

**Cambodia  
Demographic  
and Health  
Survey  
2000**

**Preliminary Report**

**National Institute of Statistics  
Ministry of Planning  
Ministry of Health**

**MEASURE *DHS*+  
ORC Macro**

This report summarizes the findings of the 2000 Cambodia Demographic and Health Survey (CDHS) carried out by the National Institute of Statistics (NIS) and the Ministry of Health (MoH) of the Government of Cambodia. ORC Macro provided technical assistance. The United Nations Fund for Population Activity (UNFPA), UNICEF and US Agency for International Development (USAID) provided funding for the survey.

The CDHS is part of the worldwide Demographic and Health Surveys Program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information about the Cambodia survey may be obtained from the National Institute of Statistics, 513 Monivong Blvd., Phnom Penh, Cambodia (Telephone (855 23 364 371 ); e-mail [sansythan@forum.org.kh](mailto:sansythan@forum.org.kh)). Additional information about the DHS program may be obtained by writing to: MEASURE *DHS+*, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (Telephone 301-572-0200; Fax 301-572-0999; e-mail [reports@macroint.com](mailto:reports@macroint.com)).

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Phnom Penh, Cambodia**

**MEASURE *DHS*+  
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Calverton, Maryland USA**

**November 2000**



# CONTENTS

	Page
A. PREFACE .....	iv
I. INTRODUCTION .....	1
II. SURVEY IMPLEMENTATION	2
A. Questionnaires	2
B. Training and Fieldwork	2
C. Data Processing	3
D. Sample Design and Implementation	3
III. RESULTS	4
A. Response Rates	4
B. Household Characteristics	4
C. Injury or Death caused by Accidents and Physical Impairments	7
D. Characteristics of the Respondents	9
E. Fertility	10
F. Family Planning	11
G. Abortion	16
H. Fertility Preferences	18
I. Infant and Child Mortality	18
J. Maternity Care	21
K. Vaccination of Children	21
L. Childhood Diarrhea	24
M. Infant Feeding Practices	26
N. Knowledge and Prevention of HIV/AIDS	27

## PREFACE

The first ever Cambodia Demographic and Health Survey (CDHS) was conducted in the year 2000. This survey was sponsored by UNFPA, UNICEF and USAID. Technical assistance was provided by ORC/Macro. The National Institute of Statistics (NIS) of the Ministry of Planning and the Directorate General of Health of the Ministry of Health (MoH) were the project implementation agencies. The NIS was responsible for monitoring the progress of the project. Fieldwork for the CDHS took place from early February to the end of July (including re-interviews) of the year 2000.

The main objective of the CDHS 2000 was to obtain current information on demographic conditions, family planning, infant and child mortality, domestic violence, and health related information such as breastfeeding, antenatal care, child immunization, children's diseases and HIV/AIDS. Also the questionnaires are designed to evaluate the nutritional status of mothers and children and measure the prevalence of anemia.

This report presents the preliminary findings from the CDHS 2000 that are expected to be used by policy makers to evaluate the demographic and health status of the Cambodian population in order to formulate appropriate population and health policies and programs in Cambodia. The final report of the CDHS as well as the summary report containing more detailed findings will be published in the first half of 2001.

We thank UNFPA, UNICEF, and USAID for sponsoring the project. We gratefully acknowledge the support and encouragement extended by H.E. Chhay Than Minister of Planning, HE. Mam Bun Heng Secretary of State - Ministry of Health, HE Lay Prohas Secretary of State - Ministry of Planning, HE Eng Huot Director General of Health and other members of the Executive Committee and Technical Committee which contributed to the timely execution of survey activities and the successful completion of the survey as planned.

We wish to place on record our deep appreciation of the work carried out by consultants of ORC Macro and all persons involved in the CDHS 2000 and especially the NIS and the MoH staff at the central and provincial offices who worked with dedication and enthusiasm to make the survey a success.

San Sy Than  
Director  
National Institute of Statistics

## I. INTRODUCTION

The 2000 Cambodia Demographic and Health Survey (CDHS) was carried out by the National Institute of Statistics (NIS) of the Ministry of Planning and the Ministry of Health (MoH) from February to July 2000. ORC Macro provided technical assistance to the project through the Demographic and Health Surveys (DHS) program. The survey was funded by UNICEF, UNFPA and USAID.

The CDHS 2000 is the largest demographic and health survey to date. While significantly expanded in content, the CDHS 2000 is a successor to the 1998 National Health Survey (NHS) and provides updated estimates of demographic and health indicators covered in the earlier survey. The CDHS also provides complimentary information to the 1998 General Population Census. Together these sources of information will be used for formulating strategies of development for Cambodia.

This preliminary report presents a first look at selected results of the CDHS 2000. A comprehensive analysis of the data will be published in a final report in late spring of 2001. While considered provisional, the results presented here are not expected to differ significantly from those presented in the final report.

The primary objectives of the CDHS 2000 project are to provide up-to-date information on many demographic, health, and social issues such as; fertility levels, nuptiality, sexual activity, fertility preferences, awareness and use of family planning methods, utilization of health services, breastfeeding practices, nutritional status of women and young children, early childhood mortality and maternal mortality, maternal and child health, women's status, domestic violence and awareness and behavior regarding AIDS and other sexually transmitted infections.

## II. SURVEY IMPLEMENTATION

### A. Questionnaires

Two questionnaires were used in the CDHS 2000; a Household Questionnaire, and a Women's Questionnaire. The contents of these questionnaires were based on the DHS Model AB@ Questionnaire, which is designed for use in countries with low level of contraceptive use. The National Institute of Statistics and the Ministry of Health in consultation with technical institutions and local organizations modified these questionnaires to reflect relevant issues in population, family planning and other health issues. These agencies include the World Health Organization, Helen Keller International, Project against Domestic Violence, Marie Stopes International, Ministry of Women's Affairs, the National Institute of Public Health, UNFPA, UNICEF, USAID and the Demographic and Health Surveys (DHS) program of ORC Macro.

The Household Questionnaire was used to list all the usual members and visitors of selected households. Basic information was collected on the characteristics of each person listed, including age, sex, education, and relationship to the head of the household. This information was used to identify women who were eligible for the individual interview. In addition, women 15-49 years and children under 5 years were measured to determine nutritional status and tested for anemia. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used for the floor of the house, and ownership of various durable goods.

The Women's Questionnaire was used to collect information from all women age 15-49. These women were asked questions on the following topics:

- X Background characteristics (education, residential history, media exposure, etc.)
- X Knowledge and use of family planning methods
- X Fertility preferences
- X Antenatal care and delivery care
- X Breastfeeding and infant feeding practices
- X Vaccinations and childhood illnesses
- X Marriage and sexual activity
- X Woman's work and husband's background characteristics
- X Woman's and children's nutritional status
- X Childhood mortality
- X Awareness and behavior regarding AIDS and other sexually transmitted diseases (STDs)
- X Adult mortality including maternal mortality.
- X Women's Status
- X Domestic Violence

### B. Training and Fieldwork

The questionnaires were developed in English and then translated into the Khmer language. Pretest training and fieldwork took place in November and December of 1999. During a three-week period, 22 interviewers were trained to carry out the pretest. The pretest fieldwork was conducted over a one-week period and approximately 240 pretest interviews were completed in both rural and urban settings. Debriefing sessions were held with the pretest field staff, and modifications to the questionnaires were made based on lessons drawn from the exercise.

