005-2006**

	Over-crowding: more than three persons per sleeping room	Lack of use of improved water source	Lack of use of improved sanitation	Percent of households considered to be living in slum housing *	Number of households	Percent of household members considered to be living in slum housing	Number of household members
<b>Education of household head</b>							
None	8.7	5.5	1.6	13.8	208,018	19.4	784,604
Primary	10.7	3.1	0.3	13.8	2,557,677	18.0	9,477,812
Secondary +	5.0	1.3	0.1	6.3	2,878,820	8.7	9,256,143
<b>Wealth index quintiles</b>							
Poorest	15.5	6.2	1.3	21.5	292,184	31.1	965,565
Second	12.3	3.2	0.8	15.9	510,747	24.1	1,687,689
Middle	10.5	3.2	0.2	13.5	1,017,933	18.0	3,450,525
Fourth	9.0	2.0	0.1	10.9	1,687,059	16.4	5,308,826
Richest	3.2	1.3	0.0	4.5	2,170,034	5.9	8,217,650
<b>Language</b>							
Thai	7.5	2.1	0.2	9.6	5,568,775	13.2	19,177,615
Other Languages	15.5	12.4	3.3	26.1	109,183	32.6	452,640
<b>Total</b>	<b>7.7</b>	<b>2.3</b>	<b>0.2</b>	<b>9.9</b>	<b>5,677,957</b>	<b>13.7</b>	<b>19,630,255</b>

\* MICS indicator 95; MDG indicator 32

**Table 30 Slum housing**  
**Percentage of households and household members in urban areas (or in capital city) that are considered as living in slum housing, by background characteristics,**  
**Thailand, 2005-2006**

	Over-crowding: more than three persons per sleeping room	Lack of use of improved water source	Lack of use of improved sanitation	Percent of households considered to be living in slum housing *	Number of households	Percent of household members considered to be living in slum housing	Number of household members
<b>Education of household head</b>							
None	8.7	5.5	1.6	13.8	208,018	19.4	784,604
Primary	10.7	3.1	0.3	13.8	2,557,677	18.0	9,477,812
Secondary +	5.0	1.3	0.1	6.3	2,878,820	8.7	9,256,143
<b>Wealth index quintiles</b>							
Poorest	15.5	6.2	1.3	21.5	292,184	31.1	965,565
Second	12.3	3.2	0.8	15.9	510,747	24.1	1,687,689
Middle	10.5	3.2	0.2	13.5	1,017,933	18.0	3,450,525
Fourth	9.0	2.0	0.1	10.9	1,687,059	16.4	5,308,826
Richest	3.2	1.3	0.0	4.5	2,170,034	5.9	8,217,650
<b>Language</b>							
Thai	7.5	2.1	0.2	9.6	5,568,775	13.2	19,177,615
Other Languages	15.5	12.4	3.3	26.1	109,183	32.6	452,640
<b>Total</b>	<b>7.7</b>	<b>2.3</b>	<b>0.2</b>	<b>9.9</b>	<b>5,677,957</b>	<b>13.7</b>	<b>19,630,255</b>

\* MICS indicator 95; MDG indicator 32

**Table 31 Use of contraception**  
**Percentage of married or in union women aged 15-49 who are using (or whose partner is using) a contraceptive method, Thailand, 2005-2006**  
**Percent of women (currently married or in union) who are using:**

	Not using any method	Female sterilization	Male sterilization	Pill	IUD	Injections	Implants	Condom	Periodic abstinence	Withdrawal	Other	Any modern method	Any traditional method	Any method*	No. of women currently married or in union
<b>Region</b>															
Central (incl.BKK)	30.5	20.7	1.3	34.5	0.6	8.4	0.6	1.8	0.7	0.5	0.1	68.0	1.5	69.5	4,834,520
North	24.3	22.6	0.8	32.1	0.8	16.8	0.6	1.1	0.3	0.3	0.0	75.0	0.7	75.7	2,459,312
Northeast	24.2	33.2	0.7	28.1	1.8	9.4	0.6	0.9	0.3	0.2	0.2	74.7	1.0	75.8	4,504,627
South	40.1	15.0	0.7	26.9	1.8	9.0	1.4	1.9	1.2	1.0	0.4	56.8	3.1	59.9	1,745,568
<b>Residence</b>															
Urban	32.1	23.4	1.3	30.8	1.2	6.2	0.8	2.6	1.0	0.4	0.2	66.1	1.8	67.9	3,950,995
Rural	27.1	24.9	0.8	31.0	1.2	12.1	0.7	0.9	0.4	0.4	0.2	71.7	1.3	72.9	9,593,032
<b>Age</b>															
15-19	33.6	1.0	0.0	46.2	0.0	14.6	1.1	1.4	0.0	0.2	0.0	64.4	2.1	66.4	390,815
20-24	29.6	5.8	0.0	46.6	0.8	14.0	0.5	1.4	0.4	0.4	0.0	69.0	1.3	70.4	1,497,786
25-29	26.1	10.7	0.3	45.5	0.8	12.9	0.8	1.4	0.5	0.7	0.1	72.3	1.6	73.9	1,967,817
30-34	25.9	20.7	0.5	35.4	1.4	11.8	1.1	1.5	0.6	0.5	0.1	72.4	1.7	74.1	2,382,623
35-39	22.3	30.7	0.9	29.1	1.7	11.0	0.8	1.8	0.9	0.4	0.2	76.0	1.6	77.7	2,546,634
40-44	29.7	34.5	1.6	22.0	0.8	8.0	0.7	1.4	0.6	0.3	0.3	69.1	1.3	70.3	2,494,206
45-49	37.5	38.7	2.3	12.6	1.7	5.4	0.2	0.9	0.4	0.2	0.3	61.7	0.8	62.5	2,264,148
<b>Number of living children**</b>															
0	54.3	0.6	0.2	39.0	0.0	1.3	0.2	2.8	0.7	0.6	0.1	44.3	1.4	45.7	1,623,509
1	33.9	3.6	0.6	42.9	1.4	13.6	0.7	1.4	0.7	0.5	0.2	64.3	1.8	66.1	4,084,281
2	18.8	38.2	1.3	26.0	1.4	11.1	0.8	1.3	0.5	0.2	0.1	80.1	1.1	81.2	5,238,374
3	19.0	47.6	1.4	18.4	1.5	9.3	0.8	0.8	0.3	0.5	0.3	79.9	1.2	81.0	1,913,601
4+	36.3	35.0	1.5	13.4	0.7	9.4	1.0	0.8	1.0	0.6	0.1	61.7	2.0	63.7	684,263
<b>Education</b>															
None	41.6	20.3	0.9	21.8	0.4	13.4	0.2	0.3	0.4	0.3	0.0	57.2	1.1	58.4	413,813
Primary	25.9	29.5	0.9	28.6	1.4	11.3	0.7	0.8	0.3	0.3	0.2	73.2	0.9	74.1	7,687,040
Secondary +	31.2	17.7	1.0	35.0	1.1	8.8	0.8	2.3	0.9	0.6	0.1	66.7	2.1	68.8	5,428,524
<b>Wealth index quintiles</b>															
Poorest	25.7	24.5	0.6	31.5	1.4	14.1	0.7	0.6	0.2	0.1	0.2	73.5	0.8	74.3	2,459,697
Second	24.9	27.3	0.6	30.3	1.3	13.5	0.5	0.7	0.3	0.0	0.1	74.2	0.8	75.1	2,599,388
Middle	29.2	24.7	0.8	29.9	1.1	11.3	1.0	0.7	0.2	0.4	0.2	69.5	1.2	70.8	2,794,826
Fourth	30.8	20.5	1.0	34.6	1.0	8.0	0.7	1.8	0.6	0.6	0.1	67.7	1.5	69.2	3,004,788
Richest	31.3	25.8	1.8	28.0	1.2	5.5	0.6	3.2	1.4	0.7	0.3	66.1	2.6	68.7	2,685,328
<b>Language</b>															
Thai	27.1	25.5	1.0	31.6	1.2	10.0	0.7	1.5	0.5	0.4	0.2	71.5	1.4	72.9	12,643,055
Other Languages	48.0	9.9	0.5	21.4	0.7	15.2	1.5	0.9	0.8	0.5	0.2	50.0	2.0	52.0	900,973
Total	28.5	24.5	1.0	30.9	1.2	10.4	0.7	1.4	0.6	0.4	0.2	70.1	1.4	71.5	13,544,028

\* MICS indicator 21; MDG indicator 19C

**Table 32 Antenatal care provider**  
**Percent distribution of women aged 15-49 who gave birth in the two years preceding the survey by type of personnel providing antenatal care, Thailand, 2005-2006**

	Person providing antenatal care					No antenatal care received	Total	Any skilled personnel*	Number of women who gave birth in the preceding two years
	Medical doctor	Nurse/ midwife	Auxiliary midwife	Traditional birth attendant/Community health worker/Other					
<b>Region</b>									
Central (incl.BKK)	75.7	21.9	0.2	0.7	1.5	100.0	97.8	601,010	
North	65.4	32.4	0.4	0.6	1.3	100.0	98.2	261,631	
Northeast	53.6	41.5	3.9	0.2	0.8	100.0	98.9	657,569	
South	56.0	36.7	2.5	3.4	1.3	100.0	95.3	328,568	
<b>Residence</b>									
Urban	77.3	20.0	0.5	0.3	1.8	100.0	97.8	485,353	
Rural	57.7	37.6	2.5	1.3	1.0	100.0	97.8	1,363,425	
<b>Age</b>									
15-19	48.6	46.8	1.2	0.9	2.5	100.0	96.6	145,646	
20-24	59.1	36.7	2.5	0.9	0.8	100.0	98.2	527,052	
25-29	64.2	31.3	2.7	0.7	1.1	100.0	98.3	523,705	
30-34	67.6	29.0	0.7	1.5	1.1	100.0	97.3	393,587	
35-39	68.1	27.0	1.9	0.7	2.3	100.0	97.0	195,480	
40-44	70.9	26.0	1.3	1.8	0.0	100.0	98.2	57,415	
45-49	64.4	35.6	0.0	0.0	0.0	100.0	100.0	5,893	
<b>Education</b>									
None	50.9	37.2	2.5	2.4	7.0	100.0	90.5	55,531	
Primary	52.0	41.6	3.6	1.4	1.3	100.0	97.3	679,618	
Secondary +	70.1	27.5	0.9	0.7	0.8	100.0	98.5	1,112,114	
<b>Wealth index quintiles</b>									
Poorest	41.0	50.9	4.1	1.2	2.9	100.0	96.0	382,922	
Second	60.4	34.3	3.3	0.9	1.1	100.0	98.0	391,831	
Middle	61.0	35.9	1.0	1.2	0.9	100.0	97.8	389,377	
Fourth	71.6	25.6	0.7	1.3	0.7	100.0	97.9	369,375	
Richest	84.6	14.6	0.3	0.2	0.3	100.0	99.5	315,273	
<b>Language</b>									
Thai	65.5	31.2	1.6	0.8	1.0	100.0	98.3	1,614,236	
Other Languages	44.4	45.2	4.7	2.9	2.7	100.0	94.3	234,542	
<b>Total</b>	<b>62.9</b>	<b>33.0</b>	<b>2.0</b>	<b>1.0</b>	<b>1.2</b>	<b>100.0</b>	<b>97.8</b>	<b>1,848,778</b>	

\* MICS indicator 20

**Table 33 Antenatal care**  
**Percentage of pregnant women receiving antenatal care among women aged 15-49 years who gave birth in two years preceding the survey and percentage of pregnant women receiving specific care as part of the antenatal care received, Thailand, 2005-2006**

	Percent of pregnant women receiving ANC one or more times during pregnancy	Percent of pregnant women who had:				Number of women who gave birth in two years preceding survey
		Blood test taken*	Blood pressure measured*	Urine specimen taken*	Weight measured*	
<b>Region</b>						
Central (incl.BKK)	98.5	97.9	98.4	98.0	98.4	601,010
North	98.7	98.7	98.7	98.4	98.7	261,631
Northeast	99.2	98.4	98.9	98.5	99.2	657,569
South	98.7	97.4	98.0	97.5	98.1	328,568
<b>Residence</b>						
Urban	98.2	97.1	97.9	97.6	98.0	485,353
Rural	99.0	98.4	98.8	98.3	98.9	1,363,425
<b>Age</b>						
15-19	97.5	96.5	97.5	97.5	97.5	145,646
20-24	99.2	98.7	99.2	98.3	99.2	527,052
25-29	98.9	98.1	98.4	98.0	98.8	523,705
30-34	98.9	98.0	98.6	98.5	98.6	393,587
35-39	97.7	97.3	97.5	97.6	97.7	195,480
40-44	100.0	99.1	99.1	99.1	99.1	57,415
45-49	100.0	100.0	100.0	100.0	100.0	5,893
<b>Education</b>						
None	93.0	89.4	91.3	89.4	91.3	55,531
Primary	98.7	97.9	98.3	97.8	98.6	679,618
Secondary +	99.2	98.7	99.1	98.9	99.2	1,112,114
<b>Wealth index quintiles</b>						
Poorest	97.1	95.5	96.3	96.7	96.7	382,922
Second	98.9	98.4	98.8	97.5	98.9	391,831
Middle	99.1	98.7	99.1	98.8	99.1	389,377
Fourth	99.3	98.6	99.3	98.7	99.3	369,375
Richest	99.7	99.5	99.5	99.3	99.5	315,273
<b>Language</b>						
Thai	99.0	98.4	98.8	98.3	98.9	1,614,236
Other Languages	97.3	96.1	96.9	96.8	96.9	234,542
<b>Total</b>	<b>98.8</b>	<b>98.1</b>	<b>98.6</b>	<b>98.1</b>	<b>98.7</b>	<b>1,848,778</b>

\* MICS indicator 44



**Table 34 Assistance during delivery**  
**Percent distribution of women aged 15-49 with a birth in two years preceding the survey by type of personnel assisting at delivery, Thailand, 2005-2006**

	Person assisting at delivery					Total	Any skilled personnel*	Delivered in health facility**	Number of women who gave birth in preceding two years
	Medical doctor	Nurse/ midwife	Auxiliary midwife	Traditional birth attendant	Relative/friend/ no attendant and other				
<b>Region</b>									
Central (incl.BKK)	73.4	25.5	0.4	0.3	0.4	100.0	99.4	99.3	601,010
North	59.2	34.9	0.5	0.9	4.6	100.0	94.6	94.1	261,631
Northeast	62.2	36.3	0.1	1.2	0.2	100.0	98.6	97.9	657,569
South	51.3	41.1	0.4	7.2	0.0	100.0	92.8	92.0	328,568
<b>Residence</b>									
Urban	75.7	23.6	0.2	0.3	0.3	100.0	99.4	99.3	485,353
Rural	59.1	37.0	0.4	2.5	1.0	100.0	96.5	95.8	1,363,425
<b>Age</b>									
15-19	49.9	48.2	0.0	1.1	0.8	100.0	98.1	98.2	145,646
20-24	59.6	38.0	0.3	1.1	0.9	100.0	97.9	97.4	527,052
25-29	63.4	34.1	0.3	1.3	0.9	100.0	97.7	96.7	523,705
30-34	71.2	26.1	0.4	1.9	0.5	100.0	97.6	97.6	393,587
35-39	67.6	25.9	0.9	4.8	0.7	100.0	94.4	94.2	195,480
40-44	65.1	27.3	0.0	7.6	0.0	100.0	92.4	92.4	57,415
45-49	83.3	5.2	0.0	0.0	11.5	100.0	88.5	75.3	5,893
<b>Education</b>									
None	50.5	29.9	0.7	10.1	8.8	100.0	81.1	78.2	55,531
Primary	56.9	37.7	0.6	3.8	0.8	100.0	95.3	94.9	679,618
Secondary +	68.1	31.0	0.2	0.3	0.4	100.0	99.3	98.8	1,112,114
<b>Wealth index quintiles</b>									
Poorest	49.1	42.8	0.8	4.4	3.0	100.0	92.7	92.4	382,922
Second	61.9	35.8	0.0	2.0	0.3	100.0	97.8	96.8	391,831
Middle	60.0	36.8	0.7	1.8	0.8	100.0	97.5	97.1	389,377
Fourth	65.2	33.7	0.1	1.0	0.0	100.0	99.0	98.2	369,375
Richest	85.2	14.6	0.0	0.2	0.0	100.0	99.8	99.8	315,273
<b>Language</b>									
Thai	67.1	32.0	0.3	0.3	0.4	100.0	99.4	98.9	1,614,236
Other Languages	38.6	43.6	0.6	13.1	4.0	100.0	82.8	81.7	234,542
<b>Total</b>	<b>63.5</b>	<b>33.4</b>	<b>0.3</b>	<b>1.9</b>	<b>0.9</b>	<b>100.0</b>	<b>97.3</b>	<b>96.7</b>	<b>1,848,778</b>

\* MICS indicator 4; MDG indicator 17

\*\* MICS indicator 5

**Table 35 Family support for learning**  
**Percentage of children aged 0-59 months for whom household members are engaged in activities that promote learning and school readiness, Thailand, 2005-2006**

	Percentage of children aged 0-59 months					
	For whom household members engaged in four or more activities that promote learning and school readiness*	Mean number of activities household members engage in with the child	For whom the father engaged in one or more activities that promote learning and school readiness**	Mean number of activities the father engaged in with the child	Living in a household without their natural father	Number of children aged 0-59 months
<b>Sex</b>						
Male	78.3	4.8	58.9	2.2	33.1	2,462,868
Female	79.0	4.8	56.1	2.1	34.6	2,374,812
<b>Region</b>						
Central (incl.BKK)	78.0	4.7	65.5	2.4	26.4	1,486,052
North	79.1	4.7	57.5	2.2	35.0	761,416
Northeast	78.0	4.7	43.6	1.6	47.3	1,799,842
South	81.0	4.9	74.2	3.0	16.0	790,370
<b>Residence</b>						
Urban	81.3	4.9	65.6	2.5	25.7	1,368,046
Rural	77.6	4.7	54.3	2.0	37.1	3,469,634
<b>Age</b>						
0-23 months	63.7	4.2	58.2	2.0	31.2	1,932,140
24-59 months	88.6	5.2	57.0	2.3	35.6	2,905,540
<b>Mother's education</b>						
None	64.5	4.3	47.9	1.9	45.5	204,334
Primary	78.2	4.7	48.6	1.8	43.1	2,506,123
Secondary +	80.6	4.9	68.9	2.7	21.9	2,119,833
<b>Father's education</b>						
None	68.6	4.4	77.4	2.9	0.0	64,867
Primary	76.9	4.7	81.0	3.0	0.0	1,485,519
Secondary +	81.6	5.0	84.8	3.3	0.0	1,636,573
<b>Wealth index quintiles</b>						
Poorest	74.9	4.5	45.7	1.6	45.3	1,066,064
Second	75.0	4.6	48.9	1.7	43.0	1,033,595
Middle	80.6	4.9	58.8	2.3	30.8	1,027,632
Fourth	79.6	4.8	65.7	2.5	26.5	903,767
Richest	84.7	5.1	73.4	3.0	19.2	806,622
<b>Language</b>						
Thai	79.1	4.8	56.2	2.1	34.6	4,320,845
Other Languages	75.1	4.7	68.0	2.9	27.7	516,835
<b>Total</b>	<b>78.6</b>	<b>4.8</b>	<b>57.5</b>	<b>2.2</b>	<b>33.9</b>	<b>4,837,680</b>

\* MICS indicator 46

\*\* MICS Indicator 47

**Table 36 Learning materials**  
**Percentage of children aged 0-59 months living in households containing learning materials, Thailand, 2005-2006**

	Children living in households with:		Child has:		Child plays with:						Number of children aged 0-59 months
	3 or more non-children's books*	Median number of non-children's books	3 or more children's books**	Median number of children's books	Household objects	Objects and materials found outside the home	Home-made toys	Toys that came from a store	No play-things mentioned	3 or more types of play-things***	
<b>Sex</b>											
Male	67.8	7.0	42.6	2.0	32.8	41.0	31.8	78.8	8.8	30.0	2,462,868
Female	68.8	6.0	42.5	2.0	43.8	38.8	32.7	75.7	7.9	32.2	2,374,812
<b>Region</b>											
Central (incl.BKK)	68.8	8.0	52.0	3.0	38.4	34.5	25.9	81.5	8.7	28.3	1,486,052
North	68.6	8.0	40.0	2.0	35.6	39.9	28.1	78.9	6.0	29.0	761,416
Northeast	68.9	7.0	37.4	1.0	38.8	41.8	35.5	74.4	8.7	32.6	1,799,842
South	65.8	5.0	39.0	2.0	38.8	45.7	40.9	74.3	9.5	34.9	790,370
<b>Residence</b>											
Urban	72.6	10.0	55.5	3.0	38.8	31.5	29.2	80.2	8.5	27.5	1,368,046
Rural	66.6	6.0	37.5	2.0	37.9	43.2	33.5	76.1	8.4	32.5	3,469,634
<b>Age</b>											
0-23 months	63.9	5.0	28.8	0.0	28.5	26.3	25.1	67.3	20.1	21.5	1,932,140
24-59 months	71.3	8.0	51.7	3.0	44.6	48.9	37.0	83.9	0.6	37.4	2,905,540
<b>Mother's education</b>											
None	48.7	2.0	15.7	0.0	38.3	41.7	30.7	66.7	12.8	25.8	204,334
Primary	64.4	5.0	36.1	1.0	39.1	43.7	33.6	77.9	6.4	32.9	2,506,123
Secondary +	74.9	10.0	52.9	3.0	36.9	35.2	30.7	77.5	10.4	29.3	2,119,833
<b>Wealth index quintiles</b>											
Poorest	57.2	4.0	24.9	0.0	39.0	46.8	29.6	74.1	8.2	32.5	1,066,064
Second	64.1	5.0	35.5	1.0	41.2	43.6	36.8	74.1	8.6	34.0	1,033,595
Middle	68.9	6.0	40.4	2.0	36.6	38.0	34.0	78.6	9.4	31.2	1,027,632
Fourth	71.6	9.0	48.9	2.0	37.3	39.4	31.0	78.4	7.6	29.9	903,767
Richest	84.0	10.0	70.7	5.0	36.1	29.1	29.2	82.6	7.9	26.6	806,622
<b>Language</b>											
Thai	68.1	6.0	44.3	2.0	37.7	38.4	31.9	78.6	7.8	30.6	4,320,845
Other Languages	69.9	7.0	28.1	0.0	42.0	52.1	35.6	66.0	13.0	35.0	516,835
<b>Total</b>	<b>68.3</b>	<b>7.0</b>	<b>42.6</b>	<b>2.0</b>	<b>38.2</b>	<b>39.9</b>	<b>32.3</b>	<b>77.3</b>	<b>8.4</b>	<b>31.1</b>	<b>4,837,680</b>

\* MICS indicator 49

\*\* MICS indicator 48

\*\*\* MICS indicator 50

**Table 37 Children left alone or with other children**  
**Percentage of children aged 0-59 months left in the care of other children under the age of 10 years or left alone in the past week, Thailand, 2005-2006**

	Percentage of children aged 0-59 months			Number of children aged 0-59 months
	Left in the care of children under the age of 10 years in past week	Left alone in the past week	Left with inadequate care in past week*	
<b>Sex</b>				
Male	11.6	4.6	13.7	2,462,868
Female	10.3	4.9	12.7	2,374,812
<b>Region</b>				
Central (incl.BKK)	6.7	4.3	9.9	1,486,052
North	11.4	6.2	15.2	761,416
Northeast	14.3	5.2	15.9	1,799,842
South	11.0	3.3	11.4	790,370
<b>Residence</b>				
Urban	7.4	3.9	10.0	1,368,046
Rural	12.4	5.1	14.5	3,469,634
<b>Age</b>				
0-23 months	7.5	3.9	9.4	1,932,140
24-59 months	13.3	5.4	15.7	2,905,540
<b>Mother's education</b>				
None	13.0	10.3	17.6	204,334
Primary	13.0	5.4	15.3	2,506,123
Secondary +	8.4	3.5	10.4	2,119,833
<b>Wealth index quintiles</b>				
Poorest	14.7	7.8	18.2	1,066,064
Second	13.4	4.5	15.0	1,033,595
Middle	9.8	4.3	11.8	1,027,632
Fourth	9.7	3.9	12.2	903,767
Richest	5.7	2.6	7.2	806,622
<b>Language</b>				
Thai	10.0	4.0	12.2	4,320,845
Other Languages	18.6	11.6	21.4	516,835
<b>Total</b>	<b>11.0</b>	<b>4.8</b>	<b>13.2</b>	<b>4,837,680</b>