Training of field staff for the main survey was conducted from January 3rd to February 9th, 2000. The training course consisted of instruction regarding interviewing techniques and field procedures, a detailed review of items on the questionnaires, instruction and practice in weighing and measuring children, anemia testing, mock interviews between participants in the classroom, and practice interviews with real respondents in areas outside the CDHS sample points. Field practice in anemia testing was also carried out for persons



who were assigned as the team health technician. All team members practiced their ability to weigh and measure children. Also during this period, field editors and team supervisors were provided with additional training in methods of field editing, data quality control procedures, and fieldwork coordination.

Seventeen interviewing teams carried out data collection for the CDHS 2000. Each team consisted of one team supervisor, one field editor, four female interviewers. Eight supervisory staff from the National Institute of Statistics and the Ministry of Health coordinated and supervised fieldwork activities. Data collection took place over a six-month period, from February to July 2000.

### **C. Data Processing**

All questionnaires for the CDHS were returned to the National Institute of Statistics for data processing, which consisted of office editing, coding of open-ended questions, data entry, and editing computer-identified errors. The data were processed by a team of twenty data entry clerks, three data editors and three data entry supervisors. Data entry and editing were accomplished using the computer program ISSA (Integrated System for Survey Analysis) from February to October, 2000.

### **D. Sample Design and Implementation**

The CDHS 2000 was conducted in all of the twenty-three provinces and Phnom Penh. The CDHS 2000 consisted of 471 clusters (villages) from urban and rural areas. The master sample developed after the 1998 General Population Census was used as a sampling frame. In order to provide results at the regional and rural-urban level, 45 strata were created. One rural and one urban stratum were created for each province, except for the three urban zones of Krong Kaeb, Krong Preah Sihanouk and Krong Pailin, for which there is only one urban stratum a piece. The sample for the CDHS 2000 was selected in two stages. In the first stage, 471 enumeration areas (EA) were selected systematically with probability proportional to size (size being the number of households in each EA according to the 1998 General Population Census). In each EA, a complete household listing and mapping was conducted in November and December of 1999, to provide the basis for the selection of the household within the cluster (which is the second stage of sampling). For the listing exercise, permanent NIS provincial directors were trained in CDHS listing and cartographic methods over a two-day period. Only private households were listed; institutional populations such as those living in hospitals, army barracks, hospitals, police camps, etc. were not listed.

From these lists, households to be included in the CDHS 2000 were selected. The number of households selected from each EA is proportional to its size based on the household listing results. All women age 15-49 years in those households were eligible to be interviewed in the CDHS. A sub-sample of 50 percent of the households was taken for data collection of anthropometry. Anemia testing was implemented in 25 percent of the original household sample. Only the women identified in the households with anemia testing were eligible for the sections related to Women's Status and Domestic Violence.

The results of the CDHS 2000 are representative at the national, rural/urban, and regional level. The 23 provinces and Phnom Penh were collapsed in to 17 regions or domains. The seventeen domains correspond to 12 individual provinces (Banteay Meanchey, Kampong Cham, Kampong Chhnang, Kampong Spueu, Kampong Thom, Kandal, Koh Kong, Phnom Penh, Prey Veang, Pursat, Svay Rieng, and Takeo) and five groups of provinces (Bat Dambang/Pailin, Kampong Speu/Krong Kaeb/Sihanouville, Preah Vihear/Stung Treng/Kratie, Mondulakiri/Ratanakiri, and Siem Reap/Otdar Meanchey).

### III. RESULTS

#### A. Response Rates

Table 1 shows response rates for the CDHS 2000. A total of 12,810 households were selected in the sample, of which 12,475 were occupied. The majority of un-interviewed households were those no longer existing in the sampled clusters at the time of the interview. Of the 12,475 existing occupied households, 12,236 were successfully interviewed, yielding a household response rate of 98.1 percent.

In the interviewed households, 15,548 women were identified for individual interview and, of these, completed interviews were conducted with 15,351 women, yielding a response rate of 98.7 percent. The principal reason for non-response among eligible women was the failure to find them at home despite repeated visits to the household. The overall response rate for the woman's survey is 96.8 percent.

#### B. Household Characteristics

In the household survey, questions were asked on characteristics of the household. Household information on the source of drinking water and type of toilet are important indicators for health and hygiene. In Cambodia, the change of the seasons can cause large changes in the availability of drinking water in some regions. For this reason the source of drinking water was recorded for both the rainy and the dry season. Household salt was tested for iodine content and the results were recorded in the household questionnaire. Iodized salt is important for eliminating goiter and iodine deficiency disorders.

Result of interview and response rate	Number	Percent
<b>Household selected</b>	12,810	100.0
Completed	12,236	95.5
Household present, no competent respondent at home	84	0.7
Household temporarily absent	141	1.1
Household no longer exist	328	2.6
Postponed	2	0.0
Refused	12	0.1
Other	7	0.1
<b>Occupied household</b>	12,475	100.0
Household interviewed	12,236	98.1
Household not interviewed	239	1.9
<b>Household response rate</b>	-	98.1
<b>Eligible Women</b>	15,548	100.0
Completed	15,351	98.7
Not at home	114	0.7
Postponed	2	0.0
Refused	15	0.1
Partly completed	3	0.0
Incapacitated	46	0.3
Other	17	0.1
<b>Individual response rate</b>	-	98.7
<b>Overall response rate*</b>	-	96.8

\* Overall response rate = Household response rate x Individual response rate

**Table 2 – Drinking water and sanitation**

Percent distribution of households by water source and type of sanitation facilities, according to residence, Cambodia 2000

Water and sanitation	Urban	Rural	All
<b>Source of drinking water during the dry season</b>			
Piped into dwelling	32.9	0.7	5.4
Public tap	1.8	0.3	0.5
Open well in dwelling/yard	6.4	10.1	9.6
Open public well	11.1	24.1	22.2
Protected well in dwelling/yard	3.8	1.5	1.9
Protected public well	1.6	2.1	2.0
Tubed well or borehole in dwelling/yard	8.1	8.6	8.5
Tubed public well or borehole	5.7	13.8	12.6
Spring	0.7	0.7	0.7
River/Stream/Pond/Lake/Dam	11.8	30.0	27.3
Rainwater	1.7	1.0	1.1
Tanker truck/Water vendor	11.1	3.5	4.6
Bottled water	0.2	0.1	0.1
Other	2.9	3.5	3.4
Total	100.0	100.0	100.0
<b>Source of drinking water during the rainy season</b>			
Piped into dwelling	31.8	0.7	5.2
Public tap	1.5	0.3	0.5
Open well in dwelling/yard	5.5	9.8	9.2
Open public well	9.1	21.7	19.9
Protected well in dwelling/yard	2.9	1.2	1.5
Protected public well	1.3	2.0	1.9
Tubed well or borehole in dwelling/yard	7.3	8.3	8.2
Tubed public well or borehole	3.6	11.2	10.1
Spring	0.5	0.8	0.7
River/Stream/Pond/Lake/Dam	8.1	24.0	21.6
Rainwater	19.8	14.9	15.6
Tanker truck/Water vendor	6.2	1.7	2.3
Bottled water	0.1	0.1	0.1
Other	2.0	3.2	3.0
Total	100.0	100.0	100.0
<b>Type of toilet facility</b>			
Flush toilet connected to sewer/with septic tank	33.8	1.7	6.4
Flush unconnected to sewer/without septic tank	17.2	5.6	7.3
Latrine connected to sewer/with septic tank	1.4	0.9	1.0
Traditional pit/Latrine unconnected to sewerwithout septic tank	7.5	5.7	6.0
No facility/Field	39.8	85.9	79.1
Other	0.3	0.1	0.1
Total	100.0	100.0	100.0

Table 2 shows the distributions of source of household drinking water. In the dry season, the majority of the urban population uses water piped into dwelling (32 percent). During the rainy season, the major urban source of drinking water is the same (32 percent) The second most common urban source of water is rainwater (20 percent). In rural areas the major sources of water during the dry season are from rivers, streams and lakes (30 percent), and open public wells (24 percent). In the rainy season, rivers, streams and lakes (24 percent), and open public wells (22 percent) are still the most common, but the collection of rainwater becomes a more important source for water (15 percent).

The percentage of households in Cambodia with sanitation facilities is very low. On the national level, 21 percent of the households have some type of toilet or latrine. In urban areas, 59 percent of households have some type of toilet or latrine, and 40 percent of households have no facilities. In rural areas 86 percent of households have no facilities and 14 percent have either a toilet or a latrine.

The survey data reports that 14 percent of Cambodian households use iodized salt (Table 3). It is more common for urban households (28 percent) to have iodized salt than rural households (11 percent). This finding is reflected in the provincial level information except for the north-east part of the country. The data shows the provinces of Mondulkiri and Ratanakiri have the highest percentage of households using iodized salt (76 percent).

Residence and province	Iodized salt	Un-iodized salt	No salt in household	Total	Number of households
<b>Residence</b>					
Urban	27.9	70.9	1.2	100.0	1,794
Rural	11.3	87.6	1.0	100.0	10,442
<b>Province</b>					
Banteay Meanchey	3.9	94.7	1.4	100.0	581
Kampong Cham	7.2	90.4	2.4	100.0	1,724
Kampong Chhnang	6.3	93.5	0.2	100.0	477
Kampong Spueu	2.7	96.6	0.7	100.0	671
Kampong Thom	4.2	95.8	0.0	100.0	621
Kandal	9.6	90.4	0.0	100.0	1,146
Koh Kong	4.8	95.1	0.1	100.0	130
Phnom Penh	45.9	52.6	1.5	100.0	993
Prey Veang	12.6	86.6	0.8	100.0	1,090
Pursat	8.4	88.9	2.6	100.0	364
Svay Rieng	36.7	61.2	2.1	100.0	566
Takeo	11.5	87.3	1.2	100.0	898
Bat Dambang/Pailin	6.8	92.9	0.3	100.0	819
Kampot/Krong Kaeb/Sihanoukville	10.3	88.4	1.3	100.0	794
Preah Vihear/Stung Treng/Kratie	28.8	70.7	0.5	100.0	467
Mondulkiri/Ratanakiri	75.6	24.1	0.3	100.0	127
Siem Reab/Otdar Meanchey	5.7	93.9	0.4	100.0	769
All	13.8	85.2	1.1	100.0	12,236

**Table 4— Injury, or death in an accident**

Percentage of the de facto household members injured or killed in an accident in the past 12 months, and among this population the percentage injured or killed in a road accident, according to background characteristics, Cambodia 2000

Background characteristics	Percentage injured or killed in an accident			Number of household members	Among those injured or killed, percentage in a road accident	Number of household members injured or killed in accident
	Injured	Killed	Total			
<b>Age</b>						
0-9	0.9	0.1	1.0	9,250	31.3	90
10-19	1.1	0.1	1.1	10,322	31.9	117
20-39	0.7	0.1	0.8	20,689	39.6	160
40-59	0.8	0.1	0.8	14,920	39.1	125
60 +	0.5	0.1	0.5	9,095	13.7	47
<b>Gender</b>						
Male	1.1	0.1	1.1	30,777	29.7	344
Female	0.5	0.1	0.6	33,497	42.0	195
<b>Residence</b>						
Urban	0.7	0.1	0.8	9,922	44.3	77
Rural	0.8	0.1	0.9	54,355	32.5	463
<b>Province</b>						
Banteay Meanchey	0.6	0.0	0.7	2,989	*	20
Kampong Cham	0.9	0.1	0.9	8,467	18.2	80
Kampong Chhnang	0.9	0.1	1.0	2,462	33.0	25
Kampong Spueu	0.4	0.0	0.4	3,516	*	15
Kampong Thom	0.7	0.1	0.8	3,259	16.1	27
Kandal	1.5	0.1	1.6	6,245	61.9	97
Koh Kong	0.8	0.1	0.9	648	*	6
Phnom Penh	0.8	0.1	0.9	5,615	66.6	49
Prey Veang	0.1	0.1	0.3	5,348	*	14
Pursat	1.0	0.0	1.0	1,920	36.4	19
Svay Rieng	0.5	0.1	0.6	2,809	*	17
Takeo	0.5	0.0	0.5	4,670	*	23
Bat Dambang/Pailin	0.9	0.1	1.0	4,475	28.3	44
Kampot/Krong						
Kaeb/Sihanoukville	0.9	0.1	1.0	4,215	35.7	42
Preah Vihear/Stung Treng/Kratie	0.4	0.0	0.4	2,539	*	10
Mondulkiri/Ratanakiri	0.3	0.0	0.4	714	*	3
Siem Reab/Otdar Meanchey	1.0	0.1	1.2	4,387	6.3	51
<b>Total</b>	<b>0.8</b>	<b>0.1</b>	<b>0.8</b>	<b>64,276</b>	<b>34.2</b>	<b>540</b>

\* Based on too few unweighted cases

### C. Injury or Death caused by Accidents and Physical Impairments

In Cambodia the widespread use of landmines during wartime left great numbers of the population in danger of injury or death by accidental triggering of these weapons. In order to provide information on the prevalence and effects of these and other accidents, special questions were included in the household

questionnaire. Information on the prevalence of injury and/or death by accident and physical impairments was collected from all households.

**Table 5 Physical impairments**

Percentage of the de facto household population physically impaired and percent distribution of the impaired de facto household population by cause of impairment, according to background characteristics, Cambodia 2000

Background characteristics	Percentage physically impaired	Number of household members	Cause of impairment						Total	Number of impaired persons
			Birth	Illness	Land-mine	Gun shot	Road accident	Other		
<b>Age</b>										
0-9	1.0	9,250	52.2	32.7	0.0	2.5	0.6	12.0	100.0	95
10-19	1.5	10,322	30.5	42.3	2.9	2.3	4.1	17.9	100.0	158
20-39	1.5	20,689	17.0	27.6	25.0	12.6	3.4	14.3	100.0	302
40-59	1.8	14,920	5.8	32.2	20.2	20.8	4.0	17.0	100.0	270
60 +	1.5	9,095	6.1	62.5	5.8	2.3	2.9	20.3	100.0	138
<b>Gender</b>										
Male	2.0	30,777	14.6	31.9	20.1	14.2	4.0	15.2	100.0	629
Female	1.0	33,497	24.5	46.2	4.8	4.2	2.2	18.2	100.0	335
<b>Residence</b>										
Urban	1.7	9,922	11.1	48.6	9.5	14.5	4.6	11.8	100.0	169
Rural	1.5	54,355	19.5	34.3	15.9	9.9	3.1	17.2	100.0	794
<b>Province</b>										
Banteay Meanchey	1.6	2,989	21.4	18.9	19.5	13.4	7.6	19.1	100.0	47
Kampong Cham	1.3	8,467	17.3	46.0	6.5	10.8	0.0	19.5	100.0	112
Kampong Chhnang	2.9	2,462	7.0	31.8	9.9	24.8	4.9	21.6	100.0	72
Kampong Spueu	1.6	3,516	18.4	20.3	23.2	16.6	5.0	16.5	100.0	56
Kampong Thom	1.1	3,259	16.7	38.0	19.1	9.6	2.4	14.2	100.0	36
Kandal	1.5	6,245	20.5	46.2	6.8	7.3	5.1	13.9	100.0	94
Koh Kong	0.7	648	*	*	*	*	*	*	*	5
Phnom Penh	1.8	5,615	13.0	54.2	5.9	13.8	5.9	7.2	100.0	99
Prey Veang	0.5	5,348	*	*	*	*	*	*	*	26
Pursat	2.1	1,920	15.9	33.8	21.0	7.8	3.5	18.0	100.0	40
Svay Rieng	2.0	2,809	25.6	21.6	16.2	6.7	1.8	28.1	100.0	57
Takeo	0.8	4,670	13.3	53.5	6.7	0.0	3.3	23.2	100.0	35
Bat Dambang/Pailin	2.5	4,475	17.7	32.4	31.9	5.8	3.4	8.7	100.0	112
Kampot/Krong										
Kaeb/Sihanoukville	1.7	4,215	16.8	40.8	16.0	9.7	0.0	16.8	100.0	71
Preah Vihear/Stung										
Treng/Kratie	0.8	2,539	13.4	45.9	11.4	13.6	2.7	13.1	100.0	21
Mondulhiri/Ratanakiri	0.6	714	*	*	*	*	*	*	*	4
Siem Reab/Otdar										
Meanchey	1.8	4,387	25.4	21.2	20.5	13.6	1.4	17.9	100.0	77
<b>Total</b>	<b>1.5</b>	<b>64,276</b>	<b>18.0</b>	<b>36.8</b>	<b>14.8</b>	<b>10.7</b>	<b>3.3</b>	<b>16.3</b>	<b>100.0</b>	<b>964</b>