\* MICS indicator 51

**Table 38 Early childhood education**  
**Percentage of children aged 36-59 months who are attending some form of organized early childhood education programme and percentage of first graders who attended pre-school, Thailand, 2005-2006**

	Percentage of children aged 36-59 months currently attending early childhood education*	Number of children aged 36-59 months	Percentage of children attending first grade who attended preschool program in previous year**	Number of children attending first grade
<b>Sex</b>				
Male	60.0	977,319	98.8	85,842
Female	61.4	967,103	100.0	79,202
<b>Region</b>				
Central (incl.BKK)	58.8	560,171	99.6	66,236
North	78.3	300,723	97.8	31,326
Northeast	57.8	758,096	100.0	46,581
South	54.3	325,431	100.0	20,901
<b>Residence</b>				
Urban	63.9	537,727	99.5	60,128
Rural	59.4	1,406,695	99.3	104,916
<b>Age of child</b>				
36-47 months	48.0	975,476	na	na
48-59 months	73.5	968,946	na	na
6 years***	na	na	99.4	165,044
<b>Mother's education</b>				
None	56.8	83,047	100.0	3,640
Primary	56.7	1,110,093	99.2	88,105
Secondary +	67.2	746,276	99.6	73,300
<b>Wealth index quintiles</b>				
Poorest	54.8	427,823	100.0	21,310
Second	54.0	427,411	100.0	38,030
Middle	59.7	413,801	98.2	38,232
Fourth	61.7	355,579	100.0	35,216
Richest	77.6	319,807	99.1	32,257
<b>Language</b>				
Thai	62.6	1,738,619	99.4	157,105
Other Languages	44.7	205,803	100.0	7,939
<b>Total</b>	<b>60.7</b>	<b>1,944,421</b>	<b>99.4</b>	<b>165,044</b>

\* MICS indicator 52

\*\* MICS indicator 53

na : Means not applicable

**Table 39 Primary school entry**  
**Percentage of children of primary school entry age attending grade 1, Thailand, 2005-2006**

	Percentage of children of primary school entry age currently attending grade 1*	Number of children of primary school entry age**
<b>Sex</b>		
Male	70.7	452,268
Female	68.6	440,124
<b>Region</b>		
Central (incl.BKK)	63.5	236,641
North	61.0	168,772
Northeast	75.8	344,462
South	75.1	142,516
<b>Residence</b>		
Urban	65.6	243,401
Rural	71.1	648,991
<b>Age of child**</b>		
7	69.6	892,392
<b>Mother's education</b>		
None	59.2	46,589
Primary	70.4	577,624
Secondary +	70.0	267,353
<b>Wealth index quintiles</b>		
Poorest	72.2	206,753
Second	69.7	177,008
Middle	68.2	201,070
Fourth	70.8	174,110
Richest	66.2	133,451
<b>Language</b>		
Thai	70.1	814,419
Other Languages	64.6	77,973
<b>Total</b>	<b>69.6</b>	<b>892,392</b>

\* MICS indicator 54

**Table 40 Primary school net attendance ratio**  
**Percentage of children of primary school aged 7 – 12 years attending primary or secondary school (NAR),**  
**Thailand, 2005-2006**

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
<b>Region</b>						
Central (incl.BKK)	97.7	933,019	97.9	856,792	97.8	1,789,811
North	97.3	571,646	97.8	570,181	97.5	1,141,827
Northeast	98.4	1,198,432	98.2	1,122,009	98.3	2,320,441
South	97.5	465,099	97.4	470,297	97.5	935,397
<b>Residence</b>						
Urban	98.1	833,854	98.0	814,445	98.0	1,648,300
Rural	97.8	2,334,341	97.9	2,204,835	97.8	4,539,176
<b>Age</b>						
7	90.2	452,268	91.0	440,124	90.6	892,392
8	98.1	544,392	99.3	560,229	98.7	1,104,622
9	99.2	554,321	99.1	494,645	99.2	1,048,966
10	99.7	551,230	99.1	514,213	99.5	1,065,444
11	99.4	535,912	99.4	504,397	99.4	1,040,309
12	99.3	530,072	98.5	505,671	98.9	1,035,743
<b>Mother's Education</b>						
None	93.8	174,657	92.3	190,835	93.0	365,493
Primary	97.9	2,121,958	98.3	2,000,243	98.1	4,122,201
Secondary +	98.9	862,240	98.3	821,680	98.6	1,683,920
<b>Wealth index quintiles</b>						
Poorest	97.1	718,923	96.6	697,411	96.9	1,416,334
Second	97.5	653,903	97.8	659,196	97.7	1,313,100
Middle	97.6	647,646	97.9	582,176	97.7	1,229,822
Fourth	99.0	595,738	98.3	549,630	98.6	1,145,369
Richest	98.4	551,985	99.4	530,867	98.9	1,082,852
<b>Language</b>						
Thai	98.1	2,878,162	98.3	2,718,940	98.2	5,597,103
Other Languages	95.6	290,033	94.0	300,340	94.8	590,373
<b>Total</b>	<b>97.9</b>	<b>3,168,196</b>	<b>97.9</b>	<b>3,019,280</b>	<b>97.9</b>	<b>6,187,476</b>

\* MICS Indicator 55; MDG Indicator 6

**Table 41 Secondary school net attendance ratio**  
**Percentage of children of secondary school aged 13 – 18 years attending secondary school or higher (NAR),**  
**Thailand, 2005-2006**

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
<b>Region</b>						
Central (incl.BKK)	74.1	958,141	78.4	926,867	76.2	1,885,008
North	80.3	594,039	84.5	574,428	82.4	1,168,467
Northeast	82.0	1,259,411	87.2	1,195,685	84.5	2,455,096
South	63.6	499,850	79.9	470,223	71.5	970,072
<b>Residence</b>						
Urban	78.7	881,439	82.0	863,252	80.3	1,744,691
Rural	75.9	2,430,001	83.4	2,303,951	79.6	4,733,952
<b>Age</b>						
13	84.3	515,467	87.8	515,111	86.1	1,030,578
14	89.6	529,824	93.4	507,171	91.5	1,036,996
15	86.6	622,495	90.3	573,863	88.3	1,196,358
16	76.0	529,100	80.6	534,624	78.3	1,063,724
17	62.1	525,595	76.9	541,212	69.6	1,066,807
18	61.3	588,959	68.6	495,222	64.6	1,084,181
<b>Mother's education</b>						
None	47.2	120,622	60.8	132,547	54.3	253,169
Primary	79.3	1,679,118	88.1	1,675,806	83.7	3,354,924
Secondary +	92.4	562,247	95.3	490,185	93.7	1,052,432
<b>Wealth index quintiles</b>						
Poorest	72.5	685,833	77.3	692,423	74.9	1,378,256
Second	76.5	706,572	83.1	649,783	79.7	1,356,355
Middle	72.0	640,138	82.3	611,847	77.0	1,251,985
Fourth	75.0	664,699	84.5	621,092	79.6	1,285,790
Richest	88.0	614,198	89.1	592,058	88.5	1,206,256
<b>Language</b>						
Thai	78.6	3,030,185	83.9	2,860,780	81.2	5,890,964
Other Languages	55.1	281,256	75.7	306,423	65.8	587,679
<b>Total</b>	<b>76.6</b>	<b>3,311,440</b>	<b>83.1</b>	<b>3,167,203</b>	<b>79.8</b>	<b>6,478,643</b>

\* MICS indicator 56



**Table 42 Secondary school age children attending primary school**  
**Percentage of children of secondary school age attending primary school, Thailand, 2005-2006**

	Male		Female		Total	
	Percent attending primary school	Number of children	Percent attending primary school	Number of children	Percent attending primary school	Number of children
<b>Region</b>						
Central (incl.BKK)	2.2	958,141	1.7	926,867	2.0	1,885,008
North	3.7	594,039	2.6	574,428	3.2	1,168,467
Northeast	1.3	1,259,411	1.7	1,195,685	1.5	2,455,096
South	5.1	499,850	2.6	470,223	3.9	970,072
<b>Residence</b>						
Urban	2.6	881,439	1.2	863,252	1.9	1,744,691
Rural	2.5	2,430,001	2.3	2,303,951	2.4	4,733,952
<b>Age</b>						
13	12.4	515,467	10.6	515,111	11.5	1,030,578
14	2.7	529,824	1.2	507,171	1.9	1,036,996
15	0.4	622,495	0.0	573,863	0.2	1,196,358
16	0.5	529,100	0.5	534,624	0.5	1,063,724
17	0.0	525,595	0.0	541,212	0.0	1,066,807
18	0.2	588,959	0.0	495,222	0.1	1,084,181
<b>Mother's education</b>						
None	11.9	120,622	9.4	132,547	10.6	253,169
Primary	3.1	1,679,118	2.5	1,675,806	2.8	3,354,924
Secondary +	2.3	562,247	1.6	490,185	2.0	1,052,432
<b>Wealth index quintiles</b>						
Poorest	3.3	685,833	3.5	692,423	3.4	1,378,256
Second	4.1	706,572	1.8	649,783	3.0	1,356,355
Middle	2.0	640,138	2.3	611,847	2.2	1,251,985
Fourth	1.9	664,699	1.1	621,092	1.5	1,285,790
Richest	1.2	614,198	1.2	592,058	1.2	1,206,256
<b>Language</b>						
Thai	1.9	3,030,185	1.6	2,860,780	1.8	5,890,964
Other Languages	9.1	281,256	5.5	306,423	7.2	587,679
<b>Total</b>	<b>2.6</b>	<b>3,311,440</b>	<b>2.0</b>	<b>3,167,203</b>	<b>2.3</b>	<b>6,478,643</b>

**Table 43 Children reaching grade 6**  
**Percentage of children entering first grade of primary school who eventually reach grade 6, Thailand, 2005-2006**

	Percent attending 2 <sup>nd</sup> grade who were in 1 <sup>st</sup> grade last year	Percent attending 3 <sup>rd</sup> grade who were in 2 <sup>nd</sup> grade last year	Percent attending 4 <sup>th</sup> grade who were in 3 <sup>rd</sup> grade last year	Percent attending 5 <sup>th</sup> grade who were in 4 <sup>th</sup> grade last year	Percent attending 6 <sup>th</sup> grade who were in 5 <sup>th</sup> grade last year	Percent who reach grade 6 of those who enter 1 <sup>st</sup> grade*
<b>Sex</b>						
Male	100.0	99.6	100.0	99.2	99.7	98.6
Female	100.0	100.0	99.8	99.5	100.0	99.2
<b>Region</b>						
Central (incl.BKK)	100.0	100.0	100.0	98.9	99.6	98.5
North	100.0	99.1	100.0	99.5	99.6	98.3
Northeast	100.0	99.9	99.8	99.6	100.0	99.3
South	100.0	99.8	99.9	99.5	100.0	99.2
<b>Residence</b>						
Urban	100.0	99.9	100.0	99.1	99.9	98.9
Rural	100.0	99.7	99.9	99.5	99.8	98.9
<b>Mother's education</b>						
None	100.0	99.5	100.0	97.3	97.9	94.8
Primary	100.0	100.0	100.0	99.7	100.0	99.6
Secondary +	100.0	100.0	100.0	100.0	100.0	100.0
<b>Wealth index quintiles</b>						
Poorest	100.0	99.2	99.7	99.1	99.6	97.6
Second	100.0	100.0	100.0	98.9	99.8	98.7
Middle	100.0	99.9	99.9	99.2	100.0	99.0
Fourth	100.0	100.0	100.0	100.0	99.6	99.6
Richest	100.0	100.0	100.0	99.8	100.0	99.8
<b>Language</b>						
Thai	100.0	99.9	99.9	99.4	99.9	99.2
Other Languages	100.0	98.5	99.9	98.8	98.9	96.1
<b>Total</b>	<b>100.0</b>	<b>99.8</b>	<b>99.9</b>	<b>99.4</b>	<b>99.8</b>	<b>98.9</b>

\* MICS indicator 57; MDG indicator 7

**Table 44 Primary school completion and transition to secondary education**  
**Primary school completion rate and transition rate to secondary education, Thailand, 2005-2006**

	Net primary school completion rate*	Number of children of primary school completion age	Transition rate to secondary education**	Number of children who were in the last grade of primary school the previous year
<b>Sex</b>				
Male	86.1	530,072	97.0	529,964
Female	87.6	505,671	97.3	501,647
<b>Region</b>				
Central (incl.BKK)	84.5	297,438	97.3	279,325
North	84.7	199,420	98.2	164,571
Northeast	92.6	385,765	97.6	422,511
South	79.5	153,120	94.9	165,203
<b>Residence</b>				
Urban	87.3	291,571	98.0	269,815
Rural	86.6	744,172	96.9	761,796
<b>Mother's education</b>				
None	56.4	58,631	94.0	40,312
Primary	87.9	697,070	98.3	714,889
Secondary +	90.5	274,538	99.9	233,678
<b>Wealth index quintiles</b>				
Poorest	84.8	232,027	94.5	262,033
Second	86.7	224,503	96.4	203,944
Middle	87.0	200,413	98.3	169,402
Fourth	86.8	182,077	98.2	201,618
Richest	89.2	196,723	99.4	194,613
<b>Language</b>				
Thai	88.8	937,434	97.1	937,447
Other Languages	68.3	98,309	97.8	94,164
<b>Total</b>	<b>86.8</b>	<b>1,035,743</b>	<b>97.2</b>	<b>1,031,611</b>

\* MICS indicator 59; MDG indicator 7b

\*\* MICS indicator 58

**Table 45 Education gender parity**  
**Ratio of girls to boys attending primary education and ratio of girls to boys attending secondary education,**  
**Thailand, 2005-2006**

	Primary school net attendance ratio (NAR), girls	Primary school net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school NAR*	Secondary school net attendance ratio (NAR), girls	Secondary school net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school NAR*
<b>Sex</b>						
Male	na	97.9	na	na	76.6	na
Female	97.9	na	na	83.1	na	na
<b>Region</b>						
Central (incl.BKK)	97.9	97.7	1.0	78.4	74.1	1.1
North	97.8	97.3	1.0	84.5	80.3	1.1
Northeast	98.2	98.4	1.0	87.2	82.0	1.1
South	97.4	97.5	1.0	79.9	63.6	1.3
<b>Residence</b>						
Urban	98.0	98.1	1.0	82.0	78.7	1.0
Rural	97.9	97.8	1.0	83.4	75.9	1.1
<b>Mother's education</b>						
None	92.3	93.8	1.0	60.8	47.2	1.3
Primary	98.3	97.9	1.0	88.1	79.3	1.1
Secondary +	98.3	98.9	1.0	95.3	92.4	1.0
<b>Wealth index quintiles</b>						
Poorest	96.6	97.1	1.0	77.3	72.5	1.1
Second	97.8	97.5	1.0	83.1	76.5	1.1
Middle	97.9	97.6	1.0	82.3	72.0	1.1
Fourth	98.3	99.0	1.0	84.5	75.0	1.1
Richest	99.4	98.4	1.0	89.1	88.0	1.0
<b>Language</b>						
Thai	98.3	98.1	1.0	83.9	78.6	1.1
Other Languages	94.0	95.6	1.0	75.7	55.1	1.4
<b>Total</b>	<b>97.9</b>	<b>97.9</b>	<b>1.0</b>	<b>83.1</b>	<b>76.6</b>	<b>1.1</b>

\* MICS Indicator 61; MDG Indicator 9

na : Means not applicable

**Table 46 Adult literacy**  
**Percentage of women aged 15-24 years that are literate\*, Thailand, 2005-2006**

	Percentage literate*	Percentage not known**	Number of women aged 15-24 years
<b>Region</b>			
Central (incl.BKK)	96.7	0.4	1,736,134
North	95.2	0.4	893,799
Northeast	98.0	0.0	1,738,850
South	93.2	0.8	771,930
<b>Residence</b>			
Urban	97.5	0.2	1,551,888
Rural	95.9	0.4	3,588,825
<b>Education</b>			
None	4.2	5.2	94,238
Primary	85.4	1.0	616,545
Secondary +	100.0	0.0	4,422,646
<b>Age</b>			
15-19	97.7	0.1	2,542,192
20-24	95.1	0.5	2,598,520
<b>Wealth index quintiles</b>			
Poorest	92.8	0.2	890,920
Second	96.6	0.6	980,925
Middle	96.3	0.5	1,069,339
Fourth	97.7	0.2	1,169,551
Richest	97.9	0.2	1,029,977
<b>Language</b>			
Thai	97.7	0.2	4,699,018
Other Languages	82.3	1.6	441,694
<b>Total</b>	<b>96.4</b>	<b>0.3</b>	<b>5,140,712</b>

\* MICS indicator 60; MDG indicator 8

**Table 47 Early marriage and polygyny**  
**Percentage of women aged 15-49 years in marriage or union before their 15th birthday, percentage of women aged 20-49 years in marriage or union before their 18th birthday, percentage of women aged 15-19 years currently married or in union, Thailand, 2005-2006**

	Percentage married before age 15*	Number of women aged 15-49 years	Percentage married before age 18*	Number of women aged 20-49 years	Percentage of women 15-19 married/in union**	Number of women aged 15-19 years
<b>Region</b>						
Central (incl.BKK)	1.8	6,991,862	14.5	6,211,101	17.3	780,760
North	3.0	3,229,399	23.5	2,769,313	15.0	460,086
Northeast	2.5	5,883,420	23.8	4,969,044	13.2	914,376
South	2.8	2,437,448	20.5	2,050,478	12.3	386,970
<b>Residence</b>						
Urban	1.6	6,042,565	13.6	5,326,538	13.8	716,026
Rural	2.7	12,499,563	22.7	10,673,398	14.9	1,826,166
<b>Age</b>						
15-19	1.7	2,542,192	na	na	14.6	2,542,192
20-24	2.8	2,598,520	19.6	2,598,520	na	na
25-29	2.6	2,639,148	19.3	2,639,148	na	na
30-34	2.6	2,788,662	20.1	2,788,662	na	na
35-39	2.3	2,842,828	19.2	2,842,828	na	na
40-44	2.3	2,707,544	20.1	2,707,544	na	na
45-49	2.0	2,423,234	19.8	2,423,234	na	na
<b>Education</b>						
None	8.1	546,232	32.5	520,808	27.6	25,423
Primary	3.4	8,265,232	27.1	8,070,440	47.5	194,792
Secondary +	1.1	9,712,623	10.6	7,391,957	11.7	2,320,666
<b>Wealth index quintiles</b>						
Poorest	3.7	3,086,179	28.1	2,592,585	17.5	493,595
Second	3.0	3,351,453	24.8	2,831,739	16.2	519,715
Middle	2.7	3,675,322	22.8	3,174,564	16.2	500,758
Fourth	2.0	4,145,686	18.0	3,609,211	16.0	536,476
Richest	0.8	4,283,487	9.1	3,791,839	6.9	491,648
<b>Language</b>						
Thai	2.2	17,298,134	19.0	14,986,963	14.9	2,311,171
Other Languages	4.2	1,243,995	29.9	1,012,973	11.6	231,021
<b>Total</b>	<b>2.3</b>	<b>18,542,128</b>	<b>19.7</b>	<b>15,999,936</b>	<b>14.6</b>	<b>2,542,192</b>

\* MICS indicator 67

\*\* MICS indicator 68

\*\*\* MICS indicator 70

na : Means not applicable

**Table 48 Spousal age difference**  
**Percent distribution of currently married/in union women aged 15-19 and 20-24 years according to the age difference with their husband or partner, Thailand, 2005-2006**

Region	Percentage of currently married/in union women aged 15-19 years whose husband or partner is:						Percentage of currently married/in union women aged 20-24 years whose husband or partner is:						Number of women aged 15-19 years currently married/in union	Number of women aged 20-24 years currently married/in union		
	Younger		5-9 years older		10+ years older*		Younger		5-9 years older		10+ years older*				Husband/partner's age unknown	Total
	0-4 years	43.1	34.9	18.7	0.0	100.0	11.7	50.7	23.6	13.4	0.6	100.0				
Central (incl.BKK)	3.3	43.1	34.9	18.7	0.0	100.0	134,802	11.7	50.7	23.6	13.4	0.6	100.0	427,792		
North	1.4	52.9	34.0	11.7	0.0	100.0	68,998	11.7	45.9	27.8	14.6	0.0	100.0	265,558		
Northeast	0.1	55.4	33.1	9.8	1.6	100.0	120,245	3.6	48.9	33.8	13.1	0.6	100.0	493,800		
South	0.8	53.3	26.3	18.5	1.1	100.0	47,428	5.0	47.9	36.1	10.1	0.9	100.0	219,010		
<b>Residence</b>																
Urban	0.7	47.2	32.1	19.4	0.5	100.0	98,898	8.0	50.7	26.8	13.7	0.8	100.0	316,022		
Rural	1.9	51.3	33.4	12.7	0.7	100.0	272,575	7.8	48.1	30.8	12.8	0.4	100.0	1,090,138		
<b>Age</b>																
15-19	1.6	50.2	33.1	14.5	0.7	100.0	371,473	na	na	na	na	na	na	na		
20-24	na	na	na	na	na	na	na	7.8	48.7	29.9	13.0	0.5	100.0	1,406,160		
<b>Education</b>																
None	0.0	8.8	57.0	34.2	0.0	100.0	7,008	7.3	59.9	21.2	11.7	0.0	100.0	28,156		
Primary	0.0	34.0	43.9	22.1	0.0	100.0	92,477	4.2	39.9	37.9	17.0	1.0	100.0	318,674		
Secondary +	2.2	56.8	28.8	11.4	0.9	100.0	271,988	9.0	51.2	27.8	11.7	0.4	100.0	1,054,328		
<b>Wealth index quintiles</b>																
Poorest	1.2	42.1	43.9	12.8	0.0	100.0	86,358	7.9	47.4	28.2	15.9	0.6	100.0	263,204		
Second	0.3	49.7	35.4	12.3	2.3	100.0	84,102	8.3	46.8	31.3	13.2	0.5	100.0	303,118		
Middle	2.1	51.2	28.8	17.9	0.0	100.0	80,964	8.4	53.1	29.5	8.7	0.3	100.0	342,963		
Fourth	1.1	55.6	25.6	17.7	0.0	100.0	85,902	6.2	49.3	31.7	12.1	0.7	100.0	338,834		
Richest	5.8	56.1	28.7	7.9	1.5	100.0	34,147	9.2	43.8	27.4	19.2	0.3	100.0	158,041		
<b>Language</b>																
Thai	1.7	50.0	33.4	14.2	0.7	100.0	344,684	8.1	49.0	29.4	13.1	0.4	100.0	1,272,523		
Other Languages	0.0	53.1	28.5	18.4	0.0	100.0	26,789	5.3	46.2	35.2	12.3	1.0	100.0	133,637		
<b>Total</b>	<b>1.6</b>	<b>50.2</b>	<b>33.1</b>	<b>14.5</b>	<b>0.7</b>	<b>100.0</b>	<b>371,473</b>	<b>7.8</b>	<b>48.7</b>	<b>29.9</b>	<b>13.0</b>	<b>0.5</b>	<b>100.0</b>	<b>1,406,160</b>		

\* MICS indicator 69 na : Means not applicable

**Table 49 Child disability reported by their mother or caretaker according to the type of disability, Thailand, 2005-2006**