\* Based on too few unweighted cases

In the past 12 months, 0.8 percent of the population were accidentally injured or killed, and 0.1 percent died due to the accident (Table 5). Injuries or deaths caused by accident are more common in the younger age groups 0-9 years (1.0 percent) and 10-19 years (1.1 percent) than the population older than 60 years of age (0.5 percent). Males are more likely to be injured or killed in an accident than females (1.1

percent and 0.6 percent, respectively). There is no difference in the percentage injured or killed in accident by rural-urban residence, however differences are found in the provincial estimates, as the prevalence ranges from 0.3 in Prey Veang to 1.6 in Kandal province. More than one-third of all injuries or deaths caused by accidents were caused by road accidents. Table 4 shows differences of the percent of injuries and deaths caused by road accidents by rural-urban residence and by gender. The two provinces with the highest percent of injuries and deaths caused by road accidents were Phnom Penh (67 percent) and Kandal (62 percent).

**Table 6. Background characteristics of respondents**

Percent distribution of women 15-49 by background characteristics, Cambodia 2000

Background characteristics	Weighted percent	Number of women	
		Weighted	Unweighted
<b>Age</b>			
15-19	23.6	3,617	3,564
20-24	12.9	1,982	1,942
25-29	13.8	2,118	2,164
30-34	14.3	2,194	2,234
35-39	14.1	2,168	2,202
40-44	12	1,847	1,823
45-49	9.3	1,425	1,422
<b>Marital Status</b>			
Never married	31.8	4,879	4,642
Married	59.1	9,073	9,334
Widowed	6	917	909
Divorced/Separated	3.1	477	462
<b>Residence</b>			
Urban	17.6	2,697	2,651
Rural	82.4	12,654	12,700
<b>Province</b>			
Banteay Meanchey	4.4	672	740
Kampong Cham	12.8	1,961	814
Kampong Chhnang	3.8	583	1,027
Kampong Spueu	4.7	725	781
Kampong Thom	5.1	777	912
Kandal	9.6	1,469	885
Koh Kong	1	147	857
Phnom Penh	10.8	1,657	1,157
Prey Veang	8.3	1,272	843
Pursat	2.8	433	885
Svay Rieng	4.5	688	876
Takeo	7.2	1,107	958
Bat Dambang/Pailin	7.1	1,084	873
Kampot/Krong Kaeb/Sihanoukville	6.5	999	863
Preah Vihear/Stung Treng/Kratie	3.8	582	1,029
Monduliri/Ratanakiri	1	161	905
Siem Reab/Otdar Meanchey	6.7	1,036	946
<b>Education</b>			
No education	28.3	4,337	4,849
Primary	54.6	8,376	8,182
Secondary	16.8	2,576	2,276
Higher	0.4	62	44

Questions on impairments were asked in order to determine the percentage of population who are physically impaired and the cause of the impairment. Table 5 shows that 1.5 percent of the population is physically impaired. Twice as many persons from the 40 –59 year age group suffers from impairments as the 0-9 year age group (1.8 percent and 1.0 percent, respectively). Males are more likely to be impaired than women. There is no difference percent of population physically impaired by rural-urban residence. Of the pro-vinces, Kampong Chhnang has the highest percentage of physically impaired persons (2.9 percent) and Prey Veang has the lowest percentage (0.5 percent). The major identified causes of physical impairment are illness (37 percent) and birth related causes (18 percent).

#### **D. Characteristics of the Respondents**

Table 6 shows the women age 15 to 49 in the CDHS 2000 sample by selected background characteristics. The distribution by age shows a decline in numbers of women with increasing age. About 47 percent of women are in the 15 to 24 age groups. Fifty-one percent of the women are married, and nine percent are divorced, widowed or separated.

Eighty-two percent of women live in rural areas. The largest percentages of the female 15 – 49 year old population live in Kampong Cham (13 percent) and Phnom Penh (11 percent). The lowest percent of this female population live in Koh Kong and Monduliri/Ratanakiri (1 percent).

Education is widespread in Cambodia; the majority of women attended primary school. Twenty-eight percent of women never received

formal education, and seventeen percent of the women attended secondary school.

## E. Fertility

All women who were interviewed in the CDHS 2000 were asked to report the total number of sons and daughters to whom they had ever given birth in their lifetime. To encourage complete reporting, women were asked separately about children still living at home, those living elsewhere, and those who had died. A complete birth history was then obtained, including information on the sex, date of birth and survival status of each child and the age at death for dead children.

### *Current and Cumulative Fertility*

Age-specific fertility rates and the Total Fertility Rate (TFR) for the five year period before the CDHS 2000 are shown in Table 7, along with the mean number of children ever born. The total and age-specific

Age	Urban	Rural	Total	Children ever born	Number of women
15-19	38	54	51	0.061	3,617
20-24	160	198	191	0.732	1,982
25-29	171	210	203	2.002	2,118
30-34	136	171	165	3.095	2,194
35-39	78	125	118	4.353	2,168
40-44	28	60	55	5.172	1,847
45-49	3	18	15	5.609	1,425
TFR 15-49	3.1	4.2	4.0	-	-
CEB 15-49	-	-	-	2.585	15,351

fertility rates are for the five-year period before the survey, a period covering approximately the calendar years 1995-2000. The TFR is the sum of the age-specific rates and is a useful measure of the level of recent fertility. It represents the number of children a woman would have by the end of her reproductive years if she were to bear children at the currently observed age-specific rates.

The total fertility rate shown in the table indicates that, if fertility rates were to remain constant at the

level prevailing during the period 1995-2000, a Cambodian woman would bear 4.0 children during her lifetime. In urban areas, the TFR is 3.1 births per woman, about one child lower than the rate in rural areas (4.2 births per woman).