	Percentage of children aged 2-9 years with reported disability by type of disability										3-9 years		2 years		
	Delay in sitting, standing or walking	Difficulty seeing, either in the daytime or at night	Appears to have difficulty hearing	No understanding of instructions	Difficulty in walking, moving arms, weakness or stiffness	Have fits, become rigid, lose consciousness	Not learning to do things like other children his/her age	Not speaking/being understood in words	Appears mentally backward, dull, or slow	Percentage of children aged 2-9 years with reported disability*	Number of children aged 2-9 years	Speech is not normal	Number of children aged 3-9 years	Cannot name at least one object	Number of children aged 2 years
<b>Region</b>															
Central (incl.BKK)	0.8	0.8	0.5	1.7	0.9	0.8	7.4	6.6	2.2	11.9	2,242,435	2.3	1,946,499	13.7	295,936
North	0.9	0.5	0.5	1.3	0.7	1.0	3.7	2.5	2.4	7.5	1,290,390	3.8	1,135,057	9.8	155,333
Northeast	0.9	0.8	0.5	2.1	0.7	1.5	7.1	6.1	4.4	13.1	2,945,253	3.2	2,585,614	10.5	359,639
South	1.1	0.7	0.5	1.4	0.6	1.7	10.4	4.7	3.6	16.1	1,200,774	2.1	1,058,581	11.0	142,193
<b>Residence</b>															
Urban	1.0	0.8	0.5	1.3	1.0	0.9	6.3	4.9	2.6	11.2	2,080,027	2.3	1,817,103	14.1	262,923
Rural	0.9	0.7	0.5	1.9	0.6	1.3	7.4	5.6	3.5	12.7	5,598,825	3.1	4,908,647	10.5	690,178
<b>Age of child</b>															
2-4	0.8	0.4	0.5	1.7	0.6	1.6	6.5	5.8	2.6	11.8	2,897,298	3.4	1,944,197	11.5	953,101
5-6	1.0	0.9	0.4	1.7	1.0	1.3	8.0	5.6	3.7	13.4	1,735,574	2.7	1,735,574	na	na
7-9	0.9	0.9	0.6	1.8	0.7	0.8	7.2	5.0	3.6	12.1	3,045,980	2.6	3,045,980	na	na
<b>Mother's education</b>															
None	1.3	0.6	1.0	3.7	1.3	2.0	8.9	8.5	3.8	14.9	380,170	4.1	335,638	16.0	44,532
Primary	1.0	0.7	0.5	1.9	0.6	1.4	7.0	5.2	3.6	12.6	4,675,953	3.0	4,167,524	10.9	508,428
Secondary +	0.6	0.7	0.4	1.3	0.8	0.8	7.0	5.2	2.6	11.2	2,609,240	2.4	2,209,956	11.7	399,284
<b>Wealth index quintiles</b>															
Poorest	1.5	1.1	1.0	2.7	0.9	1.7	7.2	6.3	5.1	13.4	1,754,543	3.8	1,532,718	12.0	221,825
Second	0.7	0.5	0.4	1.8	0.6	1.4	8.6	6.3	3.0	14.0	1,651,503	2.8	1,456,620	8.0	194,883
Middle	0.8	0.7	0.5	1.8	0.9	1.4	6.8	4.5	3.3	12.7	1,572,774	3.4	1,369,955	14.1	202,819
Fourth	0.9	0.7	0.2	1.3	0.6	0.9	7.2	5.6	2.5	11.3	1,442,627	1.9	1,260,785	7.7	181,842
Richest	0.5	0.7	0.3	0.9	0.7	0.6	5.3	4.1	1.9	9.1	1,257,405	2.2	1,105,673	16.3	151,732
<b>Language</b>															
Thai	0.9	0.7	0.5	1.7	0.7	1.2	6.5	5.4	3.2	11.7	6,937,230	2.9	6,073,207	11.7	864,024
Other Languages	0.8	1.0	0.5	1.7	1.0	1.7	12.5	5.5	4.2	17.5	741,622	2.7	652,544	9.7	89,077
<b>Total</b>	<b>0.9</b>	<b>0.7</b>	<b>0.5</b>	<b>1.7</b>	<b>0.7</b>	<b>1.2</b>	<b>7.1</b>	<b>5.4</b>	<b>3.3</b>	<b>12.3</b>	<b>7,678,852</b>	<b>2.9</b>	<b>6,725,751</b>	<b>11.5</b>	<b>953,101</b>

\* MICS indicator 101

na : Means not applicable



**Table 50 Knowledge of preventing HIV transmission**  
**Percentage of women aged 15-49 years who know the main ways of preventing HIV transmission,**  
**Thailand, 2005-2006**

	Percentage who know transmission can be prevented by:							Number of women
	Heard of AIDS	Having only one faithful uninfected sex partner	Using a condom every time	Abstaining from sex	Knows all three ways	Knows at least one way	Doesn't know any way	
<b>Region</b>								
Central (incl.BKK)	98.6	76.6	84.5	53.8	42.7	93.8	6.2	6,991,862
North	98.0	81.2	84.9	68.2	54.1	94.9	5.1	3,229,399
Northeast	98.4	83.0	88.1	65.3	55.0	96.2	3.8	5,883,420
South	97.5	79.1	83.0	56.6	46.2	93.4	6.6	2,437,448
<b>Residence</b>								
Urban	99.0	76.6	84.7	52.4	41.1	94.3	5.7	6,042,565
Rural	97.9	81.3	85.9	64.1	52.9	94.9	5.1	12,499,563
<b>Age</b>								
15-19	98.9	78.9	85.5	57.4	46.2	95.5	4.5	2,542,192
20-24	98.2	78.4	85.1	55.5	45.1	93.8	6.2	2,598,520
25-29	98.3	79.7	85.3	55.7	45.4	94.6	5.4	2,639,148
30-34	98.7	79.7	86.0	59.9	48.4	95.2	4.8	2,788,662
35-39	98.2	80.5	87.1	63.9	53.0	94.8	5.2	2,842,828
40-44	97.9	79.9	85.2	63.9	51.6	94.9	5.1	2,707,544
45-49	97.6	81.0	84.1	65.7	53.5	94.0	6.0	2,423,234
<b>Education</b>								
None	75.0	54.4	57.0	54.9	38.0	70.1	29.9	546,232
Primary	98.1	81.6	87.0	68.9	56.6	95.4	4.6	8,265,232
Secondary +	99.8	79.7	86.0	53.4	43.3	95.5	4.5	9,712,623
<b>Wealth index quintiles</b>								
Poorest	95.7	78.8	85.0	68.7	55.7	92.9	7.1	3,086,179
Second	97.8	82.2	86.7	64.9	54.5	95.3	4.7	3,351,453
Middle	98.5	80.8	86.6	63.8	52.2	95.2	4.8	3,675,322
Fourth	99.1	80.0	85.8	57.6	46.3	95.6	4.4	4,145,686
Richest	99.5	77.4	83.7	50.2	40.0	94.2	5.8	4,283,487
<b>Language</b>								
Thai	98.8	80.1	86.1	60.6	49.3	95.2	4.8	17,298,134
Other Languages	90.8	74.4	76.6	56.3	44.8	87.4	12.6	1,243,995
<b>Total</b>	<b>98.3</b>	<b>79.7</b>	<b>85.5</b>	<b>60.3</b>	<b>49.0</b>	<b>94.7</b>	<b>5.3</b>	<b>18,542,128</b>

**Table 51 Identifying misconceptions about HIV/AIDS**  
**Percentage of women aged 15-49 years who correctly identify misconceptions about HIV/AIDS,**  
**Thailand, 2005-2006**

	Percent who know that:			Reject two most common misconceptions and know a healthy-looking person can be infected	Percent who know that:		Number of women
	HIV cannot be transmitted by:		Option 3: HIV cannot be transmitted by sharing food		Option 4: HIV can be transmitted by sharing needles		
Region	Option 1: Supernatural means	Option 2: Mosquito bites	A healthy looking person can be infected				
Central (incl.BKK)	94.8	73.9	78.4	62.0	77.5	96.3	6,991,862
North	93.3	75.0	77.7	63.8	80.7	95.6	3,229,399
Northeast	93.0	68.4	78.7	63.9	80.2	95.9	5,883,420
South	88.3	68.3	74.6	56.2	72.9	93.1	2,437,448
<b>Residence</b>							
Urban	95.1	74.6	78.4	63.2	78.9	96.9	6,042,565
Rural	92.1	70.2	77.6	61.7	78.0	95.0	12,499,563
<b>Age</b>							
15-19	94.5	75.0	78.2	63.1	79.3	96.4	2,542,192
20-24	93.5	76.0	78.6	62.6	78.3	95.5	2,598,520
25-29	93.8	74.0	78.4	63.3	80.0	95.8	2,639,148
30-34	93.5	73.1	79.4	64.4	80.1	96.3	2,788,662
35-39	93.1	70.6	78.0	62.4	78.6	95.5	2,842,828
40-44	92.0	67.2	75.6	59.5	76.8	95.3	2,707,544
45-49	91.1	65.2	76.7	59.8	74.6	94.5	2,423,234
<b>Education</b>							
None	64.3	42.6	51.1	34.7	49.6	66.2	546,232
Primary	91.5	65.2	76.0	59.2	76.2	95.4	8,265,232
Secondary +	96.2	78.8	81.0	66.3	81.8	97.6	9,712,623
<b>Wealth index quintiles</b>							
Poorest	89.0	62.6	72.8	57.6	75.9	92.2	3,086,179
Second	91.4	66.9	77.2	60.2	76.8	94.7	3,351,453
Middle	93.0	71.2	77.4	62.0	78.1	95.9	3,675,322
Fourth	94.2	74.7	80.6	63.7	78.7	96.5	4,145,686
Richest	96.5	79.2	79.8	65.7	81.1	97.8	4,283,487
<b>Language</b>							
Thai	94.1	72.7	79.1	63.6	79.4	96.5	17,298,134
Other Languages	78.7	57.4	60.1	41.7	63.1	83.8	1,243,995
<b>Total</b>	<b>93.1</b>	<b>71.6</b>	<b>77.9</b>	<b>62.2</b>	<b>78.3</b>	<b>95.6</b>	<b>18,542,128</b>

**Table 52 Comprehensive knowledge of HIV/AIDS transmission**  
**Percentage of women aged 15-49 years who have comprehensive knowledge of HIV/AIDS transmission,**  
**Thailand, 2005-2006**

	Know 2 ways to prevent HIV transmission	Correctly identify 3 misconceptions about HIV transmission	Have comprehensive knowledge (identify 2 prevention methods and 3 misconceptions)*	Number of women
<b>Region</b>				
Central (incl.BKK)	69.1	62.0	44.3	6,991,862
North	72.8	63.8	48.3	3,229,399
Northeast	76.0	63.9	50.2	5,883,420
South	70.5	56.2	42.5	2,437,448
<b>Residence</b>				
Urban	68.8	63.2	44.9	6,042,565
Rural	73.7	61.7	47.5	12,499,563
<b>Age</b>				
15-19	70.8	63.1	46.0	2,542,192
20-24	70.9	62.6	46.1	2,598,520
15-24	70.9	62.8	46.1	5,140,712
25-29	71.9	63.3	47.0	2,639,148
30-34	71.8	64.4	48.0	2,788,662
35-39	74.4	62.4	48.3	2,842,828
40-44	72.0	59.5	44.8	2,707,544
45-49	72.7	59.8	45.9	2,423,234
<b>Education</b>				
None	44.7	34.7	23.1	546,232
Primary	74.6	59.2	46.5	8,265,232
Secondary +	71.6	66.3	48.1	9,712,623
<b>Wealth Index Quintiles</b>				
Poorest	72.6	57.6	45.1	3,086,179
Second	74.7	60.2	47.0	3,351,453
Middle	73.9	62.0	48.0	3,675,322
Fourth	71.7	63.7	47.1	4,145,686
Richest	68.5	65.7	45.7	4,283,487
<b>Language</b>				
Thai	72.6	63.6	47.7	17,298,134
Other Languages	64.9	41.7	32.1	1,243,995
<b>Total</b>	<b>72.1</b>	<b>62.2</b>	<b>46.6</b>	<b>18,542,128</b>

\* MICS indicator 82; MDG indicator 19b

**Table 53 Knowledge of mother-to-child HIV transmission**  
**Percentage of women aged 15-49 years who correctly identify means of HIV transmission from mother to child,**  
**Thailand, 2005-2006**

	Know AIDS can be transmitted from mother to child	Percent who know AIDS can be transmitted:				Did not know any specific way	Number of women
		During pregnancy	At delivery	Through breastmilk	All three ways*		
<b>Region</b>							
Central (incl.BKK)	91.2	85.1	72.1	76.4	62.1	7.4	6,991,862
North	94.4	87.8	78.8	88.1	72.3	3.5	3,229,399
Northeast	95.9	91.6	80.2	88.5	74.8	2.5	5,883,420
South	91.3	85.2	76.0	77.4	65.4	6.2	2,437,448
<b>Residence</b>							
Urban	92.2	85.6	72.3	76.9	61.3	6.8	6,042,565
Rural	93.8	88.6	78.3	85.1	71.8	4.2	12,499,563
<b>Age</b>							
15-19	94.1	89.0	78.4	83.0	70.3	4.8	2,542,192
20-24	92.7	86.2	75.4	82.4	67.1	5.6	2,598,520
25-29	93.6	87.3	76.6	81.7	67.8	4.7	2,639,148
30-34	93.2	87.4	74.8	82.1	66.9	5.5	2,788,662
35-39	93.1	87.8	76.5	83.7	69.3	5.1	2,842,828
40-44	93.5	88.6	76.0	81.8	68.0	4.4	2,707,544
45-49	92.6	87.3	76.7	82.0	69.2	5.0	2,423,234
<b>Education</b>							
None	66.4	62.9	58.2	62.9	55.1	8.6	546,232
Primary	93.5	88.5	77.1	84.7	70.8	4.6	8,265,232
Secondary +	94.6	88.4	76.8	81.7	67.1	5.2	9,712,623
<b>Wealth index quintiles</b>							
Poorest	92.8	88.2	78.1	86.0	73.2	2.9	3,086,179
Second	94.1	88.6	78.5	86.6	72.3	3.7	3,351,453
Middle	93.7	87.6	77.0	84.1	69.0	4.9	3,675,322
Fourth	92.6	87.2	74.3	79.6	65.5	6.5	4,145,686
Richest	93.2	86.9	74.7	77.9	64.0	6.3	4,283,487
<b>Language</b>							
Thai	94.0	88.4	76.7	83.0	68.6	4.8	17,298,134
Other Languages	82.5	77.7	71.7	74.7	65.3	8.3	1,243,995
<b>Total</b>	<b>93.3</b>	<b>87.6</b>	<b>76.3</b>	<b>82.4</b>	<b>68.3</b>	<b>5.0</b>	<b>18,542,128</b>

\* MICS indicator 89

**Table 54 Attitudes toward people living with HIV/AIDS**  
**Percentage of women aged 15-49 years who have heard of AIDS who express a discriminatory attitude towards**  
**people living with HIV/AIDS, Thailand, 2005-2006**

Region	Percent of women who:						Number of women who have heard of AIDS
	Would not care for a family member who was sick with AIDS	If a family member had HIV would want to keep it a secret	Believe that a teacher with HIV should not be allowed to work	Would not buy food from a person with HIV/AIDS	Agree with at least one discriminatory statement	Agree with none of the discriminatory statements*	
<b>Region</b>							
Central (incl.BKK)	5.8	45.5	26.6	62.7	80.1	19.9	6,892,430
North	4.5	23.9	26.6	61.7	72.6	27.4	3,163,301
Northeast	3.6	29.4	32.4	70.8	80.8	19.2	5,790,700
South	5.0	45.9	32.4	64.1	82.2	17.8	2,375,766
<b>Residence</b>							
Urban	5.2	45.1	25.6	63.1	80.1	19.9	5,983,396
Rural	4.6	32.6	31.0	66.3	78.9	21.1	12,238,801
<b>Age</b>							
15-19	4.3	37.1	28.7	67.4	80.6	19.4	2,514,623
20-24	4.7	40.0	27.4	65.7	80.1	19.9	2,552,256
25-29	4.3	42.2	27.5	63.1	79.7	20.3	2,594,541
30-34	4.1	36.9	30.2	64.8	79.5	20.5	2,752,487
35-39	5.2	34.5	29.9	65.2	78.6	21.4	2,792,774
40-44	5.9	32.9	29.8	65.1	77.9	22.1	2,651,273
45-49	4.9	33.4	31.0	65.6	78.7	21.3	2,364,244
<b>Education</b>							
None	8.3	33.3	39.6	67.7	78.0	22.0	409,525
Primary	5.4	31.0	31.6	67.3	79.4	20.6	8,106,341
Secondary +	4.1	41.6	26.8	63.5	79.3	20.7	9,694,467
<b>Wealth index quintiles</b>							
Poorest	5.2	28.0	33.7	70.9	81.0	19.0	2,951,960
Second	3.8	30.9	32.6	69.4	81.0	19.0	3,279,047
Middle	5.0	35.9	29.2	65.3	79.1	20.9	3,621,329
Fourth	5.2	40.8	28.4	62.5	78.1	21.9	4,107,106
Richest	4.6	43.8	24.3	60.7	78.0	22.0	4,262,756
<b>Language</b>							
Thai	4.8	36.4	28.9	65.2	79.3	20.7	17,092,714
Other Languages	5.0	41.9	34.4	65.6	79.5	20.5	1,129,484
<b>Total</b>	<b>4.8</b>	<b>36.7</b>	<b>29.2</b>	<b>65.3</b>	<b>79.3</b>	<b>20.7</b>	<b>18,222,198</b>

\* MICS indicator 86

**Table 55 HIV testing and counseling coverage during antenatal care**  
**Percentage of women aged 15-49 years who gave birth in the two years preceding the survey who were offered HIV testing and counseling with their antenatal care, Thailand, 2005-2006**

	Percent of women who:				Number of women who gave birth in the 2 years preceding the survey
	Received antenatal care from a health care professional for last pregnancy	Were provided information about HIV prevention during ANC visit*	Were tested for HIV at ANC visit	Received results of HIV test at ANC visit**	
<b>Region</b>					
Central (incl.BKK)	97.8	85.0	91.7	88.6	601,010
North	98.2	89.5	88.1	85.5	261,631
Northeast	98.9	87.6	86.8	83.8	657,569
South	95.3	82.7	80.6	74.9	328,568
<b>Residence</b>					
Urban	97.8	84.0	90.5	87.4	485,353
Rural	97.8	87.0	86.4	82.8	1,363,425
<b>Age</b>					
15-19	96.6	87.8	87.0	81.4	145,646
20-24	98.2	88.8	88.9	86.8	527,052
25-29	98.3	87.1	88.1	84.1	523,705
30-34	97.3	82.2	87.0	83.2	393,587
35-49	97.3	84.1	83.9	81.1	258,788
<b>Education</b>					
None	90.5	70.5	63.3	58.3	55,531
Primary	97.3	87.3	83.6	79.4	679,618
Secondary +	98.5	86.4	91.1	88.2	1,112,114
<b>Wealth index quintiles</b>					
Poorest	96.0	85.8	81.8	78.2	382,922
Second	98.0	88.6	88.3	84.8	391,831
Middle	97.8	87.7	88.0	85.4	389,377
Fourth	97.9	85.0	88.8	83.8	369,375
Richest	99.5	83.1	91.0	88.7	315,273
<b>Language</b>					
Thai	98.3	87.5	89.8	86.4	1,614,236
Other Languages	94.3	77.2	71.2	67.7	234,542
<b>Total</b>	<b>97.8</b>	<b>86.2</b>	<b>87.5</b>	<b>84.0</b>	<b>1,848,778</b>

\* MICS indicator 90

\*\* MICS indicator 91

**Table 56 Children's living arrangements and orphanhood**  
**Percent distribution of children aged 0-17 years according to living arrangements, percentage of children aged 0-17 years in households not living with a biological parent and percentage of children who are orphans, Thailand, 2005-2006**

	Living with both parents		Living with neither parent		Living with mother only		Living with father only		Living with both parents dead**		Number of children
	Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead	Not living with a biological parent*	One or both parents dead**	
<b>Sex</b>											
Male	63.8	0.3	1.0	17.1	0.4	11.3	2.2	2.3	0.5	18.8	4.6
Female	62.1	0.4	0.9	18.0	0.4	11.7	2.4	1.9	0.6	19.8	4.9
<b>Region</b>											
Central (incl.BKK)	65.8	0.3	0.9	13.5	0.4	11.8	2.4	3.1	0.4	15.1	4.5
North	60.9	0.5	1.5	18.4	0.8	10.5	2.7	2.5	0.5	21.3	6.5
Northeast	55.7	0.4	0.9	24.0	0.3	13.2	2.2	1.6	0.5	25.6	4.3
South	77.6	0.4	0.8	8.3	0.4	7.6	2.2	1.2	0.7	9.8	4.5
<b>Residence</b>											
Urban	65.4	0.3	1.0	13.5	0.4	12.2	2.4	2.9	0.4	15.2	4.6
Rural	62.1	0.4	1.0	19.0	0.4	11.2	2.3	1.9	0.6	20.9	4.8
<b>Age</b>											
0-4 years	64.6	0.1	0.5	19.0	0.0	12.7	0.8	1.4	0.1	19.6	1.5
5-9 years	61.2	0.3	1.0	19.7	0.4	11.9	1.8	2.3	0.3	21.3	3.8
10-14 years	62.7	0.6	1.4	15.8	0.8	10.8	3.1	2.7	0.7	18.6	6.7
15-17 years	63.5	0.7	1.0	15.1	0.5	10.1	4.2	2.1	1.1	17.4	7.7
<b>Wealth index quintiles</b>											
Poorest	55.5	0.7	0.9	23.5	0.4	12.1	2.8	2.0	0.5	25.4	5.3
Second	57.8	0.2	1.3	22.2	0.6	11.7	2.1	1.9	0.9	24.3	5.2
Middle	64.4	0.6	1.1	17.0	0.5	10.9	2.4	1.8	0.3	19.2	5.0
Fourth	67.1	0.2	1.2	12.8	0.5	11.6	2.4	2.8	0.4	14.7	4.8
Richest	72.9	0.2	0.3	9.8	0.2	10.9	1.9	2.4	0.4	10.5	3.2
<b>Language</b>											
Thai	62.3	0.4	1.0	17.9	0.4	11.6	2.3	2.2	0.5	19.7	4.7
Other Languages	69.2	0.6	0.7	14.0	0.3	10.4	2.8	1.1	0.8	15.5	5.1
<b>Total</b>	<b>63.0</b>	<b>0.4</b>	<b>1.0</b>	<b>17.5</b>	<b>0.4</b>	<b>11.5</b>	<b>2.3</b>	<b>2.1</b>	<b>0.5</b>	<b>19.3</b>	<b>4.7</b>

\* MICS indicator 78;

\*\* MICS indicator 75;

**Table 57 Prevalence of orphanhood and vulnerability among children**  
**Percentage of children aged 0-17 years who are orphaned or vulnerable, Thailand, 2005-2006**

	Chronically ill parent	Adult death in household	Chronically ill adult in household	Vulnerable children*	One or both parents dead**	Orphans and vulnerable children	Number of children aged 0-17 years
<b>Sex</b>							
Male	0.1	0.5	2.2	2.8	4.6	7.0	9,262,792
Female	0.3	0.3	2.2	2.7	4.9	7.3	8,912,013
<b>Region</b>							
Central (incl.BKK)	0.1	0.3	2.2	2.6	4.5	6.7	5,333,518
North	0.3	0.3	2.7	3.1	6.5	9.2	3,154,606
Northeast	0.2	0.6	2.1	2.9	4.3	6.7	6,873,360
South	0.2	0.1	2.0	2.3	4.5	6.7	2,813,321
<b>Residence</b>							
Urban	0.2	0.3	1.8	2.3	4.6	6.5	4,903,749
Rural	0.2	0.4	2.4	2.9	4.8	7.3	13,271,056
<b>Age</b>							
0-4 years	0.2	0.4	2.3	2.9	1.5	4.1	4,857,293
5-9 years	0.2	0.3	2.0	2.5	3.8	6.1	4,781,554
10-14 years	0.2	0.3	2.1	2.6	6.7	8.8	5,209,069
15-17 years	0.2	0.6	2.4	3.2	7.7	10.2	3,326,888
<b>Wealth index quintiles</b>							
Poorest	0.2	0.2	3.1	3.5	5.3	8.5	4,064,939
Second	0.3	0.9	1.9	3.1	5.2	7.5	3,905,358
Middle	0.2	0.3	2.2	2.7	5.0	7.4	3,632,972
Fourth	0.2	0.3	1.7	2.1	4.8	6.6	3,426,419
Richest	0.1	0.0	1.9	2.1	3.2	5.1	3,145,116
<b>Language</b>							
Thai	0.2	0.4	2.1	2.7	4.7	7.0	16,410,552
Other Languages	0.1	0.2	3.2	3.5	5.1	8.5	1,764,253
<b>Total</b>	<b>0.2</b>	<b>0.4</b>	<b>2.2</b>	<b>2.7</b>	<b>4.7</b>	<b>7.1</b>	<b>18,174,805</b>

\* MICS indicator 76

\*\* MICS indicator 75



**Table 58 Orphaned and vulnerable children school attendance by orphaned and vulnerable status among children aged 10-14 years, Thailand, 2005-2006**

	Percent of children whose mother and father have died	School attendance rate of children whose mother and father have died	Percent of children of whom both parents are alive and child is living with at least one parent	School attendance rate of children of whom both parents are alive and child is living with at least one parent	Orphans to non-orphan school attendance ratio*	Percent of children who are orphaned or vulnerable due to AIDS	School attendance of children who are orphaned or vulnerable due to AIDS	Percent of children who are not orphaned or vulnerable due to AIDS	School attendance of children who are not orphaned or vulnerable due to AIDS	OVC vs non-OVC school attendance ratio	Total number of children aged 10-14 years
<b>Sex</b>											
Male	0.8	95.7	77.0	97.8	1.0	8.2	95.7	91.8	97.7	1.0	2,662,506
Female	0.9	88.0	75.2	98.3	0.9	9.6	95.1	90.4	98.3	1.0	2,546,564
<b>Region</b>											
Central (incl.BKK)	1.0	98.0	79.2	98.0	1.0	8.4	94.4	91.6	97.7	1.0	1,502,239
North	0.9	93.5	74.2	98.4	1.0	11.3	96.9	88.7	98.3	1.0	954,183
Northeast	0.7	91.6	72.1	98.9	0.9	7.9	96.4	92.1	98.9	1.0	1,974,199
South	0.7	72.0	83.0	96.1	0.7	9.0	92.5	91.0	96.0	1.0	778,449
<b>Residence</b>											
Urban	0.9	93.7	79.2	98.7	1.0	8.1	94.4	91.9	98.3	1.0	1,384,586
Rural	0.8	90.8	75.0	97.8	0.9	9.1	95.7	90.9	97.9	1.0	3,824,484
<b>Wealth Index Quintiles</b>											
Poorest	0.6	100.0	70.6	96.6	1.0	10.3	94.9	89.7	97.0	1.0	1,211,907
Second	1.2	79.4	70.7	97.8	0.8	9.4	93.3	90.6	97.8	1.0	1,113,827
Middle	0.9	90.6	76.0	97.7	0.9	9.2	93.1	90.8	97.4	1.0	1,014,946
Fourth	1.2	99.4	80.1	98.7	1.0	8.9	98.2	91.1	98.5	1.0	945,306
Richest	0.2	100.0	86.1	99.7	1.0	5.9	100.0	94.1	99.7	1.0	923,083
<b>Language</b>											
Thai	0.9	91.0	75.7	98.5	0.9	8.7	96.0	91.3	98.4	1.0	4,696,850
Other Languages	0.6	100.0	80.4	94.2	1.1	10.6	91.2	89.4	94.1	1.0	512,219
<b>Total</b>	<b>0.7</b>	<b>95.5</b>	<b>78.0</b>	<b>96.4</b>	<b>1.0</b>	<b>9.6</b>	<b>93.6</b>	<b>90.4</b>	<b>96.3</b>	<b>1.0</b>	<b>5,209,069</b>

\* MICS indicator 77; MDG indicator 20

**Table 59 Support for children orphaned and vulnerable due to AIDS**  
**Percentage of children aged 0-17 years orphaned or made vulnerable due to AIDS whose households receive free basic external support in caring for the child, Thailand, 2005-2006**

	<b>Percent of orphans and vulnerable children whose households received:</b>							Number of children orphaned or vulnerable aged 0-17 years
	Medical support (in last 12 months)	Emotional and psychosocial support (in last 3 months)	Social/material support (in last 3 months)	Educational support (in last 12 months)	Any support*	All types of support	No support at all	
Male	12.5	1.6	2.7	9.1	20.0	0.1	80.0	644,257
Female	14.5	1.4	3.6	10.8	22.8	0.1	77.2	650,864
<b>Region</b>								
Central (incl.BKK)	9.6	1.3	2.3	6.1	15.4	0.2	84.6	355,995
North	23.0	2.7	4.2	18.7	34.1	0.2	65.9	289,729
Northeast	8.0	1.1	3.3	7.8	15.9	0.0	84.1	461,224
South	19.6	1.2	2.5	9.0	26.6	0.0	73.4	188,172
<b>Residence</b>								
Urban	9.2	1.0	1.8	7.3	16.1	0.0	83.9	321,127
Rural	14.9	1.7	3.6	10.8	23.1	0.1	76.9	973,994
<b>Age</b>								
0-4 years	14.0	2.5	1.7	0.0	15.4	0.2	84.6	200,720
5-9 years	15.9	2.5	3.8	12.5	25.6	0.2	74.4	293,172
10-14 years	14.0	1.5	4.6	15.4	26.6	0.1	73.4	460,800
15-17 years	10.5	0.2	1.3	6.1	14.2	0.0	85.8	340,428
<b>Wealth index quintiles</b>								
Poorest	13.7	2.0	2.7	8.3	20.6	0.2	79.4	346,900
Second	18.9	1.6	6.2	12.0	28.6	0.0	71.4	293,295
Middle	12.5	1.8	2.9	13.2	21.3	0.1	78.7	269,783
Fourth	13.9	1.2	1.5	10.6	23.2	0.1	76.8	225,692
Richest	4.0	0.4	1.0	3.3	7.7	0.0	92.3	159,451
<b>Language</b>								
Thai	13.3	1.5	3.2	10.7	21.9	0.0	78.1	1,145,381
Other Languages	14.5	1.9	2.7	3.9	17.5	0.6	82.5	149,740
<b>Total</b>	<b>13.5</b>	<b>1.5</b>	<b>3.1</b>	<b>9.9</b>	<b>21.4</b>	<b>0.1</b>	<b>78.6</b>	<b>1,295,121</b>

\* MICS indicator 81

**Table 60 Malnutrition among orphans and vulnerable children**  
**Percent of children aged 0-4 years who are moderately or severely underweight, stunted or wasted by**  
**orphanhood and vulnerability, Thailand, 2005-2006**

<b>Status</b>	<b>Percentage of children aged 0-4 years who are moderately or severely:</b>			<b>Number of children aged 0-4 years</b>
	<b>Underweight</b>	<b>Stunted</b>	<b>Wasted</b>	
Orphaned	11.8	15.6	5.2	69,765
Vulnerable	11.9	14.7	5.4	130,247
Orphaned or vulnerable	12.5	14.1	5.7	187,666
Not orphaned or vulnerable	9.2	11.8	4.0	4,444,545
<b>Total</b>	<b>9.3</b>	<b>11.9</b>	<b>4.1</b>	<b>4,632,212</b>
<b>Ratio OVC to non-OVC*</b>	<b>1.4</b>	<b>1.2</b>	<b>1.4</b>	.

\* MICS indicator 79

# APPENDIX

## Appendix A. Definition

---

### 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 taken place in formal education system at all levels – preschool, primary, lower secondary, and upper secondary; academic and vocational; and university, which include open university, such as Ramkhamhaeng University; and distant learning university, such as Sukhothai Thammathirat University where teaching takes place through various media and class attendance is not required. These educational facilities are managed by either the government or private sector

Upon finishing the program, 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 program, such as hair-dressing, dress making, driving, radio repairing, typing, and so on, which do not involve learning of any academic subjects.

### 4) No Education (or None)

Never attended school or received any provision of education.

### 5) Levels of Education

Education is classified into 4 levels as follows:

**5.1 Pre-school Level** – child education program for the readiness of children to school before commencing the primary school of the compulsory education. The program includes 2 or 3 years of kindergarten, or one year of pre-schooling.

**5.2 Primary Level** – A compulsory basic education of knowledge and skills. Currently, this level is 6 years, Prathom (Por.) 1-6 (formerly Por.1-7 or Por. 1-4 plus Mattayom (Mor.) 1-3.

**5.3 Secondary Level** – A continued education of primary level. It is divided into 2 levels, 3 years each, of lower and upper secondary levels.

Lower Secondary Level – At present, it is a 3 year education, Mor. 1-3, (formerly Mattayomsuksa (MorSor.)1-3, or Mor. 4-6) including other educational programs equivalent to lower secondary level, such as 3 year basic classical dance program.

Upper Secondary Level – Divided into 2 fields:

- a) Academic Field – The current 3 year education, Mor. 4-6 (formerly MorSor. 4-5, or Mor. 7-8) including other educational programs equivalent to upper secondary level of the academic field such as Informal Education (KorSorNor.) Level 5, 2 years of Military Cadet School.
- b) Formal Vocational and Technical Field – A 3 year educational program leading to lower certificate of vocational education (PorWorChor.) and a 3 year intermediate Thai classical dance program, including other educational programs equivalent to upper secondary level of formal vocational education, such as military machinist program (3 years), railway engineering (5 years), artisan skills (2 years at Phradabot Foundation), and former certificate of education (PorKorSor.) Program.

**5.4 Higher Level** – Academic education in colleges or universities leading to diplomas and degrees (bachelor, master and philosophy/doctoral) and special program education leading to certificates from university, college, military academy, police academy, or other institutions of higher level education leading to a diplomas or vocational associate degree (PorWorSor.), technical vocational certificate (PorWorThor.), higher certificate of education (PorKorSor. Soong), including advance Thai classical dance program.

**Note:** Educational programs, which are not comparable to any aforementioned 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 examination. For the MICS survey, it was from May 2005 to March 2006 for students of upper secondary level and below, and June 2005 to April 2006 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) Ever-Born Children**

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, birth control. There are many contraceptive methods – contraceptive pills, injections, implants, IUD (intrauterine device), condoms, female sterilization, male sterilization, breastfeeding (LAM), safety period (calendar method), and others.

**10) Stunting (in Children Aged Under 5)**

Stunting is a reflection of chronic malnutrition obtained from comparison of height for age of children with 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.

**11) Wasting (in Children Aged Under 5)**

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.

**12) Exclusive Breastfeeding**

Infants received only breast milk and vitamins, mineral supplements or medicine in the 24 hours prior to the interview.

**13) Ministry of Health's Tetanus Immunization Coverage in Pregnant Women**

- For pregnant women who have never received any tetanus vaccine, they should received at least 3 doses at 0, 1, 6 month intervals. The first dose should be given at their first visit for antenatal care. The two subsequent doses should be given at 1 and 6 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 2 more doses at 0 and 6 months intervals. If the women have already received two doses of the vaccine, they should receive one more dose at least 6 months after the second dose. Later, one booster dose should be given every 10 years.

#### 14) Ministry of Health's Vaccination Schedule for Children Aged Under Five

Age	Vaccine Provision
New Born	Vaccination against tuberculosis (BCG)
2 months	Vaccination against hepatitis B, 1 <sup>st</sup> dose (HEPB 1) Combined vaccination against diphtheria, pertussis, and tetanus, 1 <sup>st</sup> dose (DPT 1); and oral polio vaccine, 1 <sup>st</sup> dose (OPV 1)
4 months	Vaccination against hepatitis B, 2 <sup>nd</sup> dose (HEPB 2) Combined vaccination against diphtheria, pertussis, and tetanus, 2 <sup>nd</sup> dose (DPT 2); and oral polio vaccine, 2 <sup>nd</sup> dose (OPV 2)
6 months	Combined vaccination against diphtheria, pertussis, and tetanus, 3 <sup>rd</sup> dose (DPT 3); and oral polio vaccine, 3 <sup>rd</sup> dose (OPV 3)
9 months	Vaccination against hepatitis B, 3 <sup>rd</sup> dose (HEPB 3) Vaccination against measles – measles, mump and rubella or German measles (MMR)
1.5 years	Combined vaccination against diphtheria, pertussis, and tetanus, 4 <sup>th</sup> dose (DPT 4); and oral polio vaccine, 4 <sup>th</sup> dose (OPV 4)
4 years	Combined vaccination against diphtheria, pertussis, and tetanus, 5 <sup>th</sup> dose (DPT 5); and oral polio vaccine, 5 <sup>th</sup> dose (OPV 5)

#### 15) 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. This type of toilets is mostly found in condominiums, apartments or sky-scrapers.

#### 16) Flush/Pour Flush Toilets Connected to Septic Tank

Flush/pour flush toilets that keep all excreta disposal in septic tank without overflow system for water or solid waste. When the tank is full, it needs to be emptied by suction truck, and the tank may be located inside or outside the house. This type of toilets is mostly found in houses.



**17) Flush/Pore Flush Toilets Connected to Pit Latrines**

Flush/pore flush toilets that flushed all excreta to pit allowing water and excreta disposal seeping into the ground. Sometimes when the pit is full, it has to be empty by suction tuck or manually.

**18) Piped Water**

Chlorine sterilized water including systematically filtered water. Water pumped from rivers, canals or dug wells and stored in water tower before running into piping system must be sterilized or filtered systematically.

**19) Wealth Index Quintiles**

Important indicators for measurement of factors related to accumulated household living standard

- 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 continuum of comparative wealth. The values are particularly valuable for countries lack of reliable data on incomes and expenses, which were formerly used for measurement of wealth.

Wealth index quintiles can be used to analyze the economic inequality in accessibility 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 the poor population group of the country has access to national programs – public health services, immunization campaign, measures on education, and other important programs.

Wealth index quintiles help in the analysis of multi-variable data from population and health survey to be more comprehensive and able to identify the extent of impact of household's economic status on health outcomes.

Caution: The Thailand MICS wealth index quintiles can be used to compare only among other countries' MICS results and not with any other survey's. The reason is they were created for study of MICS data only.

## Appendix B. Sample Design

---

A Stratified Two - Stage Sampling was adopted for the survey. Provinces were constituted strata. The primary and secondary sampling units were blocks for municipal areas / villages for non - municipal areas and private households respectively.

### Stratification

Provinces were constituted strata. There were altogether 76 strata. Each stratum was divided into two parts according to the type of local administration, namely municipal areas and non - municipal areas.

### Selection of Primary Sampling Unit

The sample selection of blocks / villages were performed separately and independently in each part by using probability proportional to size - total number of households. The total sample blocks / villages was 1,449 from 109,966 blocks / villages.

The total number of sample blocks / villages selected for enumeration by region and type of local administration was as follows :

Region / Stratum	Total	Municipal Areas	Non - Municipal Areas
Bangkok Metropolis	78	78	-
Central (Excluding Bangkok Metropolis)	492	270	222
North	309	174	135
Northeast	324	180	144
South	246	132	114
<b>Total</b>	<b>1,449</b>	<b>834</b>	<b>615</b>

### Selection of Secondary Sampling Unit

Private households were our ultimate sampling units. A new listing of private households were made for every sample block / village to serve as the sampling frame. In each sample block / village, a systematic sample of private households were selected with 30 sample households per block/village:

The total number of sample private households selected for enumeration by region and type of local administration was as follows :

<b>Region / Stratum</b>	<b>Total</b>	<b>Municipal Areas</b>	<b>Non - Municipal Areas</b>
Bangkok Metropolis	2,340	2,340	-
Central (Excluding Bangkok Metropolis)	14,760	8,100	6,660
North	9,270	5,220	6,050
Northeast	9,720	5,400	4,320
South	7,380	3,960	3,420
<b>Total</b>	<b>43,470</b>	<b>25,020</b>	<b>18,450</b>

## Method of Estimation

The survey results were presented separately 2 parts. Part 1 were presented information of persons and part 2 were presented information for households.

The survey results were presented separately for the Bangkok Metropolis and the remaining 75 provinces were classified by region, municipal areas and non - municipal areas.

- Let  $l = 1, 2, 3, \dots, 30$  ( age - sex group )
- $k = 1, 2, 3, \dots, m_{hij}$  ( sample block / village )
- $j = 1, 2$  ( type of local administration )
- $i = 1, 2, 3, \dots, A_h$  ( province )
- $h = 1, 2, 3, 4, 5$  ( region )

### PART 1 : INFORMATION OF PERSONS

#### 1.1 Estimate of the Total Number of Persons with Characteristic X

1.1.1 Adjusted estimate of the total number of persons with characteristic X for the  $l^{th}$  age - sex group,  $j^{th}$  area ,  $h^{th}$  region was based on the formula :

$$x''_{1hjl} = \frac{x'_{1hjl}}{y'_{1hjl}} Y_{1hjl} = r_{1hjl} Y_{1hjl} \dots\dots\dots (1)$$

where  $x'_{1hjl}$  is the ordinary estimate of the total number of persons with characteristic X for the  $l^{th}$  age - sex group,  $j^{th}$  area ,  $h^{th}$  region.

$y'_{1hjl}$  is the ordinary estimate of the total population for the  $l^{th}$  age - sex group,  $j^{th}$  area ,  $h^{th}$  region.

$Y_{1hjl}^*$  is the estimate, based on the population projection of the total population for the  $l^{th}$  age - sex group,  $j^{th}$  area ,  $h^{th}$  region.

---

\* Population Projections for Thailand 1990 - 2020, Human Resources Planning Division, National Economic and Social Development Board, The Eighth National Economic and Social Development Planning, March 1995.

$r_{1hjl}$  is the ratio of the estimate of the total number of persons with characteristic X to the estimate of the total population for the  $l^{th}$  age - sex group,  $j^{th}$  area,  $h^{th}$  region.

**The formula of the estimate from a stratified two - stage sampling was as follows :**

$$i) \quad x'_{1hjl} = \sum_{i=1}^{A_h} x'_{1hijl} \quad \dots\dots\dots (2)$$

where  $x'_{1hijl}$  is the ordinary estimate of the total number of persons with characteristic X for the  $l^{th}$  age - sex group,  $j^{th}$  area,  $i^{th}$  province,  $h^{th}$  region.

$$x'_{1hijl} = \frac{1}{m_{hij}} \sum_{k=1}^{m_{hij}} \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} x_{1hijkl}$$

$x_{1hijkl}$  is the total number of persons with characteristic X for the  $l^{th}$  age - sex group,  $k^{th}$  sample block / village,  $j^{th}$  area,  $i^{th}$  province,  $h^{th}$  region.

$N_{hijk}$  is the total number of listing households in the  $k^{th}$  sample block / village,  $j^{th}$  area,  $i^{th}$  province,  $h^{th}$  region.

$n_{hijk}$  is the total number of sample households in the  $k^{th}$  sample block / village,  $j^{th}$  area,  $i^{th}$  province,  $h^{th}$  region.

$P_{hijk}$  is the probability of selection of the  $k^{th}$  sample block / village,  $j^{th}$  area,  $i^{th}$  province,  $h^{th}$  region.

$m_{hij}$  is the total number of sample blocks / villages in the  $j^{th}$  area,  $i^{th}$  province,  $h^{th}$  region.

$A_h$  is the total number of provinces in the  $h^{th}$  region and

$$\sum_{h=1}^5 A_h = 76$$

$$ii) \quad y'_{1hjl} = \sum_{l=1}^{A_h} y'_{1hijl} \quad \dots\dots\dots (3)$$

where  $y'_{1hijl}$  is the ordinary estimate of the total population for the  $l^{th}$  age – sex group,  $j^{th}$  area,  $i^{th}$  province,  $h^{th}$  region.

$$y'_{1hijl} = \frac{1}{m_{hij}} \sum_{k=1}^{m_{hij}} \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} y_{1hijkl}$$

$y_{1hijkl}$  is the total number of the population enumerated for the  $l^{th}$  age - sex group,  $k^{th}$  sample block / village,  $j^{th}$  area,  $i^{th}$  province,  $h^{th}$  region.

1.1.2 Adjusted estimate of the total number of persons with characteristic X for the  $j^{th}$  area,  $h^{th}$  region was based on the formula :

$$x''_{1hj} = \sum_{i=1}^{30} x''_{1hji} \quad \dots\dots\dots (4)$$

1.1.3 Adjusted estimate of the total number of persons with characteristic X for the  $l^{th}$  age - sex group,  $h^{th}$  region was based on the formula :

$$x''_{1hl} = \sum_{j=1}^2 x''_{1hjl} \quad \dots\dots\dots (5)$$

1.1.4 Adjusted estimate of the total number of persons with characteristic X for the  $h^{th}$  region was based on the formula :

$$x''_{1h} = \sum_{j=1}^2 x''_{1hj} = \sum_{l=1}^{30} x''_{1hl} \quad \dots\dots\dots (6)$$

1.1.5 Adjusted estimate of the total number of persons with characteristic X for the  $j^{th}$  area was based on the formula :

$$x''_{1j} = \sum_{h=1}^5 x''_{1hj} \quad \dots\dots\dots (7)$$

1.1.6 Adjusted estimate of the total number of persons with characteristic X for the  $l^{th}$  age - sex group of the whole kingdom was based on the formula :

$$x''_{1l} = \sum_{h=1}^5 x''_{1hl} \dots\dots\dots (8)$$

1.1.7 Adjusted estimate of the total number of persons with characteristic X for the whole kingdom was based on the formula :

$$x''_1 = \sum_{h=1}^5 x''_{1h} = \sum_{j=1}^2 x''_{1j} = \sum_{l=1}^{30} x''_{1l} \dots\dots\dots (9)$$

**2. Estimate of Variance of the Total Number of Persons with Characteristic X**

1.2.1 The estimate variance of  $x''_{1hji}$  was

$$\hat{V}(x''_{1hjl}) = \left[ \frac{Y_{1hjl}}{y'_{1hjl}} \right]^2 \sum_{i=1}^{A_h} \frac{1}{m_{hij}(m_{hij}-1)} \left[ \sum_{k=1}^{m_{hij}} z_{1hijkl}^2 - m_{hij} z_{1hijl}^2 \right] \dots\dots\dots (10)$$

where  $z'_{1hijkl} = x'_{1hijkl} - r_{1hjl} y'_{1hijkl}$

$$z'_{1hijl} = x'_{1hijl} - r_{1hjl} y'_{1hijl}$$

$$x'_{1hijkl} = \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} x_{1hijkl}$$

$$y'_{1hijkl} = \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} y_{1hijkl}$$

1.2.2 The estimate variance of  $x''_{1hj}$  was

$$\hat{V}(x''_{1hj}) = \sum_{l=1}^{30} \hat{V}(x''_{1hjl}) \dots\dots\dots (11)$$

1.2.3 The estimate variance of  $x''_{1hl}$  was

$$\hat{V}(x''_{1hl}) = \sum_{j=1}^2 \hat{V}(x''_{1hjl}) \dots\dots\dots (12)$$

1.2.4 The estimate variance of  $x''_{1h}$  was

$$\hat{V}(x''_{1h}) = \sum_{j=1}^2 \hat{V}(x''_{1hj}) = \sum_{l=1}^{30} \hat{V}(x''_{1hl}) \dots\dots\dots (13)$$

1.2.5 The estimate variance of  $x''_{1j}$  was

$$\hat{V}(x''_{1j}) = \sum_{h=1}^5 \hat{V}(x''_{1hj}) \dots\dots\dots (14)$$

1.2.6 The estimate variance of  $x''_{1l}$  was

$$\hat{V}(x''_{1l}) = \sum_{h=1}^5 \hat{V}(x''_{1hl}) \dots\dots\dots (15)$$

1.2.7 The estimate variance of  $x''_1$  was

$$\hat{V}(x''_1) = \sum_{h=1}^5 \hat{V}(x''_{1h}) = \sum_{j=1}^2 \hat{V}(x''_{1j}) = \sum_{l=1}^{30} \hat{V}(x''_{1l}) \dots\dots\dots (16)$$

**1.3 Coefficient of Variation (CV) of the Total Number of Persons with Characteristic X**

1.3.1 The formula of CV of  $x''_{1hjl}$  was

$$CV(x''_{1hjl}) = \frac{\sqrt{\hat{V}(x''_{1hjl})}}{x''_{1hjl}} \times 100 \% \dots\dots\dots (17)$$



1.3.2 The formula of CV of  $x''_{1hj}$  was

$$CV(x''_{1hj}) = \frac{\sqrt{\hat{V}(x''_{1hj})}}{x''_{1hj}} \times 100 \% \dots\dots\dots (18)$$

1.3.3 The formula of CV of  $x''_{1hl}$  was

$$CV(x''_{1hl}) = \frac{\sqrt{\hat{V}(x''_{1hl})}}{x''_{1hl}} \times 100 \% \dots\dots\dots (19)$$

1.3.4 The formula of CV of  $x''_{1h}$  was

$$CV(x''_{1h}) = \frac{\sqrt{\hat{V}(x''_{1h})}}{x''_{1h}} \times 100 \% \dots\dots\dots (20)$$

1.3.5 The formula of CV of  $x''_{1j}$  was

$$CV(x''_{1j}) = \frac{\sqrt{\hat{V}(x''_{1j})}}{x''_{1j}} \times 100 \% \dots\dots\dots (21)$$

1.3.6 The formula of CV of  $x''_{1l}$  was

$$CV(x''_{1l}) = \frac{\sqrt{\hat{V}(x''_{1l})}}{x''_{1l}} \times 100 \% \dots\dots\dots (22)$$

1.3.7 The formula of CV of  $x''_1$  was

$$CV(x''_1) = \frac{\sqrt{\hat{V}(x''_1)}}{x''_1} \times 100 \% \dots\dots\dots (23)$$

**PART 2 : INFORMATION OF HOUSEHOLDS**

**2.1 Estimate of the Total Number of Households with Characteristic X**

2.1.1 Adjusted estimate of the total number of households with characteristic X for the j<sup>th</sup> area, h<sup>th</sup> region was based on the formula :

$$x''_{2hj} = \frac{x'_{2hj}}{y'_{2hj}} Y_{2hj} = r_{2hj} Y_{2hj} \dots\dots\dots (24)$$

where  $x'_{2hj}$  is the ordinary estimate of the total number of households with characteristic X for the j<sup>th</sup> area, h<sup>th</sup> region.