Overall, Cambodian women have children early in the childbearing period. According to the age-specific fertility rates shown in Table 7 and Figure 1, the average Cambodian woman will give birth to 1.2 children by age 25 and 2.2 children by age 30. An examination of age-specific rates by urban-rural residence indicates that the age pattern of fertility shows little variation with that rates are higher in every age group for rural women compared with urban women. In the age-group 15-19, fertility rates are quite low in urban and rural areas (respectively, 38 and 54 per 1,000 women). Rates then increase drastically to reach a maximum of 171 per 1,000 urban women and 210 per 1,000 rural women in the age group 25-29. Above the age of 29, rates decline slowly but regularly in both urban and rural residence.

1 Calculated as age specific rate 15-19 plus age specific rate 20-24, times 5 (to take into account the five year age group), divided by 1,000.



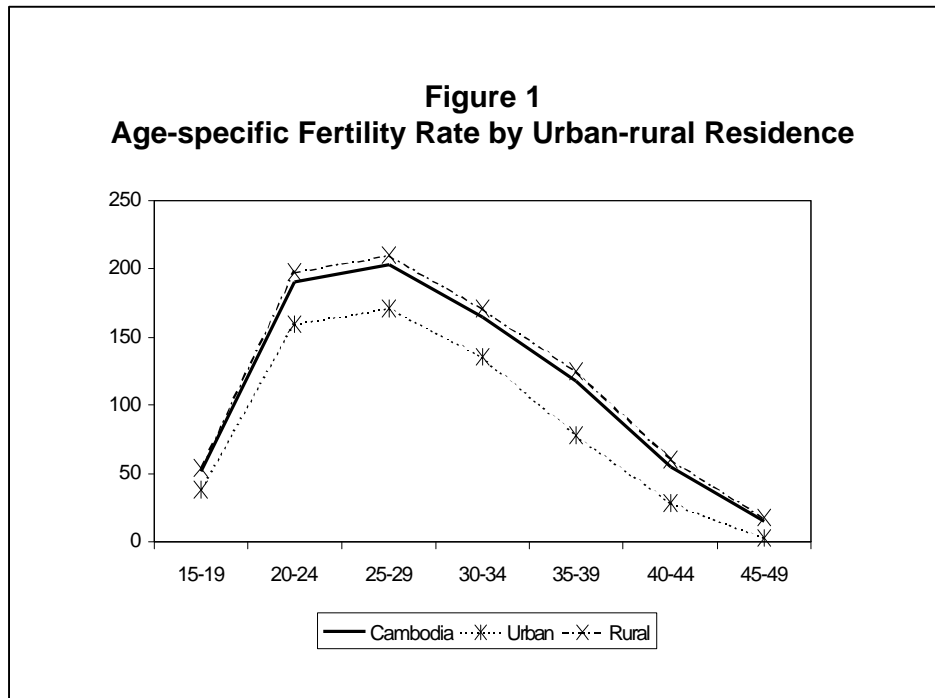


Table 7 also shows the mean number of children ever born to women by five-year age group. On average, women have given birth to more than two children by their late twenties and to more than 4.3 children by their late thirties. By the end of their reproductive age, the average Cambodian woman has had 5.6 children. The difference between cumulative parities of women (measuring both past and current fertility) and the total fertility rate (a synthetic measure of current fertility) reflects the fact that Cambodia is witnessing a period of fertility decline.

These results confirm the findings of the 1998 National Health Survey (NHS) which also showed a fertility decline in the most recent years and a current fertility level of 4.1 children per woman.

## **F. Family Planning**

The CDHS 2000 included a series of questions about family planning knowledge, ever use, and current use. Respondents were first asked to name all of the methods that they had heard about. For methods not mentioned spontaneously, the interviewer read a description of the method and asked if the woman had heard of the method. For each method which they recognized, respondents were asked if they had ever used the method. Finally, women were asked if they were currently using a method, and, if so, where they had most recently obtained the method they were using.

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Table 8 Knowledge, ever use and current use of contraceptive methods

Percentage of all women 15-49 and currently married women who know of at least one contraceptive method, who have ever used a contraceptive method, and who are currently using a contraceptive method, Cambodia 2000

Contraceptive method	Know method		Ever used method		Currently using method	
	All women	Women in union	All women	Women in union	All women	Women in union
<b>Any method</b>	91.9	95.5	23.0	37.4	14.2	23.8
<b>Any modern method</b>	91.7	95.1	19.9	32.4	11.0	18.5
Female Sterilization	56.4	64.0	0.9	1.5	0.9	1.5
Male Sterilization	39.9	47.2	0.1	0.2	0.1	0.2
Pill	85.0	89.6	6.4	10.5	2.7	4.5
Monthly pill	70.7	76.5	3.6	5.9	1.6	2.7
IUD	77.3	83.3	2.1	3.3	0.7	1.3
Injectables	84.4	89.7	9.4	15.4	4.4	7.4
Implants	50.0	54.4	0.1	0.2	0.1	0.1
Condom	76.1	79.3	1.2	1.8	0.6	0.9
Female Condom	5.0	5.3	0.0	0.0	0.0	0.0
Diaphragm	0.4	0.4	0.0	0.0	0.0	0.0
Foam/Jelly	0.4	0.5	0.0	0.0	0.0	0.0
<b>Any traditional method</b>	24.4	33.0	5.5	9.0	3.2	5.3
Lactational amenorrhea method	6.8	9.1	0.6	0.9	0.2	0.3
Periodic abstinence	19.5	26.1	3.1	5.0	1.6	2.7
Withdrawal	12.9	18.6	2.8	4.5	1.3	2.2
Emergency contraception	1.7	2.2	0.0	0.1	0.0	0.0
Other methods	0.3	0.6	0.2	0.3	0.0	0.1
Number of women	15,351	9,073	15,351	9,073	15,351	9,073

### *Knowledge of Methods*

Some knowledge of family planning is nearly universal among Cambodian women, 92 percent have heard of at least one method (Table 8). With regard to knowledge of specific methods, 85 percent of women have heard of the pill, 84 percent know of injectables, 77 percent know of the IUD, 76 percent have heard of male condoms, and 71 percent have heard of the monthly pill. Female sterilization (56 percent) and the implants (50 percent) are less well known, but are still recognized by more than half of all women.

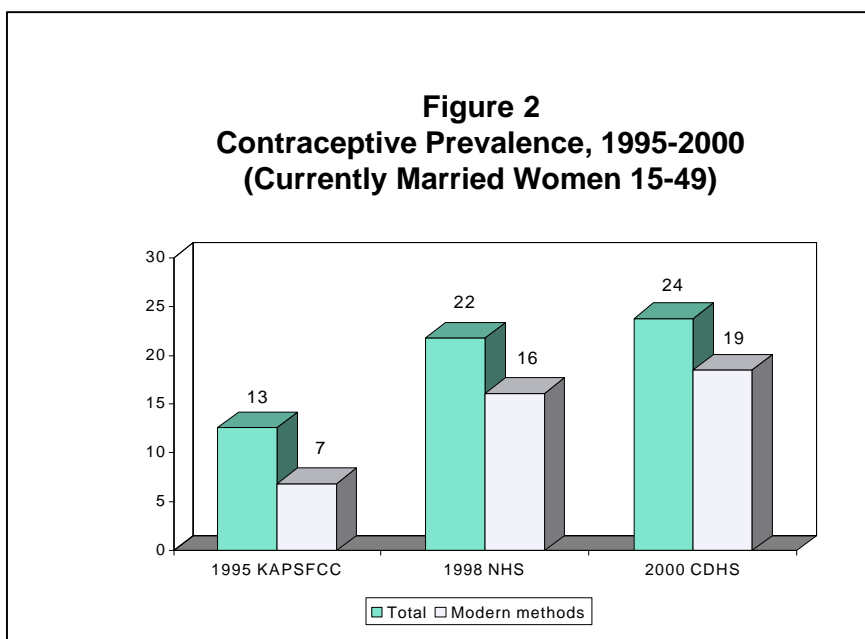
Twenty-four percent of women have heard of a traditional method of family planning, mostly withdrawal and periodic abstinence. Only seven percent of women have knowledge of the lactational amenorrhoea method or LAM. As expected, knowledge of all methods is higher among married women than all women.