$y'_{2hj}$  is the ordinary estimate of the total households for the j<sup>th</sup> area, h<sup>th</sup> region.

$Y_{2hj}^*$  is the estimate, based on the population projection of the total households for the j<sup>th</sup> area, h<sup>th</sup> region.

$r_{2hj}$  is the ratio of the estimate of the total number of households with characteristic X to the estimate of the total households for the j<sup>th</sup> area, h<sup>th</sup> region.

**The formula of the estimate from a stratified two - stage sampling was as follows :**

i) 
$$x'_{2hj} = \sum_{i=1}^{A_h} x'_{2hij} \dots\dots\dots (25)$$

where  $x'_{2hij}$  is the ordinary estimate of the total number of households with characteristic X for j<sup>th</sup> area, i<sup>th</sup> province, h<sup>th</sup> region.

$$x'_{2hij} = \frac{1}{m_{hij}} \sum_{k=1}^{m_{hij}} \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} x_{2hijk}$$

---

\* Population Projections for Thailand 1990 - 2020, Human Resources Planning Division, National Economic and Social Development Board, The Eighth National Economic and Social Development Planning, March 1995.

$x_{2hijk}$  is the total number of households with characteristic X for the  $k^{\text{th}}$  sample block / village,  $j^{\text{th}}$  area,  $i^{\text{th}}$  province,  $h^{\text{th}}$  region.

$$ii) \quad y'_{2hj} = \sum_{i=1}^{A_h} y'_{2hij} \quad \dots\dots\dots (26)$$

where  $y'_{2hij}$  is the ordinary estimate of the total households for the  $j^{\text{th}}$  area,  $i^{\text{th}}$  province,  $h^{\text{th}}$  region.

$$y'_{2hij} = \frac{1}{m_{hij}} \sum_{k=1}^{m_{hij}} \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} y_{2hijk}$$

$y_{2hijk}$  is the total number of the households enumerated for the  $k^{\text{th}}$  sample block / village,  $j^{\text{th}}$  area,  $i^{\text{th}}$  province,  $h^{\text{th}}$  region.

2.1.2 Adjusted estimate of the total number of households with characteristic X for the  $h^{\text{th}}$  region was based on the formula :

$$x''_{2h} = \sum_{j=1}^2 x''_{2hj} \quad \dots\dots\dots (27)$$

2.1.3 Adjusted estimate of the total number of households with characteristic X for the  $j^{\text{th}}$  area was based on the formula :

$$x''_{2j} = \sum_{h=1}^5 x''_{2hj} \quad \dots\dots\dots (28)$$

2.1.4 Adjusted estimate of the total number of households with characteristic X for the whole kingdom was based on the formula :

$$x''_2 = \sum_{h=1}^5 x''_{2h} = \sum_{j=1}^2 x''_{2j} \quad \dots\dots\dots (29)$$

**2.2 Estimate of Variance of the Total Number of Households with Characteristic X**

2.2.1 The estimate variance of  $x''_{2hj}$  was

$$\hat{V}(x''_{2hj}) = \left[ \frac{Y_{2hj}}{y'_{2hj}} \right]^2 \sum_{i=1}^{A_h} \frac{1}{m_{hij}(m_{hij}-1)} \left[ \sum_{k=1}^{m_{hij}} z'^2_{2hijk} - m_{hij}z'^2_{2hij} \right] \dots\dots\dots (30)$$

where  $z'_{2hijk} = x'_{2hijk} - r_{2hj}y'_{2hijk}$

$$z'_{2hij} = x'_{2hij} - r_{2hj}y'_{2hij}$$

$$x'_{2hijk} = \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} x_{2hijk}$$

$$y'_{2hijk} = \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} y_{2hijk}$$

2.2.2 The estimate variance of  $x''_{2h}$  was

$$\hat{V}(x''_{2h}) = \sum_{j=1}^2 \hat{V}(x''_{2hj}) \dots\dots\dots (31)$$

2.2.3 The estimate variance of  $x''_{2j}$  was

$$\hat{V}(x''_{2j}) = \sum_{h=1}^5 \hat{V}(x''_{2hj}) \dots\dots\dots (32)$$

2.2.4 The estimate variance of  $x''_2$  was

$$\hat{V}(x''_2) = \sum_{h=1}^5 \hat{V}(x''_{2h}) = \sum_{j=1}^2 \hat{V}(x''_{2j}) \dots\dots\dots (33)$$

### 2.3 Coefficient of Variation (CV) of the Total Number of Households with Characteristic X

2.3.1 The formula of CV  $x''_{2hj}$  was

$$CV(x''_{2hj}) = \frac{\sqrt{\hat{V}(x''_{2hj})}}{x''_{2hj}} \times 100 \% \dots\dots\dots (34)$$

2.3.2 The formula of CV  $x''_{2h}$  was

$$CV(x''_{2h}) = \frac{\sqrt{\hat{V}(x''_{2h})}}{x''_{2h}} \times 100 \% \dots\dots\dots (35)$$

2.3.3 The formula of CV  $x''_{2j}$  was

$$CV(x''_{2j}) = \frac{\sqrt{\hat{V}(x''_{2j})}}{x''_{2j}} \times 100 \% \dots\dots\dots (36)$$

2.3.4 The formula of CV  $x''_2$  was

$$CV(x''_2) = \frac{\sqrt{\hat{V}(x''_2)}}{x''_2} \times 100 \% \dots\dots\dots (37)$$

---

## **Appendix C. 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 all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey results.

The following sampling error measures are presented in this appendix for each of the selected indicators:

- Standard error (*se*): Sampling errors are usually measured in terms of standard errors for particular indicators (means, proportions etc). Standard error is the square root of the variance. The Taylor linearization method is used for the estimation of standard errors.
- Coefficient of variation ( $se/r$ ) is the ratio of the standard error to the value of the indicator
- Design effect (*deff*) is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect (*deff*) is used to show the efficiency of the sample design. A *deff* value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a *deff* value above 1.0 indicates the increase in the standard error due to the use of a more complex sample design.
- Confidence limits are calculated to show the interval within which the true value for the population can be reasonably assumed to fall. For any given statistic calculated from the survey, the value of that statistics will fall within a range of plus or minus two times the standard error ( $p + 2.se$  or  $p - 2.se$ ) of the statistic in 95 percent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, SPSS Version 14 Complex Samples module has been used. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and unweighted counts of denominators for each indicator.

Sampling errors are calculated for indicators of primary interest, for the national total, for the regions, and for urban and rural areas. Three of the selected indicators are based on households, 8 are based on household members, 13 are based on women, and 15 are based on children under 5. All indicators presented here are in the form of proportions. Table SE.1 shows the list of indicators for which sampling errors are calculated, including the base population (denominator) for each indicator. Tables SE.2 to SE.9 show the calculated sampling errors.

**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, 2005-2006

<b>MICS Indicator</b>	<b>Base Population</b>
<b>HOUSEHOLDS</b>	
41 Iodized salt consumption	All households
<b>HOUSEHOLD MEMBERS</b>	
11 Use of improved drinking water sources	All household members
12 Use of improved sanitation facilities	All household members
55 Net primary school attendance rate	Children of primary school age
56 Net secondary school attendance rate	Children of secondary school age
59 Primary completion rate	Children of primary school completion age
71 Child labour	Children aged 5-14 years
75 Prevalence of orphans	Children aged under 18
76 Prevalence of vulnerable children	Children aged under 18
<b>WOMEN</b>	
4 Skilled attendant at delivery	Women aged 15-49 years with a live birth in the last 2 years
20 Antenatal care	Women aged 15-49 years with a live birth in the last 2 years
21 Contraceptive prevalence	Women aged 15-49 currently married/in union
60 Adult literacy	Women aged 15-24 years
67 Marriage before age 18	Women aged 20-49 years
82 Comprehensive knowledge about HIV prevention among young people	Women aged 15-24 years
86 Attitude towards people with HIV/AIDS	Women aged 15-49 years
88 Women who have been tested for HIV	Women aged 15-49 years
89 Knowledge of mother- to-child transmission of HIV	Women aged 15-49 years
<b>UNDER-5s</b>	
6 Underweight prevalence	Children under age 5
25 Tuberculosis immunization coverage	Children aged 12-23 months
26 Polio immunization coverage	Children aged 12-23 months
27 Immunization coverage for DPT	Children aged 12-23 months
28 Measles immunization coverage	Children aged 12-23 months
31 Fully immunized children	Children aged 12-23 months
- Acute respiratory infection in last two weeks	Children under age 5
22 Antibiotic treatment of suspected pneumonia	Children under age 5 with suspected pneumonia in the last 2 weeks
- Diarrhoea in last two weeks	Children under age 5
35 Received ORT or increased fluids and continued feeding	Children under age 5 with diarrhoea in the last 2 weeks
46 Support for learning	Children under age 5
62 Birth registration	Children under age 5

**Table SE.2: Sampling errors: Total sample**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

Table	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>deft</i> )	Weighted count	Unweighted count	Confidence limits		
								<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>	
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	1,776,109	4,123	0.000	0.000	
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.940	0.006	0.006	75.462	8.687	65,064,070	137,006	0.929	0.952
Use of improved sanitation facilities	EN.5	0.992	0.001	0.001	21.510	4.638	65,064,070	137,006	0.990	0.994
Net primary school attendance rate	ED.3	0.979	0.002	0.002	2.170	1.473	6,187,476	14,476	0.975	0.982
Net secondary school attendance rate	ED.4	0.798	0.006	0.008	3.065	1.751	6,478,643	13,108	0.786	0.810
Primary completion rate	ED.6	0.868	0.009	0.010	1.779	1.334	1,035,743	2,506	0.850	0.886
Child labour	CP.2	0.083	0.003	0.035	2.630	1.622	9,990,624	23,389	0.077	0.089
Prevalence of orphans	HA.10	0.047	0.002	0.041	3.335	1.826	18,174,805	38,954	0.043	0.051
Prevalence of vulnerable children	HA.11	0.028	0.002	0.073	5.827	2.414	18,174,805	38,954	0.024	0.032
WOMEN										
Skilled attendant at delivery	RH.5	0.973	0.005	0.005	2.605	1.614	1,848,778	3,365	0.963	0.982
Antenatal care	RH.3	0.978	0.003	0.003	1.699	1.304	1,848,778	3,365	0.971	0.985
Contraceptive prevalence	RH.1	0.716	0.006	0.009	5.142	2.268	13,544,028	26,984	0.704	0.728
Adult literacy	ED.8	0.964	0.003	0.004	2.921	1.709	5,140,712	8,784	0.957	0.970
Marriage before age 18	CP.5	0.196	0.009	0.048	2.206	1.485	2,598,520	3,996	0.178	0.215
Comprehensive knowledge about HIV prevention among young people	HA.3	0.419	0.007	0.016	6.960	2.638	18,542,128	36,960	0.405	0.432
Attitude towards people with HIV/AIDS	HA.5	0.207	0.006	0.027	7.111	2.667	18,222,198	36,253	0.196	0.218
Knowledge of mother- to-child transmission of HIV	HA.4	0.684	0.008	0.011	9.915	3.149	18,542,128	36,960	0.668	0.699
UNDER-5s										
Underweight prevalence	NU.1	0.093	0.005	0.049	2.237	1.496	4,632,212	8,993	0.084	0.102
Tuberculosis immunization coverage	CH.2	0.981	0.003	0.003	0.972	0.986	974,861	1,932	0.974	0.987
Polio immunization coverage	CH.2	0.936	0.007	0.007	1.574	1.255	974,861	1,932	0.922	0.950
Immunization coverage for DPT	CH.2	0.935	0.008	0.009	2.103	1.450	974,861	1,932	0.919	0.951
Measles immunization coverage	CH.2	0.961	0.006	0.006	2.010	1.418	974,861	1,932	0.949	0.974
Fully immunized children	CH.2	0.897	0.009	0.010	1.712	1.308	974,861	1,932	0.878	0.915
Acute respiratory infection in last two weeks	CH.6	0.045	0.004	0.082	2.990	1.729	4,837,680	9,409	0.038	0.053
Antibiotic treatment of suspected pneumonia	CH.7	0.648	0.016	0.025	0.432	0.657	219,589	379	0.616	0.681
Diarrhoea in last two weeks	CH.4	0.087	0.005	0.054	2.596	1.611	4,837,680	9,409	0.077	0.096
Received ORT or increased fluids and continued feeding	CH.5	0.464	0.019	0.042	1.145	1.070	419,746	767	0.426	0.503
Support for learning	CD.1	0.786	0.009	0.012	4.642	2.154	4,837,680	9,409	0.768	0.805



**Table SE.3: Sampling errors: Urban areas**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

Table	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>deft</i> )	Weighted count	Unweighted count	Confidence limits		
								<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>	
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	1,075,659	3,117	0.000	0.000	
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.976	0.003	0.003	20.658	4.545	19,630,255	74,985	0.971	0.981
Use of improved sanitation facilities	EN.5	0.997	0.001	0.001	9.304	3.050	19,630,255	74,985	0.996	0.999
Net primary school attendance rate	ED.3	0.980	0.002	0.002	2.268	1.506	1,648,300	7,388	0.975	0.985
Net secondary school attendance rate	ED.4	0.803	0.011	0.013	5.209	2.282	1,744,691	7,001	0.782	0.825
Primary completion rate	ED.6	0.874	0.011	0.012	1.349	1.161	291,571	1,304	0.852	0.895
Child labour	CP.2	0.080	0.004	0.054	3.013	1.736	2,661,379	11,897	0.071	0.089
Prevalence of orphans	HA.10	0.046	0.002	0.054	2.820	1.679	4,903,749	19,833	0.041	0.051
Prevalence of vulnerable children	HA.11	0.023	0.002	0.100	4.610	2.147	4,903,749	19,833	0.018	0.027
WOMEN										
Skilled attendant at delivery	RH.5	0.994	0.002	0.002	1.604	1.267	485,353	1,745	0.990	0.999
Antenatal care	RH.3	0.978	0.006	0.006	2.620	1.619	485,353	1,745	0.967	0.990
Contraceptive prevalence	RH.1	0.680	0.008	0.012	4.538	2.130	3,950,995	14,727	0.664	0.697
Adult literacy	ED.8	0.975	0.004	0.004	2.621	1.619	1,551,888	5,041	0.968	0.982
Marriage before age 18	CP.5	0.122	0.008	0.068	1.577	1.256	835,861	2,417	0.105	0.139
Comprehensive knowledge about HIV prevention among young people	HA.3	0.416	0.010	0.023	8.337	2.887	6,042,565	21,265	0.396	0.435
Attitude towards people with HIV/AIDS	HA.5	0.199	0.006	0.031	4.971	2.229	5,983,396	20,963	0.187	0.212
Knowledge of mother- to-child transmission of HIV	HA.4	0.613	0.011	0.019	11.850	3.442	6,042,565	21,265	0.590	0.636
UNDER-5s										
Underweight prevalence	NU.1	0.056	0.005	0.087	1.976	1.406	1,282,847	4,387	0.046	0.066
Tuberculosis immunization coverage	CH.2	0.975	0.003	0.003	0.303	0.550	278,651	929	0.970	0.981
Polio immunization coverage	CH.2	0.901	0.017	0.018	2.864	1.692	278,651	929	0.868	0.934
Immunization coverage for DPT	CH.2	0.918	0.015	0.017	2.878	1.696	278,651	929	0.888	0.949
Measles immunization coverage	CH.2	0.962	0.010	0.011	2.771	1.665	278,651	929	0.941	0.983
Fully immunized children	CH.2	0.870	0.017	0.019	2.272	1.507	278,651	929	0.837	0.904
Acute respiratory infection in last two weeks	CH.6	0.031	0.004	0.114	1.951	1.397	1,368,046	4,624	0.024	0.039
Antibiotic treatment of suspected pneumonia	CH.7	0.681	0.015	0.023	0.170	0.412	42,929	156	0.651	0.712
Diarrhoea in last two weeks	CH.4	0.080	0.007	0.084	2.858	1.691	1,368,046	4,624	0.067	0.094
Received ORT or increased fluids and continued feeding	CH.5	0.421	0.023	0.056	0.828	0.910	109,545	366	0.374	0.468
Support for learning	CD.1	0.813	0.010	0.012	3.098	1.760	1,368,046	4,624	0.792	0.833

**Table SE.4: Sampling errors: Rural areas**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

Table	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>deft</i> )	Weighted count	Unweighted count	Confidence limits		
								<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>	
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	700,450	1,006	0.000	0.000	
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.925	0.008	0.008	54.509	7.383	45,433,815	62,021	0.909	0.941
Use of improved sanitation facilities	EN.5	0.990	0.002	0.002	15.037	3.878	45,433,815	62,021	0.987	0.993
Net primary school attendance rate	ED.3	0.978	0.002	0.002	1.667	1.291	4,539,176	7,088	0.974	0.983
Net secondary school attendance rate	ED.4	0.796	0.007	0.009	2.049	1.431	4,733,952	6,107	0.781	0.810
Primary completion rate	ED.6	0.866	0.012	0.014	1.445	1.202	744,172	1,202	0.843	0.890
Child labour	CP.2	0.084	0.004	0.044	2.010	1.418	7,329,244	11,492	0.077	0.091
Prevalence of orphans	HA.10	0.048	0.003	0.053	2.670	1.634	13,271,056	19,121	0.043	0.053
Prevalence of vulnerable children	HA.11	0.029	0.003	0.089	4.541	2.131	13,271,056	19,121	0.024	0.034
WOMEN										
Skilled attendant at delivery	RH.5	0.965	0.006	0.006	1.705	1.306	1,363,425	1,620	0.953	0.977
Antenatal care	RH.3	0.978	0.004	0.004	1.193	1.092	1,363,425	1,620	0.970	0.986
Contraceptive prevalence	RH.1	0.731	0.008	0.011	4.144	2.036	9,593,032	12,257	0.714	0.747
Adult literacy	ED.8	0.959	0.005	0.005	2.014	1.419	3,588,825	3,743	0.949	0.968
Marriage before age 18	CP.5	0.231	0.013	0.057	1.565	1.251	1,762,659	1,579	0.205	0.258
Comprehensive knowledge about HIV prevention among young people	HA.3	0.420	0.009	0.021	5.067	2.251	12,499,563	15,695	0.403	0.438
Attitude towards people with HIV/AIDS	HA.5	0.211	0.008	0.037	5.715	2.391	12,238,801	15,290	0.195	0.227
Knowledge of mother- to-child transmission of HIV	HA.4	0.718	0.010	0.013	7.181	2.680	12,499,563	15,695	0.698	0.737
UNDER-5s										
Underweight prevalence	NU.1	0.107	0.006	0.056	1.725	1.313	3,349,365	4,606	0.095	0.119
Tuberculosis immunization coverage	CH.2	0.983	0.004	0.004	1.035	1.017	696,210	1,003	0.974	0.991
Polio immunization coverage	CH.2	0.950	0.007	0.007	1.036	1.018	696,210	1,003	0.935	0.964
Immunization coverage for DPT	CH.2	0.942	0.010	0.010	1.709	1.307	696,210	1,003	0.923	0.961
Measles immunization coverage	CH.2	0.961	0.008	0.008	1.562	1.250	696,210	1,003	0.946	0.976
Fully immunized children	CH.2	0.907	0.011	0.012	1.397	1.182	696,210	1,003	0.885	0.929
Acute respiratory infection in last two weeks	CH.6	0.051	0.005	0.098	2.479	1.575	3,469,634	4,785	0.041	0.061
Antibiotic treatment of suspected pneumonia	CH.7	0.640	0.020	0.031	0.378	0.615	176,660	223	0.601	0.680
Diarrhoea in last two weeks	CH.4	0.089	0.006	0.066	2.077	1.441	3,469,634	4,785	0.078	0.101
Received ORT or increased fluids and continued feeding	CH.5	0.479	0.024	0.051	0.960	0.980	310,201	401	0.430	0.528
Support for learning	CD.1	0.776	0.012	0.015	3.970	1.993	3,469,634	4,785	0.752	0.800

**Table SE.5: Sampling errors: Central Region (include Bangkok)**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

Table	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>deft</i> )	Weighted count	Unweighted count	Confidence limits		
								<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>	
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	1,175,817	2,408	0.000	0.000	
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.981	0.003	0.003	18.576	4.310	22,559,762	51,882	0.976	0.986
Use of improved sanitation facilities	EN.5	0.998	0.000	0.000	4.999	2.236	22,559,762	51,882	0.997	0.999
Net primary school attendance rate	ED.3	0.978	0.003	0.003	2.221	1.490	1,789,811	4,818	0.972	0.984
Net secondary school attendance rate	ED.4	0.762	0.012	0.016	3.661	1.913	1,885,008	4,701	0.739	0.786
Primary completion rate	ED.6	0.845	0.014	0.017	1.283	1.132	297,438	820	0.817	0.874
Child labour	CP.2	0.074	0.005	0.069	2.959	1.720	2,887,362	7,817	0.064	0.085
Prevalence of orphans	HA.10	0.045	0.003	0.060	2.269	1.506	5,333,518	13,276	0.039	0.050
Prevalence of vulnerable children	HA.11	0.026	0.003	0.100	3.532	1.879	5,333,518	13,276	0.020	0.031
WOMEN										
Skilled attendant at delivery	RH.5	0.994	0.003	0.003	1.760	1.327	601,010	1,239	0.987	1.000
Antenatal care	RH.3	0.978	0.006	0.006	1.896	1.377	601,010	1,239	0.966	0.989
Contraceptive prevalence	RH.1	0.696	0.008	0.011	3.072	1.753	4,834,520	10,464	0.680	0.712
Adult literacy	ED.8	0.967	0.006	0.006	3.730	1.931	1,736,134	3,722	0.956	0.979
Marriage before age 18	CP.5	0.141	0.010	0.072	1.628	1.276	955,374	1,900	0.121	0.162
Comprehensive knowledge about HIV prevention among young people	HA.3	0.415	0.011	0.028	8.063	2.840	6,991,862	14,925	0.393	0.438
Attitude towards people with HIV/AIDS	HA.5	0.199	0.007	0.037	5.035	2.244	6,892,430	14,673	0.185	0.214
Knowledge of mother- to-child transmission of HIV	HA.4	0.621	0.013	0.021	10.468	3.235	6,991,862	14,925	0.596	0.647
UNDER-5s										
Underweight prevalence	NU.1	0.061	0.006	0.098	1.921	1.386	1,392,369	3,030	0.049	0.073
Tuberculosis immunization coverage	CH.2	0.976	0.003	0.003	0.213	0.461	314,450	663	0.971	0.982
Polio immunization coverage	CH.2	0.889	0.016	0.018	1.744	1.321	314,450	663	0.856	0.921
Immunization coverage for DPT	CH.2	0.907	0.014	0.016	1.600	1.265	314,450	663	0.879	0.936
Measles immunization coverage	CH.2	0.946	0.013	0.014	2.151	1.467	314,450	663	0.920	0.972
Fully immunized children	CH.2	0.839	0.017	0.020	1.419	1.191	314,450	663	0.805	0.873
Acute respiratory infection in last two weeks	CH.6	0.029	0.005	0.168	2.711	1.647	1,486,052	3,223	0.019	0.039
Antibiotic treatment of suspected pneumonia	CH.7	0.701	0.021	0.030	0.213	0.462	42,959	99	0.658	0.744
Diarrhoea in last two weeks	CH.4	0.080	0.007	0.088	2.167	1.472	1,486,052	3,223	0.066	0.094
Received ORT or increased fluids and continued feeding	CH.5	0.448	0.015	0.034	0.242	0.492	118,304	264	0.418	0.478
Support for learning	CD.1	0.780	0.013	0.016	3.033	1.742	1,486,052	3,223	0.754	0.805

**Table SE.6: Sampling errors: Northern Region**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

Table	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>deft</i> )	Weighted count	Unweighted count	Confidence limits		
								<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>	
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	199,976	576	0.000	0.000	
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.950	0.007	0.008	33.608	5.797	11,719,885	28,444	0.935	0.965
Use of improved sanitation facilities	EN.5	0.996	0.002	0.002	21.872	4.677	11,719,885	28,444	0.993	1.000
Net primary school attendance rate	ED.3	0.975	0.004	0.004	1.877	1.370	1,141,827	2,936	0.967	0.983
Net secondary school attendance rate	ED.4	0.824	0.012	0.015	2.804	1.674	1,168,467	2,611	0.799	0.849
Primary completion rate	ED.6	0.847	0.017	0.020	1.167	1.080	199,420	527	0.813	0.881
Child labour	CP.2	0.105	0.006	0.061	2.054	1.433	1,788,623	4,665	0.092	0.117
Prevalence of orphans	HA.10	0.065	0.005	0.085	3.726	1.930	3,154,606	7,546	0.054	0.075
Prevalence of vulnerable children	HA.11	0.031	0.003	0.101	2.490	1.578	3,154,606	7,546	0.025	0.038
WOMEN										
Skilled attendant at delivery	RH.5	0.946	0.019	0.020	3.932	1.983	261,631	556	0.907	0.984
Antenatal care	RH.3	0.982	0.005	0.005	0.680	0.824	261,631	556	0.973	0.991
Contraceptive prevalence	RH.1	0.758	0.009	0.012	2.572	1.604	2,459,312	5,615	0.740	0.777
Adult literacy	ED.8	0.952	0.010	0.010	3.377	1.838	893,799	1,553	0.932	0.972
Marriage before age 18	CP.5	0.232	0.025	0.106	2.154	1.468	433,713	634	0.183	0.281
Comprehensive knowledge about HIV prevention among young people	HA.3	0.444	0.014	0.032	5.965	2.442	3,229,399	7,353	0.415	0.472
Attitude towards people with HIV/AIDS	HA.5	0.274	0.017	0.063	10.904	3.302	3,163,301	7,202	0.240	0.309
Knowledge of mother- to-child transmission of HIV	HA.4	0.723	0.018	0.025	12.144	3.485	3,229,399	7,353	0.687	0.760
UNDER-5s										
Underweight prevalence	NU.1	0.071	0.007	0.105	1.372	1.171	751,874	1,645	0.056	0.086
Tuberculosis immunization coverage	CH.2	0.988	0.005	0.006	0.880	0.938	167,940	353	0.977	0.999
Polio immunization coverage	CH.2	0.968	0.008	0.008	0.691	0.832	167,940	353	0.953	0.984
Immunization coverage for DPT	CH.2	0.975	0.008	0.008	0.897	0.947	167,940	353	0.959	0.991
Measles immunization coverage	CH.2	0.977	0.009	0.009	1.294	1.138	167,940	353	0.959	0.995
Fully immunized children	CH.2	0.954	0.011	0.011	0.950	0.975	167,940	353	0.933	0.976
Acute respiratory infection in last two weeks	CH.6	0.065	0.012	0.179	3.727	1.931	761,416	1,664	0.042	0.089
Antibiotic treatment of suspected pneumonia	CH.7	0.547	0.022	0.040	0.144	0.379	49,740	77	0.504	0.591
Diarrhoea in last two weeks	CH.4	0.089	0.010	0.112	2.057	1.434	761,416	1,664	0.069	0.109
Received ORT or increased fluids and continued feeding	CH.5	0.446	0.026	0.057	0.378	0.614	67,911	143	0.394	0.497
Support for learning	CD.1	0.791	0.020	0.025	3.886	1.971	761,416	1,664	0.752	0.831

**Table SE.8: Sampling errors: Northeastern Region**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

Table	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>deft</i> )	Weighted count	Unweighted count	Confidence limits		
								<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>	
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	260,093	631	0.000	0.000	
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.944	0.012	0.013	86.716	9.312	21,953,181	32,703	0.921	0.968
Use of improved sanitation facilities	EN.5	0.995	0.002	0.002	21.858	4.675	21,953,181	32,703	0.991	0.998
Net primary school attendance rate	ED.3	0.983	0.003	0.003	1.814	1.347	2,320,441	3,946	0.978	0.989
Net secondary school attendance rate	ED.4	0.845	0.010	0.012	2.490	1.578	2,455,096	3,348	0.826	0.865
Primary completion rate	ED.6	0.926	0.014	0.016	2.107	1.451	385,765	691	0.897	0.955
Child labour	CP.2	0.082	0.005	0.066	2.525	1.589	3,804,039	6,412	0.071	0.093
Prevalence of orphans	HA.10	0.043	0.004	0.082	3.128	1.769	6,873,360	10,405	0.036	0.050
Prevalence of vulnerable children	HA.11	0.029	0.004	0.153	7.255	2.694	6,873,360	10,405	0.020	0.038
WOMEN										
Skilled attendant at delivery	RH.5	0.986	0.006	0.006	2.308	1.519	657,569	782	0.974	0.999
Antenatal care	RH.3	0.989	0.005	0.005	1.520	1.233	657,569	782	0.980	0.998
Contraceptive prevalence	RH.1	0.758	0.011	0.015	4.319	2.078	4,504,627	6,314	0.736	0.781
Adult literacy	ED.8	0.980	0.005	0.005	2.660	1.631	1,738,850	1,870	0.969	0.991
Marriage before age 18	CP.5	0.233	0.021	0.088	1.768	1.330	824,474	752	0.192	0.274
Comprehensive knowledge about HIV prevention among young people	HA.3	0.426	0.012	0.027	4.633	2.152	5,883,420	8,313	0.403	0.450
Attitude towards people with HIV/AIDS	HA.5	0.192	0.012	0.061	7.298	2.702	5,790,700	8,208	0.168	0.215
Knowledge of mother- to-child transmission of HIV	HA.4	0.748	0.014	0.019	8.578	2.929	5,883,420	8,313	0.720	0.776
UNDER-5s										
Underweight prevalence	NU.1	0.115	0.010	0.084	2.163	1.471	1,736,991	2,383	0.096	0.134
Tuberculosis immunization coverage	CH.2	0.986	0.007	0.007	1.900	1.378	330,929	503	0.971	1.000
Polio immunization coverage	CH.2	0.960	0.011	0.011	1.572	1.254	330,929	503	0.938	0.982
Immunization coverage for DPT	CH.2	0.969	0.011	0.011	1.882	1.372	330,929	503	0.947	0.990
Measles immunization coverage	CH.2	0.967	0.012	0.012	2.147	1.465	330,929	503	0.944	0.990
Fully immunized children	CH.2	0.940	0.013	0.014	1.510	1.229	330,929	503	0.914	0.966
Acute respiratory infection in last two weeks	CH.6	0.056	0.007	0.130	2.504	1.582	1,799,842	2,470	0.042	0.071
Antibiotic treatment of suspected pneumonia	CH.7	0.693	0.030	0.044	0.585	0.765	101,248	137	0.632	0.753
Diarrhoea in last two weeks	CH.4	0.092	0.009	0.095	2.290	1.513	1,799,842	2,470	0.075	0.110
Received ORT or increased fluids and continued feeding	CH.5	0.508	0.042	0.084	1.490	1.221	166,024	207	0.423	0.593
Support for learning	CD.1	0.780	0.019	0.024	5.111	2.261	1,799,842	2,470	0.742	0.817

**Table SE.9: Sampling errors: Southern Region**Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deff*) and confidence intervals for selected indicators, Thailand, 2005-2006

Table	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		
								<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>	
<b>HOUSEHOLDS</b>										
Iodized salt consumption	NU.5	0.000	0.000	.	.	140,223	508	0.000	0.000	
<b>HOUSEHOLD MEMBERS</b>										
Use of improved drinking water sources	EN.1	0.815	0.021	0.026	70.169	8,377	8,831,242	23,977	0.773	0.857
Use of improved sanitation facilities	EN.5	0.966	0.006	0.006	24.244	4.924	8,831,242	23,977	0.954	0.978
Net primary school attendance rate	ED.3	0.975	0.005	0.006	3.372	1.836	935,397	2,776	0.964	0.986
Net secondary school attendance rate	ED.4	0.715	0.015	0.021	2.740	1.655	970,072	2,448	0.685	0.745
Primary completion rate	ED.6	0.795	0.034	0.042	3.268	1.808	153,120	468	0.728	0.863
Child labour	CP.2	0.075	0.006	0.075	2.043	1.429	1,510,601	4,495	0.064	0.087
Prevalence of orphans	HA.10	0.045	0.005	0.111	4.456	2.111	2,813,321	7,727	0.035	0.055
Prevalence of vulnerable children	HA.11	0.023	0.004	0.163	4.846	2.201	2,813,321	7,727	0.016	0.031
<b>WOMEN</b>										
Skilled attendant at delivery	RH.5	0.928	0.013	0.014	2.048	1.431	328,568	788	0.902	0.955
Antenatal care	RH.3	0.953	0.012	0.013	2.626	1.621	328,568	788	0.928	0.977
Contraceptive prevalence	RH.1	0.602	0.025	0.042	12.212	3.495	1,745,568	4,591	0.552	0.653
Adult literacy	ED.8	0.932	0.008	0.009	1.664	1.290	771,930	1,639	0.916	0.948
Marriage before age 18	CP.5	0.212	0.027	0.126	3.048	1.746	384,959	710	0.158	0.265
Comprehensive knowledge about HIV prevention among young people	HA.3	0.378	0.020	0.052	10.493	3.239	2,437,448	6,369	0.338	0.417
Attitude towards people with HIV/AIDS	HA.5	0.178	0.011	0.060	4.754	2.180	2,375,766	6,170	0.156	0.199
Knowledge of mother- to-child transmission of HIV	HA.4	0.654	0.015	0.023	6.377	2.525	2,437,448	6,369	0.624	0.684
<b>UNDER-5s</b>										
Underweight prevalence	NU.1	0.125	0.010	0.081	1.815	1.347	750,977	1,935	0.105	0.145
Tuberculosis immunization coverage	CH.2	0.971	0.008	0.008	0.961	0.981	161,542	413	0.955	0.988
Polio immunization coverage	CH.2	0.944	0.013	0.014	1.396	1.181	161,542	413	0.917	0.971
Immunization coverage for DPT	CH.2	0.880	0.028	0.032	3.123	1.767	161,542	413	0.823	0.936
Measles immunization coverage	CH.2	0.963	0.011	0.011	1.335	1.155	161,542	413	0.941	0.984
Fully immunized children	CH.2	0.860	0.028	0.033	2.777	1.667	161,542	413	0.803	0.917
Acute respiratory infection in last two weeks	CH.6	0.032	0.006	0.189	2.460	1.568	790,370	2,052	0.020	0.045
Antibiotic treatment of suspected pneumonia	CH.7	0.581	0.026	0.044	0.175	0.419	25,642	66	0.530	0.632
Diarrhoea in last two weeks	CH.4	0.085	0.012	0.144	3.972	1.993	790,370	2,052	0.061	0.110
Received ORT or increased fluids and continued feeding	CH.5	0.404	0.035	0.087	0.787	0.887	67,508	153	0.333	0.474
Support for learning	CD.1	0.810	0.017	0.021	3.703	1.924	790,370	2,052	0.777	0.844

## Appendix D. Data Quality Tables

**Table DQ.1: Age distribution of household population**

Single-year age distribution of household population by sex (weighted), Thailand, 2005-2006

Age	Males		Females		Age	Males		Females	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
0	512,449	1.6	466,822	1.4	43	470,418	1.5	532,075	1.6
1	503,998	1.6	476,728	1.4	44	438,677	1.4	508,829	1.5
2	478,375	1.5	474,726	1.4	45	579,790	1.8	588,619	1.8
3	481,875	1.5	499,775	1.5	46	440,936	1.4	462,940	1.4
4	495,923	1.6	466,623	1.4	47	362,961	1.1	473,843	1.4
5	408,691	1.3	390,169	1.2	48	449,538	1.4	539,363	1.6
6	490,804	1.5	445,910	1.3	49	428,603	1.3	376,668	1.1
7	452,268	1.4	440,124	1.3	50	424,185	1.3	466,501	1.4
8	544,392	1.7	560,229	1.7	51	309,115	1.0	345,344	1.0
9	554,321	1.7	494,645	1.5	52	373,161	1.2	398,611	1.2
10	551,230	1.7	514,213	1.6	53	358,766	1.1	403,282	1.2
11	535,912	1.7	504,397	1.5	54	329,969	1.0	336,080	1.0
12	530,072	1.7	505,671	1.5	55	295,088	0.9	350,464	1.1
13	515,467	1.6	515,111	1.6	56	326,245	1.0	321,323	1.0
14	529,824	1.7	507,171	1.5	57	252,675	0.8	263,301	0.8
15	622,495	1.9	573,863	1.7	58	274,113	0.9	307,201	0.9
16	529,100	1.7	534,624	1.6	59	200,817	0.6	233,316	0.7
17	525,595	1.6	541,212	1.6	60	287,088	0.9	326,190	1.0
18	588,959	1.8	495,222	1.5	61	166,289	0.5	182,726	0.6
19	411,616	1.3	421,606	1.3	62	203,355	0.6	197,365	0.6
20	551,801	1.7	501,073	1.5	63	219,413	0.7	256,033	0.8
21	507,360	1.6	479,511	1.4	64	157,122	0.5	205,298	0.6
22	533,110	1.7	524,415	1.6	65	208,366	0.7	267,356	0.8
23	587,533	1.8	533,469	1.6	66	157,575	0.5	195,239	0.6
24	519,493	1.6	585,321	1.8	67	175,224	0.5	188,965	0.6
25	589,467	1.8	567,342	1.7	68	156,822	0.5	175,358	0.5
26	494,925	1.5	526,702	1.6	69	127,971	0.4	154,242	0.5
27	460,353	1.4	504,896	1.5	70	125,581	0.4	164,910	0.5
28	576,462	1.8	511,646	1.5	71	92,297	0.3	116,820	0.4
29	575,854	1.8	551,166	1.7	72	140,494	0.4	157,785	0.5
30	612,825	1.9	557,644	1.7	73	108,146	0.3	143,242	0.4
31	470,908	1.5	588,811	1.8	74	101,445	0.3	125,181	0.4
32	513,802	1.6	568,384	1.7	75	78,314	0.2	123,856	0.4
33	511,952	1.6	529,129	1.6	76	76,383	0.2	84,856	0.3
34	567,570	1.8	552,776	1.7	77	54,901	0.2	82,747	0.2
35	543,581	1.7	560,505	1.7	78	82,643	0.3	99,518	0.3
36	546,085	1.7	614,668	1.9	79	43,419	0.1	52,681	0.2
37	539,350	1.7	584,068	1.8	80+	274,068	0.9	445,461	1.3
38	530,655	1.7	589,906	1.8	DK/Missing				
39	491,022	1.5	518,062	1.6					
40	597,915	1.9	582,469	1.8	Total	31,951,196	100.0	33,112,873	100.0
41	484,105	1.5	576,561	1.7					
42	529,728	1.7	521,921	1.6					

Typical data quality issues: Heaping on ages with digits ending with 0 and 5. If age reporting is good, the curve to be produced from these numbers should be smooth. The table should also provide insights into overreporting-underreporting at certain age groups or intervals, and the extent of missing information on age.

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

Household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by five-year age group, Thailand, 2005-2006

Age	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
	Number	Number	Percent	
10-14	2,546,564	na	na	na
15-19	2,566,527	2,542,192	13.7	99.1
20-24	2,623,789	2,598,520	14.0	99.0
25-29	2,661,753	2,639,148	14.2	99.2
30-34	2,796,744	2,788,662	15.0	99.7
35-39	2,867,209	2,842,828	15.3	99.1
40-44	2,721,855	2,707,544	14.6	99.5
45-49	2,441,433	2,423,234	13.1	99.3
50-54	1,949,818	na	na	na
15-49	18,679,308	18,542,128	100.0	99.3

Typical data quality issues: In countries with growing populations, the percentages in each age group should decline with age (Columns 2 and 4). The last column shows whether the survey was less effective in interviewing certain age groups - typically, some surveys fail to interview the younger women, sometimes because of problems in sample implementation, sometimes because of interviewers' reluctance to interview young women. These figures should be high, preferably over 95 percent, or at least 90 percent, and should not vary much by age.

Note: Weights for both household population of women and interviewed women are population weights. Age is based on the household schedule. Table should be run unweighted if major problems are identified.



**Table DQ.3: Age distribution of eligible and interviewed under-5s**

Household population of children age 0-4, children whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed (unweighted), by five-year age group, Thailand, 2005-2006

Age	<u>Household population of children age 0-7</u>	<u>Interviewed children age 0-4</u>		Percentage of eligible children interviewed
	Number	Number	Percent	
0	1,880	1,878	20.0	99.9
1	1,951	1,944	20.7	99.6
2	1,862	1,854	19.7	99.6
3	1,921	1,914	20.3	99.6
4	1,830	1,819	19.3	99.4
5	1,849	.	.	.
6	2,135	.	.	.
7	2,090	.	.	.
0-4	9,444	9,409	100.0	99.6

Typical data quality issues: The table is intended to provide information on the efficiency of the survey in collecting information on under-5s. Distribution of children by age in the household questionnaire should be smooth, with little or no heaping on age 5, which could mean out-transference of children age 0-4 to outside the eligibility range. Percentages in the last column (completion rates) should be over 90, preferably over 95.

Note: Weights for both household population of children and interviewed children are household weights. Age is based on the household schedule. Table should be run unweighted if major problems are identified.

**Table DQ.3: Age distribution of eligible and interviewed under-5s**

Household population of children age 0-4, children whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed (unweighted), by five-year age group, Thailand, 2005-2006

Age	<u>Household population of children age 0-7</u>	<u>Interviewed children age 0-4</u>		Percentage of eligible children interviewed
	Number	Number	Percent	
0	1,880	1,878	20.0	99.9
1	1,951	1,944	20.7	99.6
2	1,862	1,854	19.7	99.6
3	1,921	1,914	20.3	99.6
4	1,830	1,819	19.3	99.4
5	1,849	.	.	.
6	2,135	.	.	.
7	2,090	.	.	.
0-4	9,444	9,409	100.0	99.6

Typical data quality issues: The table is intended to provide information on the efficiency of the survey in collecting information on under-5s. Distribution of children by age in the household questionnaire should be smooth, with little or no heaping on age 5, which could mean out-transference of children age 0-4 to outside the eligibility range. Percentages in the last column (completion rates) should be over 90, preferably over 95.

Note: Weights for both household population of children and interviewed children are household weights. Age is based on the household schedule. Table should be run unweighted if major problems are identified.

**Table DQ.4: Age distribution of under-5 children**

Age distribution of under-5 children by 3-month groups (weighted), Thailand, 2005-2006

	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Age in months						
0-2	91,640	3.7	104,708	4.4	196,348	4.1
3-5	142,198	5.8	114,343	4.8	256,541	5.3
6-8	147,171	6.0	113,781	4.8	260,953	5.4
9-11	122,824	5.0	120,614	5.1	243,437	5.0
12-14	125,275	5.1	122,045	5.1	247,321	5.1
15-17	132,465	5.4	127,673	5.4	260,138	5.4
18-20	113,534	4.6	126,199	5.3	239,733	5.0
21-23	122,818	5.0	104,853	4.4	227,670	4.7
24-26	127,322	5.2	114,787	4.8	242,109	5.0
27-29	124,029	5.0	127,515	5.4	251,544	5.2
30-32	131,746	5.3	126,820	5.3	258,566	5.3
33-35	104,529	4.2	104,370	4.4	208,899	4.3
36-38	110,917	4.5	120,821	5.1	231,738	4.8
39-41	132,824	5.4	126,972	5.3	259,796	5.4
42-44	113,531	4.6	111,247	4.7	224,778	4.6
45-47	122,105	5.0	137,061	5.8	259,165	5.4
48-50	124,370	5.0	118,792	5.0	243,162	5.0
51-53	121,730	4.9	117,305	4.9	239,036	4.9
54-56	121,113	4.9	118,453	5.0	239,566	5.0
57-59	130,730	5.3	116,451	4.9	247,181	5.1
Total	2,462,868	100.0	2,374,812	100.0	4,837,680	100.0

Typical data quality issues: The table is intended to provide information on the quality of age reporting for under-5s. In fact, the information is collected by asking the date of birth of children in the under-5 questionnaire, which is later converted into ages during data processing and analysis. The distribution should be smooth. Poor interviewing will reveal itself in heaping on certain ages.

**Table DQ.5: Heaping on ages and periods**

Age and period ratios at boundaries of eligibility by type of information collected (weighted), Thailand, 2005-2006

	Age and period ratios*			Eligibility boundary (lower-upper)	Module or questionnaire
	Males	Females	Total		
Age in household questionnaire					
1	1.01	1.01	1.01		
2	0.98	0.98	0.98	Lower	Child discipline and child disability
3	0.99	1.04	1.02		
4	1.07	1.03	1.05	Upper	Under-5 questionnaire
5	0.88	0.90	0.89	Lower	Child labour and education
6	1.09	1.05	1.07		
8	1.05	1.12	1.09		
9	1.01	0.95	0.98	Upper	Child disability
10	1.01	1.02	1.01		
13	0.98	1.01	1.00		
14	0.95	0.95	0.95	Upper	Child labour and child discipline
15	1.11	1.07	1.09	Lower	Women's questionnaire
16	0.95	0.97	0.96		
17	0.96	1.03	1.00	Upper	Orphaned and vulnerable children
18	1.03	1.11	1.07		
23	1.07	0.97	1.02		
24	0.92	1.04	0.98	Upper	Education
25	1.10	1.01	1.06		
48	1.09	1.16	1.13		
49	0.99	0.82	0.90	Upper	Women's questionnaire
50	1.10	1.18	1.14		
Age in women's questionnaire					
23	na	0.98	na		
24	na	1.04	na	Upper	Sexual behaviour
25	na	1.01	na		(This module not include in questionnaire)
Months since last birth in women's questionnaire					
6-11	na	1.00	na		
12-17	na	1.05	na		
18-23	na	0.91	na	Upper	Tetanus toxoid and maternal and child health
24-29	na	1.09	na		
30-35	na	0.92	na		

\* Age or period ratios are calculated as  $x / ((x_{n-1} + x_n + x_{n+1}) / 3)$ , where x is age or period.

Typical data quality issues: Age and period ratios in the table are calculated for two purposes: To check for evidence of heaping on certain periods or ages, particularly on those at the boundaries of eligibility, and to check if interviewers had transferred cases out of eligibility intervals. The table is indicative of the quality of fieldwork. Interviewers sometimes "transfer out" cases so as to avoid extra work - for instance, interviewers may transfer the age a 15 year-old woman to 14 to avoid an individual interview, in which case the age ratio on age 15 will be depressed (a deficit of females at age 15) and the age ratio on age 14 significantly higher than 1.00.