### *Ever Use*

Twenty-three percent of women in Cambodia have had experience in using family planning methods (Table 8). Modern methods are more popular than traditional methods; 20 percent of all women have used a modern method, while only six percent have used a traditional method. Injectables, the pill, the monthly pill, and periodic abstinence are the most commonly used methods.

### *Current Use*

Overall, 14 percent of all women of childbearing age are currently using a contraceptive method (Table 8). Use of modern methods (11 percent) is more common than the use of traditional methods (3 percent). Among the currently married women, 24 percent are currently using a contraceptive method: 19 percent use modern methods and 5 percent use traditional methods. The most widely used methods are injectables (7 percent) and the pill (5 percent), followed by the monthly pill and periodic abstinence (3 percent each).



### *Trends in Contraceptive Use*

Contraceptive use has almost doubled since 1995 (KAPSFCC survey), from 13 to 24 percent of currently married women using a method (Figure 2). Use of modern methods has increased even faster, rising from 7 percent of women in 1995 to 16 percent in 1998 (NHS) and to 19 percent in 2000.

### *Differentials in Contraceptive Use*

Survey data indicate that some women are much more likely to be using contraception than others (Table 9). Contraceptive use is lowest among teenagers (7 percent) and women in their late 40's (9 percent); at 30-39 years of age, almost one third of all married women use a method and one quarter use a modern method. The drop in contraceptive use among older women may reflect declining fecundity, while lower levels among younger women probably are due to their desire to have more children or their lower sexual activity. Among all age groups, injectables are the most popular method, followed by the pill

Only 3 percent of women with no children are currently using a family planning method. After the first child, contraceptive use increases sharply to 15 percent of women and gradually rises to 31 percent of women with three children.

The level of current contraceptive use is 50 percent higher in urban areas than in rural areas (Figure 3). Whereas injectables are the most widely used method among rural women (8 percent), the pill is among urban women (6 percent).

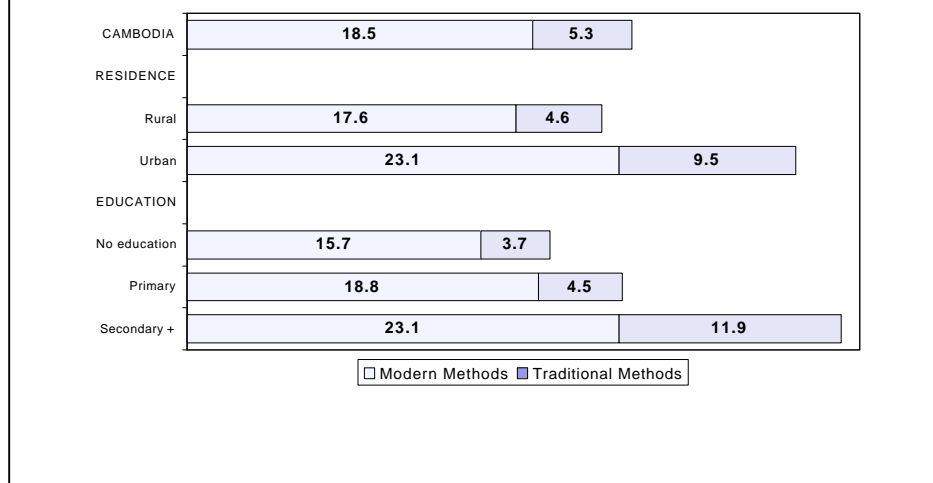
Women who live in Phnom Penh, Banteay Meanchey, and Bat Dambang/Pailin are much more likely to use a family planning method (43, 36, and 35 percent, respectively) than women who live in other provinces. Contraceptive use is particularly low in Kampong Spueu (11 percent) and Mondulakiri/Ratanakiri (11 percent).

Table 9 – Current use of contraception by background characteristics

Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Cambodia 2000

Background characteristics	Modern method									Traditional method				Not currently using	Total	Number of women
	Any method	Any modern	Fem. sterilizat.	Pill	Monthly pill	IUD	Injectables	Condom	Other modern	Any traditional	Periodic abstinence	Withdrawal	Other tradit.			
<b>Age</b>																
15-19	8.9	6.0	0.0	0.9	1.5	0.0	3.0	0.6	0.0	3.0	0.3	1.6	1.1	91.1	100.0	438
20-24	15.5	11.9	0.0	3.6	2.6	0.3	4.7	0.6	0.1	3.7	1.5	1.6	0.6	84.5	100.0	1,009
25-29	23.4	18.4	0.3	5.7	2.9	1.4	7.1	0.7	0.4	5.0	2.4	2.2	0.4	76.6	100.0	1,612
30-34	30.8	23.4	1.1	6.0	3.1	1.5	10.4	1.1	0.2	7.5	3.8	2.9	0.8	69.2	100.0	1,797
35-39	30.9	25.4	2.8	5.7	3.9	1.9	9.9	1.1	0.2	5.5	2.6	2.8	0.1	69.1	100.0	1,764
40-44	26.8	20.3	3.4	3.9	2.4	1.3	7.9	1.1	0.2	6.5	3.7	2.7	0.2	73.2	100.0	1,428
45-49	10.2	7.5	1.1	1.3	0.9	1.0	1.9	0.8	0.5	2.7	2.1	0.6	0.0	89.8	100.0	1,024
<b>Number of living children</b>																
0	2.5	1.4	0.1	0.6	0.2	0.0	0.3	0.2	0.0	1.0	0.9	0.2	0.0	97.5	100.0	744
1	15.3	11.1	0.4	2.8	2.1	0.7	4.2	0.6	0.2	4.2	1.9	1.6	0.7	84.7	100.0	1,285
2	27.7	18.7	1.2	5.2	2.6	1.7	6.6	1.0	0.4	9.0	4.7	3.5	0.6	72.3	100.0	1,644
3	30.5	23.4	2.2	5.5	3.3	1.6	9.2	1.2	0.3	7.2	3.4	3.3	0.5	69.5	100.0	1,545
4 +	26.4	22.2	1.9	5.1	3.2	1.4	9.3	1.0	0.2	4.2	2.2	1.9	0.1	73.6	100.0	3,855
<b>Residence</b>																
Urban	32.6	23.1	3.2	6.2	3.0	3.1	5.3	2.0	0.5	9.5	7.3	1.7	0.6	67.4	100.0	1,417
Rural	22.2	17.6	1.2	4.2	2.7	0.9	7.7	0.7	0.2	4.6	1.9	2.4	0.4	77.8	100.0	7,656
<b>Province</b>																
Banteay Meanchey	36.1	28.9	1.9	9.7	5.2	0.4	10.1	1.0	0.6	7.2	1.0	1.8	4.4	63.9	100.0	451
Kampong Cham	18.6	13.6	1.0	2.0	3.0	0.6	5.9	0.8	0.2	5.0	2.0	2.6	0.4	81.4	100.0	1,212
Kampong Chhnang	17.0	14.5	1.6	1.7	2.3	0.3	7.5	0.7	0.2	2.5	0.9	1.7	0.0	83.0	100.0	326
Kampong Spueu	10.9	10.1	1.5	1.8	1.4	0.6	4.7	0.2	0.0	0.8	0.2	0.6	0.0	89.1	100.0	469
Kampong Thom	19.5	17.8	0.6	4.5	1.4	0.4	10.2	0.2	0.6	1.8	1.6	0.2	0.0	80.5	100.0	435
Kandal	28.2	16.5	1.6	3.5	1.6	2.0	7.0	0.8	0.0	11.7	2.8	8.7	0.2	71.8	100.0	832
Koh Kong	16.7	14.8	0.7	4.8	3.5	1.4	3.1	0.5	0.8	1.8	0.4	1.2	0.2	83.3	100.0	105
Phnom Penh	43.3	27.4	4.1	6.5	3.0	5.1	4.6	3.8	0.3	15.9	10.0	5.9	0.0	56.7	100.0	822
Prey Veang	16.9	15.5	0.8	3.2	2.3	0.8	8.3	0.2	0.0	1.4	0.6	0.8	0.0	83.1	100.0	769
Pursat	17.6	15.1	0.5	1.5	4.4	0.1	7.6	0.7	0.1	2.5	0.4	1.8	0.3	82.4	100.0	276
Svay Rieng	26.5	22.1	1.4	7.7	2.2	0.7	8.9	0.9	0.2	4.5	3.7	0.4	0.4	73.5	100.0	436
Takeo	22.6	20.2	0.7	6.5	1.6	0.9	9.7	0.7	0.2	2.4	2.0	0.3	0.0	77.4	100.0	676
Bat Dambang/Pailin	35.0	29.0	3.4	8.8	5.1	2.4	8.1	0.6	0.8	6.0	4.6	1.0	0.4	65.0	100.0	627
Kampot/Krong Kaeb/Sihanoukville	25.0	20.6	0.8	5.0	3.8	0.2	9.8	0.8	0.2	4.4	3.2	0.8	0.4	75.0	100.0	586
Preah Vihear/Stung Treng/Kratie	14.3	12.1	0.7	2.8	1.6	0.9	5.3	0.6	0.0	2.2	1.8	0.4	0.0	85.7	100.0	358
Monduliri/ Ratanakiri	10.3	9.2	0.4	3.0	1.1	1.3	3.4	0.0	0.0	1.1	0.7	0.1	0.3	89.7	100.0	113
Siem Reab/Otdar Meanchey	16.7	14.0	0.4	2.6	2.5	0.7	7.0	0.5	0.3	2.6	1.7	0.9	0.0	83.3	100.0	578
<b>Education</b>																
No education	19.3	15.7	1.0	3.7	3.1	0.7	6.9	0.1	0.1	3.7	1.2	1.8	0.6	80.7	100.0	2,798
Primary	23.4	18.8	1.5	4.6	2.7	1.2	7.8	0.9	0.3	4.5	2.2	2.0	0.3	76.6	100.0	4,960
Secondary +	35.0	23.1	2.6	5.8	2.2	2.8	6.7	2.5	0.5	11.9	7.6	4.2	0.2	65.0	100.0	1,314
<b>All women</b>	23.8	18.5	1.5	4.5	2.7	1.3	7.4	0.9	0.2	5.3	2.7	2.2	0.4	76.2	100.0	9,073