**Table DQ.6: Completeness of reporting**

Percentage of observations missing information for selected questions and indicators (weighted), Thailand, 2005-2006

Questionnaire and Subject	Reference group	Percent with missing information*	Number of cases
<b>Age</b>			
Salt testing	All households surveyed	0.0	18,031,070
<b>Women</b>			
Date of Birth	All women age 15-49		
Month only		4.9	18,542,128
Month and year missing		-	18,542,128
Date of first birth	All women age 15-49 with at least one live birth		
Month only		2.3	11,950,256
Month and year missing		1.6	11,950,256
Completed years since first birth	All women age 15-49 with at least one live birth	-	242,669
Date of last birth	All women age 15-49 with at least one live birth		
Month only		-	11,950,256
Month and year missing		-	11,950,256
Date of first marriage/union	All ever married women age 15-49		
Month only		18.7	13,544,028
Month and year missing		27.4	13,544,028
Age at first marriage/union	All ever married women age 15-49	0.3	13,544,028
<b>Under-5</b>			
Date of Birth	All under five children surveyed		
Month only		-	4,837,680
Month and year missing		-	4,837,680
Anthropometry	All under five children surveyed		
Height			
Weight		2.5	4,837,680
Height or Weight		2.9	4,837,680
		2.9	4,837,680

\* Includes "Don't know" responses

Typical data quality issues: Surveys always have cases with missing information. The extent of missing information is important, because it can result in biased results if such proportions are high. Particularly informative is the extent of missing information on measurements, ages, dates of events.

**Table DQ.7: Presence of mother in the household and the person interviewed for the under-5 questionnaire**

Distribution of children under five by whether the mother lives in the same household, and the person interviewed for the under-5 questionnaire (weighted), Thailand, 2005-2006

	Mother in the household				Mother not in the household			Child(<15) interviewed	Total	Number of children aged 0-4 years
	Mother interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed			
<b>Age</b>										
0	84.6	0.0	-	-	0.1	15.2	0.1	0.0	100.0	979,271
1	78.9	0.0	-	-	0.1	20.4	0.5	0.0	100.0	980,725
2	75.0	0.0	-	-	0.5	23.8	0.6	0.0	100.0	953,101
3	76.5	0.0	-	-	1.2	21.8	0.6	0.0	100.0	981,650
4	77.1	0.0	-	-	1.3	20.7	0.9	0.0	100.0	962,546
			-	-						
<b>Total</b>	<b>78.5</b>	<b>0.0</b>			<b>0.6</b>	<b>20.4</b>	<b>0.5</b>	<b>0.0</b>	<b>100.0</b>	<b>4,857,293</b>

Typical data quality issues: The under-5 questionnaire should be administered to the mother, if the mother was in the household. The table is informative on how the questionnaire was administered during the fieldwork. Not all information will have been collected from mothers, but cases where the mother is in the household but somebody else was interviewed can be problematic.

**Table DQ.8: School attendance by single age**

Distribution of household population age 5-24 by educational level and grade attended in the current year (weighted), Thailand, 2005-2006

Age	Primary school										Secondary school						Total	Number	
	Preschool	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Higher	Non-standard curriculum	Don't know			Not attending school
5	98.7	0.8	0.1	-	0.0	0.1	-	-	-	-	-	-	-	-	0.1	-	0.2	100.0	798,860
6	80.4	18.1	1.0	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-	100.0	936,714
7	8.4	70.3	19.6	1.1	0.4	-	-	-	-	-	-	-	-	-	0.0	-	0.1	100.0	892,392
8	0.6	7.3	67.5	21.6	2.2	0.7	-	-	-	-	-	-	-	-	0.0	-	0.1	100.0	1,104,622
9	0.1	0.4	7.7	69.7	20.9	1.0	0.2	-	-	-	-	-	-	-	0.0	-	0.1	100.0	1,048,966
10	0.0	0.2	0.5	7.9	67.2	23.1	1.0	-	-	-	-	-	-	-	-	-	0.1	100.0	1,065,444
11	0.1	0.2	0.4	1.2	8.9	67.9	20.2	0.8	0.2	0	-	0.0	-	-	0.0	-	0.2	100.0	1,040,309
12	-	0.0	0.1	0.3	1.8	10.0	65.8	18.4	2.8	0	0.0	-	-	-	0.0	-	0.6	100.0	1,035,743
13	-	0.0	0.1	0.0	0.3	1.6	9.6	62.6	22.6	1	0.0	-	-	-	0.0	-	1.9	100.0	1,030,578
14	-	0.0	0.2	0.3	-	0.2	1.3	7.5	62.7	20	1.1	0.1	-	-	-	-	6.3	100.0	1,036,996
15	-	-	-	-	-	-	0.2	0.8	6.7	66	14.2	0.6	0.3	0.1	-	-	10.9	100.0	1,196,358
16	-	-	-	-	0.1	0.1	0.4	0.4	2.5	11	51.1	11.7	2.3	0.3	-	-	20.7	100.0	1,063,724
17	-	-	-	0.0	-	-	-	0.1	0.3	3	9.3	45.0	12.1	0.8	-	-	30.0	100.0	1,066,807
18	-	-	0.1	-	-	-	-	0.1	0.1	1	3.5	15.9	38.2	6.9	-	-	34.4	100.0	1,084,181
19	-	-	-	-	-	0.0	0.1	0.1	0.1	1	1.9	3.5	10.3	25.7	-	-	57.5	100.0	833,222
20	-	-	-	-	-	-	-	-	0.0	0	0.7	1.1	2.3	27.7	-	-	67.7	100.0	1,052,874
21	-	-	-	-	-	-	-	0.0	0.1	0	0.9	0.3	1.8	27.1	-	-	69.5	100.0	986,871
22	-	-	-	-	-	-	-	0.1	0.1	0	0.8	0.3	0.7	16.1	-	-	81.6	100.0	1,057,525
23	-	-	-	-	-	-	-	0.1	0.1	0	0.3	0.0	0.2	6.0	-	-	93.2	100.0	1,121,002
24	-	-	-	-	-	-	0.1	-	-	0	0.1	0.1	0.3	5.5	-	-	93.7	100.0	1,104,815

Typical data quality issues: The table could be used to look at the outliers. Data entry programs do not check age versus grade. If data has been collected and entered correctly, one should see cases concentrated over the diagonal, and should not expect such cases as 22 year old persons at primary school grades, very young people at grade 6 of secondary school etc. Before running the table grades should be adapted to the system in the country.

Note: Levels and grades refer to the most recent school year if data collection was completed between school years

**Table DQ.9: Sex ratio at birth among children ever born and living**

Sex ratio at birth among children ever born, children living, and deceased children, by age of women (weighted), Thailand, 2005-2006

Age	Children Ever Born			Children Living			Children deceased			Number of women
	Number of sons ever born	Number of daughters ever born	Sex ratio	Number of sons living	Number of daughters living	Sex ratio	Number of deceased sons	Number of deceased daughters	Sex ratio	
15-19	114,548.1	85,888.5	1.3	113,054	85,888	1.3	1,494	-	.	2,542,192
20-24	640,643.0	655,798.8	1.0	630,850	654,319	1.0	9,793	1,479	7	2,598,520
25-29	1,309,274.5	1,179,727.1	1.1	1,301,082	1,159,349	1.1	8,192	20,378	0	2,639,148
30-34	2,074,026.1	1,956,630.6	1.1	2,035,725	1,936,896	1.1	38,301	19,734	2	2,788,662
35-39	2,589,721.7	2,480,728.2	1.0	2,527,934	2,449,024	1.0	61,787	31,704	2	2,842,828
40-44	2,812,055.0	2,685,799.9	1.0	2,710,172	2,628,372	1.0	101,883	57,428	2	2,707,544
45-49	2,830,224.5	2,621,132.3	1.1	2,671,757	2,525,168	1.1	158,467	95,964	2	2,423,234
Total	12,370,492.8	11,665,705.4	1.1	11,990,575	11,439,018	1.0	379,918	226,687	2	18,542,128

Typical data quality issues: Universally, the sex ratio among live births is around 1.05, typically ranging from 1.03 to 1.07 in sizeable populations (with the exception of populations where sex-selective abortions is practiced). The values in column 3 should be within these ranges. However, since sample surveys are influenced by chance fluctuations, one should be looking for systematically low or high ratios (in several countries, very young daughters may not be reported, or deaths of males may not be reported). In most populations, death rates at early ages are higher for males than females - hence, the sex ratios among deceased children (Column 6) should also be above 1.



**Table DQ.10: Distribution of women by time since last birth**

Distribution of women aged 15-49 with at least one live birth, by months since last birth (weighted), Thailand, 2005-2006

Months since last birth					
Age	Number	Percent	Age	Number	Percent
0	54,496	2.1	18	74,080	2.8
1	74,449	2.9	19	70,734	2.7
2	105,540	4.1	20	50,110	1.9
3	97,519	3.8	21	49,867	1.9
4	83,988	3.2	22	81,433	3.1
5	72,748	2.8	23	60,636	2.3
6	87,106	3.3	24	80,230	3.1
7	85,152	3.3	25	58,790	2.3
8	82,755	3.2	26	59,775	2.3
9	76,197	2.9	27	76,432	2.9
10	83,331	3.2	28	66,415	2.6
11	65,957	2.5	29	79,622	3.1
12	75,962	2.9	30	64,003	2.5
13	72,219	2.8	31	66,687	2.6
14	90,380	3.5	32	77,142	3.0
15	69,839	2.7	33	53,982	2.1
16	85,281	3.3	34	53,643	2.1
17	73,022	2.8	35	39,962	1.5
			Total	2,600,338	100.0

Typical data quality issues: Months since last birth may be heaped on periods of 6 months, 12 months, 24 months etc. In particular, the heaping on 24 months is problematic, since some women had a birth in the last 2 years, but did not declare them so.

<b>Figure</b>	<b>Description</b>
1	Scatterplot of weight (Y-axis) by height (x-axis), unweighted
2	Scatterplot of weights of children by age in months
3	Scatterplot of heights of children by age in months
	<p>Figures 1-3 are intended to provide a visual insight into the quality of anthropometric measurements. The data points should be concentrated along a diagonal. Outliers can be easily spotted visually. Remember that data problems may be due to poor reporting of age, or poor measurement of heights or weights, or any combination of the three.</p>
4	Number of male household population (Y-axis) by single ages (X-axis) (Line graph) (unweighted and weighted)
5	Number of female household population (Y-axis) by single ages (X-axis) (Line graph) (unweighted and weighted)
	<p>Figures 4-5 are based on Table DQ.1, and are intended to provide information on the extent of age heaping, deficits of household population at certain ages or age intervals. Both unweighted and weighted distributions are shown.</p>
6	Population pyramid, Thailand, 2005-2006

Figure 1. Scatterplot of weight (Y-axis) by height (X-axis) (unweighted), Thailand, 2005-2006

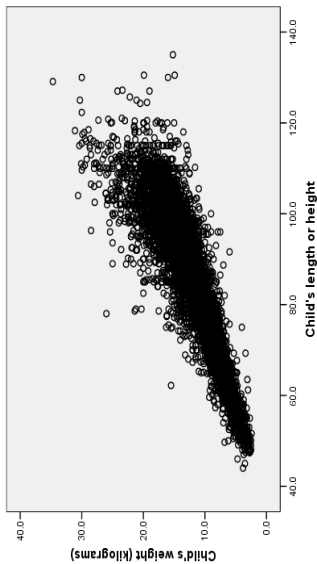


Figure 2. Scatterplot of weights of children by age in months (unweighted), Thailand, 2005-2006

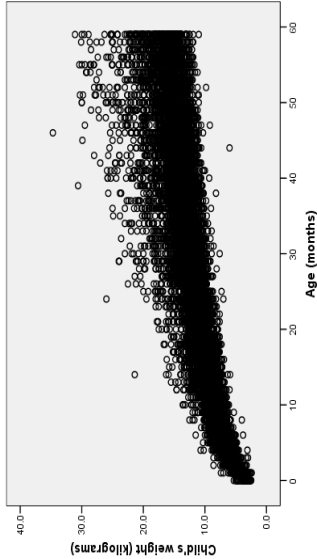


Figure 3. Scatterplot of heights of children by age in months (unweighted), Thailand, 2005-2006

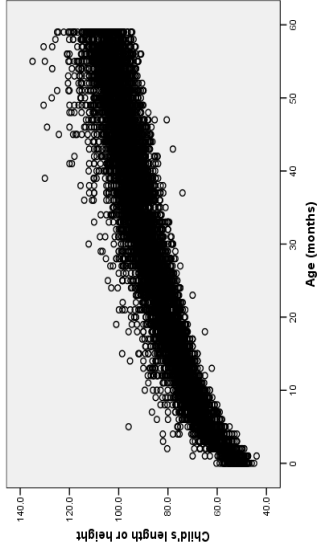


Figure 4. Number of male household population (Y-axis) by single ages (X-axis) (unweighted), Thailand, 2005-2006

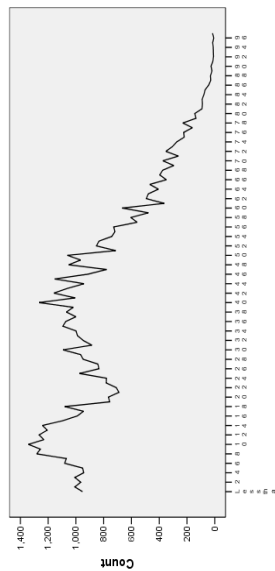


Figure 5. Number of female household population (Y-axis) by single ages (X-axis) (unweighted), Thailand, 2005-2006

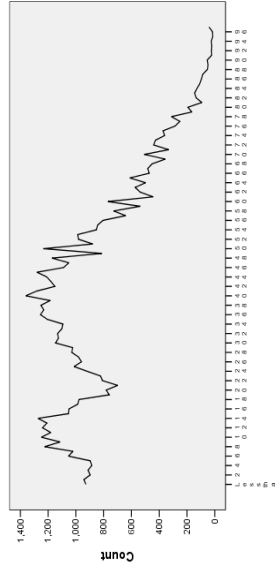


Figure 4. Number of male household population (Y-axis) by single ages (X-axis) (weighted), Thailand, 2005-2006

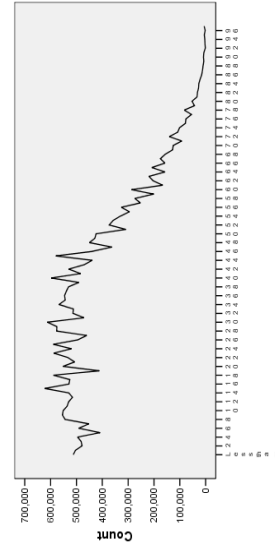


Figure 5. Number of female household population (Y-axis) by single ages (X-axis) (weighted), Thailand, 2005-2006

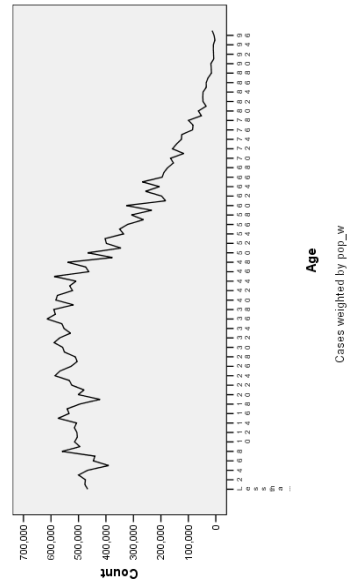
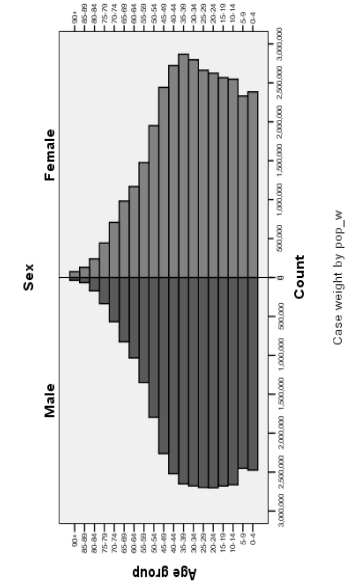


Figure 6. Population pyramid, Thailand, 2005-2006



Cases weighted by pop\_w

Cases weighted by pop\_w

## Appendix E. MICS Indicators: Numerators and Denominators

INDICATOR	NUMERATOR	DENOMINATOR
4	Skilled attendant at delivery	Total number of women surveyed aged 15-49 years with a birth in the 2 years preceding the survey
5	Institutional deliveries	Total number of women surveyed aged 15-49 years with a birth in 2 years preceding the survey
6	Underweight prevalence	Total number of children under age five that were weighed
7	Stunting prevalence	Total number of children under age five measured
8	Wasting prevalence	Total number of children under age five weighed and measured
9	Low-birthweight infants	Total number of last live births in the 2 years preceding the survey
10	Infants weighed at birth	Total number of last live births in the 2 years preceding the survey
11	Use of improved drinking water sources	Total number of household members in households surveyed
12	Use of improved sanitation facilities	Total number of household members in households surveyed
13	Water treatment	Total number of household members in households surveyed
14	Disposal of child's faeces	Total number of children under age three surveyed
15	Exclusive breastfeeding rate	Total number of infants aged 0-5 months surveyed
16	Continued breastfeeding rate	Total number of children aged 12-15 months and 20-23 months surveyed
17	Timely complementary feeding rate	Total number of infants aged 6-9 months surveyed
18	Frequency of complementary feeding	Total number of infants aged 6-11 months surveyed

INDICATOR	NUMERATOR	DENOMINATOR
19 Adequately fed infants	Number of infants aged 0-11 months that are appropriately fed: infants aged 0-5 months that are exclusively breastfed and infants aged 6-11 months that are breastfed and ate solid or semi-solid foods the appropriate number of times (see above) yesterday	Total number of infants aged 0-11 months surveyed
20 Antenatal care	Number of women aged 15-49 years that were attended at least once during pregnancy in the 2 years preceding the survey by skilled health personnel	Total number of women surveyed aged 15-49 years with a birth in the 2 years preceding the survey
21 Contraceptive prevalence	Number of women currently married or in union aged 15-49 years that are using (or whose partner is using) a contraceptive method (either modern or traditional)	Total number of women aged 15-49 years that are currently married or in union
22 Antibiotic treatment of suspected pneumonia	Number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks receiving antibiotics	Total number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks
23 Care-seeking for suspected pneumonia	Number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks that are taken to an appropriate health provider	Total number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks
24 Solid fuels	Number of residents in households that use solid fuels (wood, charcoal, crop residues and dung) as the primary source of domestic energy to cook	Total number of residents in households surveyed
25 Tuberculosis immunization coverage	Number of children aged 12-23 months receiving BCG vaccine before their first birthday	Total number of children aged 12-23 months surveyed
26 Polio immunization coverage	Number of children aged 12-23 months receiving OPV3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed
27 Immunization coverage for diphtheria, pertussis and tetanus (DPT)	Number of children aged 12-23 months receiving DPT3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed
28 Measles immunization coverage	Number of children aged 12-23 months receiving measles vaccine before their first birthday	Total number of children aged 12-23 months surveyed
29 Hepatitis B immunization coverage	Number of children aged 12-23 months immunized against hepatitis before their first birthday	Total number of children aged 12-23 months surveyed
31 Fully immunized children	Number of children aged 12-23 months receiving DPT1-3, OPV-1-3, BCG and measles vaccines before their first birthday	Total number of children aged 12-23 months surveyed
32 Neonatal tetanus protection	Number of mothers with live births in the previous year that were given at least two doses of tetanus toxoid (TT) vaccine within the appropriate interval prior to giving birth	Total number of women surveyed aged 15-49 years with a birth in the year preceding the survey
33 Use of oral rehydration therapy (ORT)	Number of children aged 0-59 months with diarrhoea in the previous 2 weeks that received oral rehydration salts and/or an appropriate household solution	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
34 Home management of diarrhoea	Number of children aged 0-59 months with diarrhoea in the previous 2 weeks that received more fluids AND continued eating somewhat less, the same or more food	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
35 Received ORT or increased fluids and continued feeding	Number of children aged 0-59 months with diarrhoea that received ORT (oral rehydration salts or an appropriate household solution) or received more fluids AND continued eating somewhat less, the same or more food	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
44 Content of antenatal care	Number of women with a live birth in the 2 years preceding the survey that received antenatal care during the last pregnancy	Total number of women with a live birth in the 2 years preceding the survey
45 Timely initiation of breastfeeding	Number of women with a live birth in the 2 years preceding the survey that put the newborn infant to the breast within 1 hour of birth	Total number of women with a live birth in the 2 years preceding the survey
46 Support for learning	Number of children aged 0-59 months living in households in which an adult has engaged in four or more activities to promote learning and school readiness in the past 3 days	Total number of children aged 0-59 months surveyed

INDICATOR	NUMERATOR	DENOMINATOR
47	Father's support for learning	Total number of children aged 0-59 months
48	Support for learning: children's books	Total number of households surveyed
49	Support for learning: non-children's books	Total number of households surveyed
50	Support for learning: materials for play	Total number of households surveyed
51	Non-adult care	Total number of children aged 0-59 months surveyed
52	Pre-school attendance	Total number of children aged 36-59 months surveyed
53	School readiness	Total number of children in the first grade surveyed
54	Net intake rate in primary education	Total number of children of primary-school entry age surveyed
55	Net primary school attendance rate	Total number of children of primary-school age surveyed
56	Net secondary school attendance rate	Total number of children of secondary-school age surveyed
57	Children reaching grade five	Total number of children that were in the last grade of primary school during the previous school year surveyed
58	Transition rate to secondary school	Total number of children of primary school completion age (age appropriate to final grade of primary school) surveyed
59	Primary completion rate	Total number of women aged 15-24 years surveyed
60	Adult literacy rate	Proportion of boys in primary and secondary education
61	Gender parity index	Total number of women aged 15-49 years and 20-49 years surveyed, by age groups
67	Marriage before age 15 and age 18	Total number of women aged 15-19 years surveyed
68	Young women aged 15-19 years currently married or in union	Total number of women aged 15-19 and 20-24 years surveyed that are currently married or in union
69	Spousal age difference	Total number of children under age 18 surveyed
75	Prevalence of orphans	

INDICATOR	NUMERATOR	DENOMINATOR
76	Prevalence of vulnerable children	Total number of children under age 18 surveyed
77	School attendance of orphans versus non-orphans	Proportion of children aged 10-14 years, both of whose parents are alive, that are living with at least one parent and are attending school
78	Children's living arrangements	Total number of children aged 0-17 years surveyed
81	External support to children orphaned and made vulnerable by HIV/AIDS	Number of orphaned and vulnerable children under age 18 surveyed
82	Comprehensive knowledge about HIV prevention among young people	Total number of women aged 15-24 years surveyed
86	Attitude towards people with HIV/AIDS	Total number of women surveyed
89	Knowledge of mother-to-child transmission of HIV	Total number of women surveyed
90	Counselling coverage for the prevention of mother-to-child transmission of HIV	Total number of women that gave birth in the previous 24 months surveyed
91	Testing coverage for the prevention of mother-to-child transmission of HIV	Total number of women that gave birth in the previous 24 months surveyed
95	Slum household	Number of household members in urban households surveyed
101	Child disability	Total number of children aged 2-9 surveyed

## **Appendix F. Questionnaire**

---



CONFIDENTIAL

CHILDREN SITUATION SURVEY IN THAILAND 2005-2006

2



HOUSEHOLD QUESTIONNAIRE

Page no. ....in total....pages for this Household

MICS2

For Recording Comment/Observation of Enumerator

HH7 - REIG  CWT

1. Region..... Province.....

2. District..... Sub-district.....

3. Address No..... Rd..... Soi.....

4. Urban Area ED.....BLK.....

HH6

Rural Area ED.....Village No..... Village Name.....

5. Primary Sampling Unit No.....

PSU\_NO

6. Household No. ....

HH2

7. Interviewing : Date.....Month.....Year.....

HH6

Results after Interviewing

8. Name of Head of Household.....

9. Name of Respondent.....No.....

HH10

10. Total No. of Household Member .....

HH11

11. No. of Women Aged 15-49 ..... No. of those Interviewing Completed.....

HH12

12. No. of Children aged < 5 ..... No. of those Interviewing Completed .....

HH14

13. Result of Household Interview

Completed.....11 Destroyed/Burned.....12 Vacancy.....13

New Household moved in .....16 Could not interview (3 times call back),21

Could not find.....23 Other (Specify).....24 Refused.....22

Editing and Coding: Date.....Month.....Year..... Name.....Checker

Name..... Editor (.....)