**Figure 3**  
**Contraceptive Prevalence by Background Characteristics**  
**(Currently Married Women 15-49)**



Contraceptive use differs by educational level of women. Only 19 percent of women with no education are currently using a method, compared to 23 percent of women with primary education, and 35 percent of those with secondary education or higher. Among women with secondary education it is surprising to find a higher reliance on traditional methods (12 percent) such as periodic abstinence (8 percent) instead of use of more modern methods.

#### *Source of Contraceptives*

Women who reported using a modern method of family planning at the time of the survey were asked where they obtained the method. For sterilization, they were asked where the procedure took place. Women using an IUD since 1995 were asked where the method was received the first time, and women using other modern methods were asked where they last obtained the method.

The type of source varies greatly by method. Those using methods requiring medical expertise like sterilization, IUD, and injectables are more likely to get them from medical places. As shown in table 10, for more than nine in ten women sterilized, the procedure took place in the public sector, mainly in the central hospital of Phnom Penh and in the provincial hospitals. Public hospitals and health centers, and private clinics contribute equally to the provision of IUDs. Districts hospitals and public health centers provide 37 percent of the injectables, while 17 percent of users obtain this method at the home of a private health worker or nurse.

Monthly pills are primarily obtained from shops (46 percent) and dedicated drug stores (21 percent); these places also supply 43 percent of daily pill users. However, both public and private medical sectors are important sources of supply for daily pills (38 and 18 percent respectively). As expected, the vast majority of condom users use private sources such as pharmacies and shops. However, 13 percent of users obtain condom from provincial hospitals.

**Table 10 Source of supply for specific modern contraceptive methods**

Percent distribution of current users of modern contraceptive methods by source of method, according to specific method, Cambodia 2000

Source of supply	Female steriliza-tion	First source of IUD when started using since 1995	Last source of modern method			
			Pill	Monthly pill	Injectables	Condom
<b>Public sector</b>	93.4	43.8	38.4	13.1	57.4	27.9
Central hospital (Phnom Penh)	38.9	8.4	2.0	0.0	0.5	0.0
Provincial hospital	49.5	9.0	2.0	0.7	3.4	12.6
District hospital	5.1	9.4	7.7	2.4	11.5	2.6
Health center	0.0	11.1	16.5	3.4	25.0	7.2
Khum clinic	0.0	0.0	7.7	3.1	11.9	3.2
Health worker	0.0	0.0	1.5	1.9	1.6	0.0
Midwife	0.0	2.2	0.5	0.3	1.6	0.0
Other public	0.0	3.7	0.4	1.2	1.9	2.3
<b>Private medical sector</b>	3.9	46.9	17.6	16.9	37.1	5.0
Private hospital	2.1	1.7	1.5	0.1	1.5	0.0
Private clinic	1.7	41.5	7.0	10.7	9.8	3.0
Home of trained health worker/Nurse	0.0	1.8	7.0	3.7	17.1	0.5
Visit of trained health worker/Nurse	0.0	0.0	0.8	1.2	6.1	0.0
Other private medical	0.0	1.8	1.3	1.4	2.6	1.5
<b>Other source</b>	2.7	9.3	44.0	70.0	5.5	67.1
Dedicated drug store	0.0	0.0	16.8	20.5	1.3	37.7
Shop selling drugs/Market	0.0	0.0	26.2	46.3	1.3	19.1
Friend/Relative	0.0	2.0	0.4	2.4	0.2	0.0
Other	2.7	7.3	0.6	0.9	2.8	10.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

## G. Abortion

Questions on abortion are difficult to ask and respondents are often reticent to answer honestly, therefore the number of abortions recorded during the CDHS is probably underestimated. However, 6 percent of women declared to have had at least one induced abortion in their lifetime (table 11). Half of the women who have had an abortion only had one abortion (3 percent).

As expected, the proportion of induced abortions increases with age, from less than 2 percent among women 20-24 to 10 percent among women aged 35 and above. The proportion of abortions also increases with the number of living children. Eleven percent of women with four or more children have had at least one abortion.

There is no significant difference between urban and rural women in the practice of abortion. Also, level of education does not affect the use of abortion. Table 11 shows small provincial differences. Practice of abortion is very uncommon in Kampong Spueu (less than 1 percent). and most prevalent in Bat Dambang/Pailin and Svay Rieng (more than 10 percent).