Name..... Supervisor (.....)


Enumerator

Editor

Supervisor



MIC2 - 3

SECTION 1 CHARACTERISTICS OF HOUSEHOLD MEMBER (HL)									
FOR MEMBER AGE 0 - 17 YEARS									
FOR ADULTS AGE 18-50 YEARS		FOR CODE 1 IN HL9		FOR CODE 1 IN HL10		FOR CODE 1 IN HL11		FOR CODE 1 IN HL12	
Check HL5. If there is any child age 0-17, tick mark/ in  and continue. If no, skip to Section 2		IS...NATURAL MOTHER ALIVE ?		DOES...NATURAL MOTHER LIVE IN THIS HOUSEHOLD?		IS...NATURAL FATHER ALIVE ?		DOES...NATURAL FATHER LIVE IN THIS HOUSEHOLD ?	
HAS... BEEN VERY SICK FOR AT LEAST 3 MONTHS DURING THE PAST 12 MONTHS ?		HAS... 'S MOTHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST MONTHS ?		HAS... 'S FATHER BEEN VERY SICK FOR AT LEAST 3 MONTHS IN THE PAST 12 MONTHS ?		Record Line no. of mother or 00 for 'no'		Record Line no. of father or 00 for 'no'	
CODE		CODE		CODE		CODE		CODE	
YES .....1		YES .....1		YES .....1		YES .....1		YES .....1	
NO .....2		NO .....2		NO .....2		NO .....2		NO .....2	
DK .....8		DK .....8		DK .....8		DK .....8		DK .....8	
HL5A		HL9		HL10		HL10A		HL11	
Count CODE 1		Count CODE 2		Count CODE 1		Count CODE 2		Count CODE 1	



MIC2 - 5

SECTION 2 EDUCATION (ED)		SECTION 3 ORPHANED & VULNERABLE CHILDREN (OV)			
FOR MEMBERS AGE 5 - 24 YEARS		FOR MEMBERS AGE 0-17 YEARS			
DURING THE PREVIOUS (2004) SCHOOL YEAR, DID...ATTEND SCHOOL OR PRE-SCHOOL ?	WHICH LEVEL WAS...ATTENDING ?	WHICH GRADE WAS...ATTENDING ?	OVER THE PAST 12 MONTHS, HAS ANY USUAL MEMBER OF YOUR HOUSEHOLD DIED IN THE LAST 12 MONTHS ?	WERE ANY OF THESE PEOPLE BETWEEN THE AGES OF 18 AND 59 ?	WERE ANY OF THESE PEOPLE SERIOUSLY ILL FOR 3 OF THE 12 MONTHS BEFORE HE/SHE DIED ?
YES.....1 (Cont.) NO.....2 DK.....8 (CODE 2, 8 Skip to Section 3)	PRE-SCHOOL.....0 PRIMARY.....1 SECONDARY.....2 HIGHER.....3 NON-STANDARD CURRICULUM.....6 DK.....8	ED8B	YES.....1 (Cont.) NO.....2 (Skip to OV5)	YES.....1 (Cont.) NO.....2 (Skip to OV5)	YES.....1 (Skip to OV10) NO.....2 (Cont.)
ED7	ED8A	ED8B	OV2	OV3	OV4
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Check HL5.  
If there is any child age 0-17, tick mark  in  and  continue.  
If no, skip to Section 6











MIC2 - 9

**SECTION 6 WATER AND SANITATION (WS)**

**Circle CODE**

**WS1. WHAT IS THE MAIN SOURCE OF DRINKING WATER**

**FOR MEMBER OF YOUR HOUSEHOLD ?**

- Piped water
- Piped into dwelling.....11 (Skip to WS5)
- Piped into yard or plot.....12 (Skip to WS5)
- Public tap/standpipe.....13
- Tubewell/borehole.....21
- Dug well
- Protected well.....31
- Unprotected well.....32
- Water from spring
- Protected well.....41 (Skip to WS3)
- Unprotected well.....42
- Rainwater collection.....51
- Tanker-truck.....61
- Surface water (river, stream, dam, lake, pond, canal, irrigation channel).....81
- Bottled water.....91 (Cont.)
- Other (specify).....96 (Skip to WS3)

**FOR CODE 91 IN WS1**

**WS2. WHAT IS THE MAIN SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HANDWASHING ?**

- Piped water
- Piped into dwelling.....11 (Skip to WS5)
- Piped into yard or plot.....12 (Skip to WS5)
- Public tap/standpipe.....13
- Tubewell/borehole.....21
- Dug well
- Protected well.....31
- Unprotected well.....32
- Water from spring
- Protected well.....41 (Cont.)
- Unprotected well.....42
- Rainwater collection.....51
- Tanker-truck.....61
- Surface water (river, stream, dam, lake, pond, canal, irrigation channel).....81
- Other (specify).....96

**FOR CODE 13-81, 96 IN WS1 OR WS2**

**WS3. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK ?**

- No. of minute..... [ ] [ ] [ ] (Cont.)
- Water on premises.....995 (Skip to WS5)
- DK.....998 (Cont.)

**FOR CODE 998 IN WS3**

**WS4. WHO USUALLY GOES TO THIS SOURCE TO FETCH THE WATER FOR YOUR HOUSEHOLD ?**

- Adult woman.....1
- Adult man.....2
- Female child (under 15).....3 (Cont.)
- Male child (under 15).....4
- DK.....8

**WS5. DO YOU TREAT YOUR WATER IN ANY WAY TO MAKE IT SAFER TO DRINK ?**

- Yes.....1 (Cont.)
- No.....2 (Skip to WS7)
- DK.....8 (Skip to WS7)

SECTION 6 WATER AND SANITATION (WS)

Circle CODE

FOR CODE 1 IN WS5

WS6. WHAT DO YOU USUALLY DO TO THE WATER TO MAKE IT SAFTER TO DRINK ?

(Circle all that apply)

- Boil.....A
- Add bleach/chlorine.....B
- Strain it through a cloth.....C
- Use water filter (e.g. ceramic, sand)....D
- Solar disinfection.....E
- Let it stand and settle.....F
- Other (specify).....X
- DK.....Z

WS7. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE ?

it flush to ?

- 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 ...15
- Pit latrine with slab.....22
- Pit latrine without slab / open pit.....23
- No facilities or bush or field.....95 (Skip to Section 7)
- Other (specify).....96

WS8. DO YOU SHARE THIS FACILITY WITH OTHER HOUSEHOLDS ?

Yes.....1 (Cont.)

No.....2 (Skip to Section 7)

For CODE 1 in WS8

WS9. HOW MANY HOUSEHOLD IN TOTAL USE THIS TOILET FACILITY ?

No. of households (if less than 10).....0

Ten or more households.....10

DK.....98

MIC2 - 11

**SECTION 7 HOUSEHOLD CHARACTERISTICS (HC)**

<b>HC1A. Religion of the Head of Household</b>		<b>HC1D. Main occupation of Household (Max. income)</b>		<b>HC3. Main Material of the Dwelling Floor</b>		<b>HC5. Main Material of the Walls</b>	
Buddhism.....	1	Government service/employee..	1	Earth/sand.....	11	No walls.....	11
Islam .....	2	Government enterprise.....	2	Wood planks.....	21	Cane/palm/trunks.....	12
Christianity.....	3	Private employee.....	3	Palm/bamboo.....	22	Dirt.....	13
Other religion (specify).....	6	Private enterprise/own account	4	Parquet or polished wood.....	31	Plywood.....	24
No religion.....	7	Farmer.....	5	Vinyl or asphalt strips.....	32	Carton.....	25
<b>HC1B. Mother Tongue/Native Language of the Head of Household</b>		General employee/Unskill labour	6	Ceramic tiles.....	33	Reused wood.....	26
Thai.....	1	Other (specify).....	7	Cement.....	34	Bamboo.....	27
Khmer.....	2	<b>HC1E. Total income per month of all members</b>		Carpet.....	35	Cement.....	31
Malay (Yavz).....	3	Less than 10,000 Baht.....	1	Marble.....	36	Stone with lime/cement.....	32
Chinese.....	4	10,000 - 19,999 Baht.....	2	Polished cement (with stone pieces)	37	Bricks.....	33
Burmese.....	5	20,000 - 29,999 Baht.....	3	Other material (specify).....	96	Cement blocks.....	34
Other language (specify).....	6	30,000 - 39,999 Baht.....	4	<b>HC4. Main Material of the Roof</b>		Wood planks/shingles.....	36
Ethnic Minority Language (Specify).....	7	40,000 - 49,999 Baht.....	5	No Roof.....	11	Zinc.....	37
		50,000 Baht and over.....	6	Thatch/palm leaf.....	12	Ceramic tiles.....	38
<b>HC1C. Ethnic Group of the Head of Household</b>				Sod.....	13	Sheara.....	39
Thai.....	1	<b>HC2. No. of Rooms used for Sleeping</b>		Other material (specify).....	96	Other material (specify).....	96
Cambodian.....	2			No Roof.....	11		
Laosian.....	3			Thatch/palm leaf.....	12		
Chinese.....	4			Sod.....	13		
Burmese.....	5			Palm/bamboo.....	22		
Other ethnic group (specify)	6			Wood planks.....	23		
Ethnic Minority Group (Specify).....	7			Metal.....	31		
				Calamine/cement fiber.....	33		
				Ceramic tiles.....	34		
				Cement.....	35		
				Roofing shingles.....	36		
				Other material (specify).....	96		

SECTION 7 HOUSEHOLD CHARACTERISTICS (HC)		SECTION 8 IODIZATION (SI)								
<b>HC6. TYPE OF FUEL MAINLY USE FOR COOKING</b> Electricity.....01 Liquid Propane Gas (LPG).....02 (Skip to HC8) Biogas.....04 Kerosene.....05 Coal / Lignite.....06 Charcoal.....07 Wood.....08 (Cont.) Straw/shrubs/grass.....09 Animal dung.....10 Agricultural crop residue.....11 Other (specify).....96 No cooking.....97 (Skip to HC9)		<b>CHECK WHETHER THE SALT USED IN MAIN COOKING IN HOUSEHOLD IS IODIZED, AND COLLECT THE SAMPLE OF SALT FOR LAB TEST</b>  SI1 RESULT OF PKTT TEST CODE Non iodized ..... 1 With iodized..... 4 No salt in home..... 6								
<b>HC8. WHERE THE COOKING USUALLY DONE ?</b> In the house..... 1 In a separate building..... 2 Outdoors..... 3 Terrace..... 4 Other (specify)..... 6		<b>SI2 THE PACKAGE OF SALT WHEN PURCHASED</b> In a bag, specified with iodized... 1 In a bottle, specified with iodized 2 In a bag/bottle, not specified about iodized..... 3 DK..... 6								
<b>HC9. DOES YOUR HOUSEHOLD HAVE: .....</b> Electricity..... 1 Radio..... 2 Television..... 2 Mobile Telephone..... 2 Non-Mobile Telephone..... 2 Refrigerator..... 2 Computer..... 2		<b>SIA TYPE OF SALT</b> Coarse..... 1 Refined..... 2								
<b>HC10. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN: ...?</b> Watch..... 1 Bicycle..... 2 Motorcycle/Scooter ..... 2 Animal drawn-cart..... 2 Car/Truck..... 2 Boat with motor..... 2		<b>SIB Record PPM from Lab test</b> <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> <td style="width: 20px; height: 20px;"></td> </tr> </table>								
<b>HC7. TYPE OF STOVE USED FOR FOOD COOKING</b> (For CODE 05 - 11, 96 in HC6) Open fire.....1 (Cont.) Open stove.....2 (Cont.) Close stove.....3 (Skip to HC8) Other (specify).....6 (Skip to HC8)										
<b>HC7A. THE FIRE/STOVE HAVE A CHIMNEY OR A HOOD</b> (For CODE 1 - 2 in HC7) Yes.....1 No.....2										

CONFIDENTIAL



# CHILDREN SITUATION SURVEY IN THAILAND 2005-2006

## QUESTIONNAIRE FOR WOMEN AGE 15 - 49 YEARS

3

MICS 3

Page no.....in total....pages for this Household

- 1. Region..... Province.....  HH7 - REG  CWT
- 2. District..... Sub-district.....
- 3. Address No..... Rd..... Soi.....
- 4. Urban Area ED.....BLK.....Rural Area ED..... Village No..... Village Name..... AREA
- 5. Primary Sampling Unit No..... PSU\_NO
- 6. Household No..... WM2 - HH\_NO

WM3 - Name of Women (Copy from HL2 in MICS2 Questionnaire)	WM4. Women's Line No. (Copy from HL6 in MICS2 Questionnaire)	WM6D-Day	WM6M-Month	WM6Y-Year of Interview	WM7- Interview Results (see Code in no. 7)
1.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**7. Result of Interview for Women Age 15-49 (Record Code in  in WM7)**

- 1. Completed
- 2. Not at Home (3 times call back)
- 3. Refused
- 4. Partly Completed
- 5. Incapacitated
- 6. Other (specify).....

Editing and Coding Date ..... Name..... Editor  
 Name..... Enumerator  
 Name..... Supervisor  
 Name..... Checker

SECTION 1 GENERAL INFORMATION OF WOMEN (WM)																		
FOR ALL WOMEN AGE 15 - 49 YEARS																		
NO.	NAME	MONTH AND YEAR OF BIRTH		AGE	HAVE YOU EVER ATTENDED SCHOOL ?	WHAT IS THE HIGHEST LEVEL OF SCHOOL ATTENDED ?	FOR CODE 1 IN WM10		FOR CODE 2 IN WM10 OR RECORDED 1 OR 6 IN WM11 ASK THE RESPONDENT TO READ THE SENTENCE PROVIDED									
		MONTH	YEAR				WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THE LEVEL ?	SENTENCE PROVIDED										
		Record the Month of Birth If don't know, record "98"	Record the Year of Birth If don't know, record "9998"	Record age at the last birthday (Age in completed year)	YES.....1 (Cont.) NO.....2 (Skip to WM14)	CODE PRIMARY.....1 SECONDARY.....2 HIGHER.....3 NON STANDARD CURRICULUM.....6	Record Grade, Certificate or Academic Degree in Detail  (CODE 1 Cont., CODE 2 - 3 Skip to Section 2)	CANNOT READ AT ALL.....1 ABLE TO READ ONLY PARTS OF SENTENCE.....2 ABLE TO READ WHOLE SENTENCE.....3 NO SENTENCE IN REQUIRED LANGUAGE.....4 BLIND/MUTE/VISUALLY/SPEED IMPAIRED.....5	WM3	WM8 M	WM8 Y	WM9	WM10	WM11	WM12	WM14		













MIC3 - 8

SECTION 6 CONTRACEPTION (CP)		
FOR ALL WOMEN AGE 15 - 49 YEARS		
ARE YOU PREGNANT NOW ?	FOR THOSE RECORDED 2 OR 8 IN CP1	FOR CODE 1 CP 2
YES.....1 (Skip to Section 7) NO.....2 UNSURE/DK.....8 (CODE 2, 8 Cont.)	ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT ? YES.....1 (Cont.) NO.....2 (Skip to Section 7)	WHICH METHOD ARE YOU USING ? Record CODE (Circle all that apply) CODE FEMALE STERILIZATION.....A MALE STERILIZATION.....B PILL.....C IUD.....D INJECTIONS.....E IMPLANTS.....F CONDOM.....G LACTATIONAL AMENORRHOEA METHOD (LAM)...K PERIODIC ABSTINENCE.....L WITHDRAWAL.....M OTHER (Specify).....X
CP1	CP2	CP3
		A B C D E F G K L M X
		A B C D E F G K L M X
		A B C D E F G K L M X



CONFIDENTIAL



CHILDREN SITUATION SURVEY IN THAILAND 2005-2006  
**QUESTIONNAIRE FOR CHILDREN UNDER 5 YEARS**

MICS 4

Page no. .... in total ..... pages for this household

1. Region ..... Province .....

2. District ..... Sub-district .....

3. Address No. .... Rd. .... Soi .....

4. Urban Area ED ..... BLK ..... Rural Area ED ..... Village Name .....

5. Primary Sampling Unit No. ....

6. Household No. ....

HH 7 - REG  CWT

AREA

PSU\_NO

UF2 - HH\_NO

UF3 - Child's Name (Copy from HL2 in MICS2 Questionnaire)	UF4 - Child's Line No. (Copy from HL1 in MICS2)	UF5 - Mother's/Caretaker's Name (Copy from HL2 in MICS2 Questionnaire)	UF6 - Mother's/Caretaker's Line No. (Copy from HL8 in MICS2)	UF8D-Day	UF8M-Month	UF8Y-Year of Interview	UF9 - Interview Results (see Code in no. 7)
1.....	<input type="checkbox"/>	1.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.....	<input type="checkbox"/>	2.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.....	<input type="checkbox"/>	3.....	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

7. Result of Interview for children under 5 years (Record Code in  in UF9)

1. Completed    2. Not at Home (3 times call back)    3. Refused    4. Incapacitated    5. Incapacitated    6. Other (Specify).....

Name..... Enumerator  
 Editing and Coding: Date..... Name..... Editor  
 Name....., Checker  
 (.....) Supervisor







MIC4 - 4

SECTION 3 CHILD DEVELOPMENT (CE)		SECTION 4 BREASTFEEDING (BF)	
FOR CHILDREN AGE UNDER 5 YEARS		FOR CHILDREN AGE UNDER 5 YEARS	
<p><b>WHAT TYPE OF THINGS THAT...PLAY WITH WHEN HE/SHE IS AT HOME ?</b> (Circle all that apply)</p> <p>HOUSEHOLD OBJECTS (e.g. bowls, plates, cups or pots).....A</p> <p>OBJECTS AND MATERIALS FOUND OUTSIDE THE LIVING QUARTERS (e.g.sticks, rocks, animals).....B</p> <p>HOMEMADE TOYS (e.g.dolls, cars and other toys made at home).....C</p> <p>TOYS THAT CAME FROM A STORE.....D</p> <p>NO PLAYTHINGS MENTIONED.....Y</p>	<p>SINCE LAST (day of the week) HOW MANY TIMES WAS ... LEFT IN THE CARE OF ANOTHER CHILD (someone less than 10 years old) ?</p> <p>(Sometimes adults taken care of children have to leave the house to go shopping, wash clothes, or for other reasons and have to leave young children with others)</p> <p>Record number of time If NO, record "00"</p>	<p>HAS ..... EVER BEEN BREASTFED ?</p> <p>YES.....1 (Cont.) NO.....2 DK.....8 (CODE 2, 8 skip to BF3 A)</p>	<p>FOR CODE 1 IN BF1 IS HE/SHE STILL BEING BREASTFED ?</p> <p>YES.....1 NO.....2 DK.....8</p>
CE3	CE4	CE5	BF 1
A B C D Y			BF 2
A B C D Y			
A B C D Y			







MIC4 - 8

SECTION 6 IMMUNIZATION (IM)															
FOR CHILDREN AGE UNDER 5 YEARS															
Copy dates for each vaccination from the card in IM2D-IM6Y															
IS THERE A VACCINATION CARD FOR ..... ?	BCG	POLIO1 (OPV1)	POLIO2 (OPV2)	POLIO3 (OPV3)	POLIO4 (OPV4)	CODE	YES, SEEN.....1  (Cont.)	YES, NOT SEEN.....2  NO.....3  (CODE 2,3, skip to IM10)	DAY	MONTH	YEAR	YEAR			
									IM2D	IM2M	IM2Y	IM3 BY	IM3 CD	IM3 CM	IM3 CY
IM1	IM2D	IM2M	IM2Y	IM3 BD	IM3 BM	IM3 BY	IM3 CD	IM3 CM	IM3 CY	IM3 DD	IM3 DM	IM3 DY	IM3 ED	IM3 EM	IM3 EY

Write '44' in day column if card shows that vaccination was given but no date recorded.











## Appendix G. Tables Education

**Table ED.3-1: Primary school net attendance ratio**  
**Percentage of children of primary school age\*\* attending primary or secondary school (NAR),**  
**Thailand, 2005-2006**

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
<b>Region</b>						
Central (incl.BKK)	88.3	905,290	87.3	835,855	87.8	1,741,145
North	85.6	548,383	87.5	549,313	86.6	1,097,696
Northeast	83.3	1,208,964	84.0	1,118,657	83.6	2,327,621
South	84.0	466,291	86.2	455,694	85.0	921,985
<b>Residence</b>						
Urban	87.9	801,983	86.7	791,562	87.3	1,593,545
Rural	84.3	2,326,945	85.6	2,167,957	85.0	4,494,902
<b>Age**</b>						
6	19.0	490,804	19.0	445,910	19.0	936,714
7	90.2	452,268	91.0	440,124	90.6	892,392
8	98.1	544,392	99.3	560,229	98.7	1,104,622
9	99.2	554,321	99.1	494,645	99.2	1,048,966
10	99.7	551,230	99.1	514,213	99.5	1,065,444
11	99.4	535,912	99.4	504,397	99.4	1,040,309
<b>Mother's Education</b>						
None	83.4	164,244	83.6	183,835	83.5	348,079
Primary	85.1	2,091,144	86.6	1,923,392	85.8	4,014,537
Secondary +	86.1	866,265	84.9	848,903	85.5	1,715,168
<b>Wealth index quintiles</b>						
Poorest	83.9	719,395	83.2	678,981	83.6	1,398,376
Second	82.8	654,780	85.0	656,648	83.9	1,311,429
Middle	83.8	646,931	86.6	578,887	85.1	1,225,818
Fourth	89.0	580,172	85.5	552,541	87.3	1,132,714
Richest	87.8	527,649	90.5	492,461	89.1	1,020,110
<b>Language</b>						
Thai	85.6	2,840,012	86.1	2,674,870	85.8	5,514,882
Other Languages	82.1	288,916	83.9	284,649	83.0	573,565
<b>Total</b>	<b>85.3</b>	<b>3,128,928</b>	<b>85.9</b>	<b>2,959,519</b>	<b>85.6</b>	<b>6,088,447</b>

\* MICS Indicator 55; MDG Indicator 6

**Table ED.4-1: Secondary school net attendance ratio**  
**Percentage of children of secondary school age\*\* attending secondary school or higher (NAR),**  
**Thailand, 2005-2006**

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
<b>Region</b>						
Central (incl.BKK)	71.4	932,170	72.4	920,709	71.9	1,852,879
North	72.4	591,697	76.0	572,642	74.2	1,164,339
Northeast	72.7	1,244,392	79.1	1,199,082	75.9	2,443,474
South	60.1	484,294	71.5	485,219	65.8	969,513
<b>Residence</b>						
Urban	73.1	865,263	75.0	852,501	74.0	1,717,764
Rural	69.4	2,387,290	75.7	2,325,151	72.5	4,712,441
<b>Age**</b>						
12	21.4	530,072	21.2	505,671	21.3	1,035,743
13	84.3	515,467	87.8	515,111	86.1	1,030,578
14	89.6	529,824	93.4	507,171	91.5	1,036,996
15	86.6	622,495	90.3	573,863	88.3	1,196,358
16	76.0	529,100	80.6	534,624	78.3	1,063,724
17	62.1	525,595	76.9	541,212	69.6	1,066,807
<b>Mother's education</b>						
None	39.8	152,251	51.4	159,549	45.7	311,800
Primary	69.3	2,026,930	76.5	2,025,064	72.9	4,051,994
Secondary +	78.3	710,506	80.8	616,463	79.4	1,326,969
<b>Wealth index quintiles</b>						
Poorest	65.1	688,993	69.3	713,108	67.2	1,402,101
Second	69.3	702,879	75.0	672,086	72.1	1,374,965
Middle	65.8	628,634	76.1	595,327	70.8	1,223,961
Fourth	71.5	632,044	76.9	606,034	74.1	1,238,078
Richest	81.5	600,004	81.5	591,096	81.5	1,191,099
<b>Language</b>						
Thai	72.2	2,980,279	76.4	2,856,225	74.3	5,836,505
Other Languages	51.0	272,273	66.8	321,427	59.6	593,700
<b>Total</b>	<b>70.4</b>	<b>3,252,553</b>	<b>75.5</b>	<b>3,177,652</b>	<b>72.9</b>	<b>6,430,204</b>

\* MICS indicator 56