Table 11 Induced abortion

Percent distribution of women by number of induced abortion during their lifetime, according to background characteristics, Cambodia 2000

Background characteristics	Number of abortions						Total	Number of women
	None	1	2	3	4+	Missing		
<b>Age</b>								
15-19	99.9	0.0	0.0	0.0	0.0	0.1	100.0	3,617
20-24	98.1	1.1	0.0	0.0	0.0	0.8	100.0	1,982
25-29	95.0	2.6	0.5	0.1	0.0	1.9	100.0	2,118
30-34	91.4	5.1	0.9	0.1	0.2	2.3	100.0	2,194
35-39	89.5	5.1	1.6	0.2	0.4	3.2	100.0	2,168
40-44	89.2	5.1	1.6	0.9	0.3	2.9	100.0	1,847
45-49	90.5	4.6	1.7	0.7	0.4	2.1	100.0	1,425
<b>Number of surviving children</b>								
0	99.5	0.1	0.1	0.0	0.0	0.3	100.0	5,800
1	94.7	3.5	0.5	0.0	0.0	1.3	100.0	1,644
2	92.0	4.2	1.2	0.1	0.0	2.4	100.0	1,924
3	90.6	4.8	1.5	0.2	0.5	2.4	100.0	1,738
4	88.9	5.8	1.3	0.8	0.3	2.9	100.0	1,394
5	89.1	4.8	1.7	0.6	0.4	3.4	100.0	1,113
6+	89.0	5.4	1.2	0.5	0.4	3.5	100.0	1,738
<b>Residence</b>								
Urban	93.3	3.3	0.8	0.3	0.3	2.0	100.0	2,697
Rural	94.3	2.9	0.8	0.2	0.1	1.7	100.0	12,654
<b>Province</b>								
Banteay Meanchey	93.0	2.4	0.8	0.0	0.1	3.6	100.0	672
Kampong Cham	93.6	3.6	1.1	0.1	0.1	1.5	100.0	1,961
Kampong Chhnang	90.9	1.3	0.5	0.2	0.1	7.1	100.0	583
Kampong Spueu	99.1	0.3	0.1	0.0	0.0	0.5	100.0	725
Kampong Thom	97.6	0.5	0.0	0.0	0.0	1.9	100.0	777
Kandal	94.8	3.6	0.2	0.5	0.1	0.8	100.0	1,469
Koh Kong	95.8	2.5	0.2	0.1	0.1	1.2	100.0	147
Phnom Penh	92.9	4.6	1.0	0.4	0.2	0.9	100.0	1,657
Prey Veang	95.8	2.7	0.4	0.4	0.1	0.6	100.0	1,272
Pursat	92.1	2.9	0.9	0.1	0.0	4.0	100.0	433
Svay Rieng	89.6	6.1	1.4	0.1	0.5	2.3	100.0	688
Takeo	96.4	2.2	0.3	0.1	0.0	0.9	100.0	1,107
Bat Dambang/Pailin	89.4	5.7	2.2	0.5	0.6	1.6	100.0	1,084
Kampot/Krong								
Kaeb/Sihanoukville	94.3	1.5	0.9	0.1	0.0	3.2	100.0	999
Preah Vihear/Stung								
Treng/Kratie	94.7	2.7	1.2	0.4	0.1	1.0	100.0	582
Mondulhiri/ Ratanakiri	97.3	1.0	0.2	0.2	0.1	1.2	100.0	161
Siem Reab/Otdar Meanchey	95.9	1.5	0.6	0.0	0.4	1.5	100.0	1,036
<b>Education</b>								
No education	94.4	2.5	0.9	0.2	0.2	1.8	100.0	4,337
Primary	93.4	3.4	0.8	0.2	0.2	2.0	100.0	8,376
Secondary +	95.8	2.4	0.6	0.4	0.1	0.7	100.0	2,638
<b>All women</b>	<b>94.1</b>	<b>3.0</b>	<b>0.8</b>	<b>0.2</b>	<b>0.2</b>	<b>1.7</b>	<b>100.0</b>	<b>15,351</b>

## H. Fertility Preferences

Future fertility preferences of currently married respondents were determined by asking whether or not they wanted another child and, if so, how soon. Overall, 37 percent of currently married women 15-49 stated that they want no more children or have been sterilized. More than one fifth of women would like to have another child, 9 percent want one within two years, 14 percent would prefer to wait two or more years and two percent could not decide on the timing (see Table 12). Thus, currently, half of married women want either to space their next birth or to end childbearing altogether. This represents the proportion of women who are potentially in need of some method of family planning. However, it should be noted that a large proportion of women are undecided regarding their desire for children (28 percent)

Table 12 shows that the desire to limit births increases rapidly with age, from 5 percent among currently married women age 15-19 years to 49 percent among those age 45-49. The wish to space the next child declines with increasing age, especially after age 30.

Desire for Children	Age							Total
	15-19	20-24	25-29	30-34	35-39	40-44	45-49	
Want within 2 years	21.1	14.5	11.4	9.6	7.3	4.2	3.2	9.0
Want after 2 years	41.9	37.2	21.6	13.2	4.8	0.9	0.6	13.7
Want, unsure timing	3.7	3.0	3.0	2.0	0.8	0.4	0.1	1.7
Undecided	25.9	28.7	29.3	27.7	29.0	30.5	21.2	28.0
Want no more children	5.4	13.6	28.1	36.9	43.7	45.1	49.2	35.2
Sterilized	0.0	0.0	0.4	1.4	2.9	3.6	1.7	1.7
Declare infecund	2.1	2.6	6.1	9.2	11.5	15.2	23.9	10.6
Total*	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	438	1,009	1,612	1,797	1,764	1,428	1,024	9,073

\* Including missing cases

## I. Infant and Child Mortality

One important objective of the CDHS 2000 was to measure the level and trend of mortality among children, since infant and child mortality rates are basic indicators of a country's socioeconomic situation and quality of life. Estimates of childhood mortality are based on information from the birth history section of the questionnaire administered to individual women. The section began with questions about the aggregate childbearing experience of respondents (i.e., the number of sons and daughters who live with the mother, the number who live elsewhere and the number who have died). For each of these births, information was then collected on sex, month and year of birth, survivorship status and current age, or, if the child had died, age at death. This information is used to directly estimate the following five mortality rates:

<b>Neonatal mortality:</b>	the probability of dying within the first month of life;
<b>Postneonatal mortality:</b>	the difference between infant and neonatal mortality;
<b>Infant mortality:</b>	the probability of dying before the first birthday;



**Child mortality:** the probability of dying between the first and fifth birthday;  
**Under-five mortality:** the probability of dying between birth and the fifth birthday.

All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

**Table 13 – Infant and Child Mortality**

Neonatal, postneonatal, infant, child, and under-five mortality by five-year periods preceding the survey, Cambodia 2000

	Neonatal mortality (NN)	Post neonatal mortality (PNN)	Infant mortality (1q0)	Child mortality (4q1)	Under-five mortality (5q0)
0-4	37.3	57.8	95.1	32.5	124.5
5-9	40.5	50.5	90.9	31.3	119.4
10-14	44.2	34.5	78.8	39.1	114.7
15-19	48.1	36.4	84.6	53.3	133.4
20-24	53.7	75	128.7	129.7	241.7

Table 13 presents early childhood mortality rates for the 25 years preceding the survey. Under-five mortality for the period 0-4 years before the survey (which roughly corresponds to the years 1995-2000) is 125 per 1,000 births. This means that one in eight children born in Cambodia dies before reaching the fifth birthday. Most of the mortality occurs during the first year of life since the infant mortality rate is 95 deaths per 1,000 births, while mortality between the first and the fifth birthday is 33 per 1,000 children

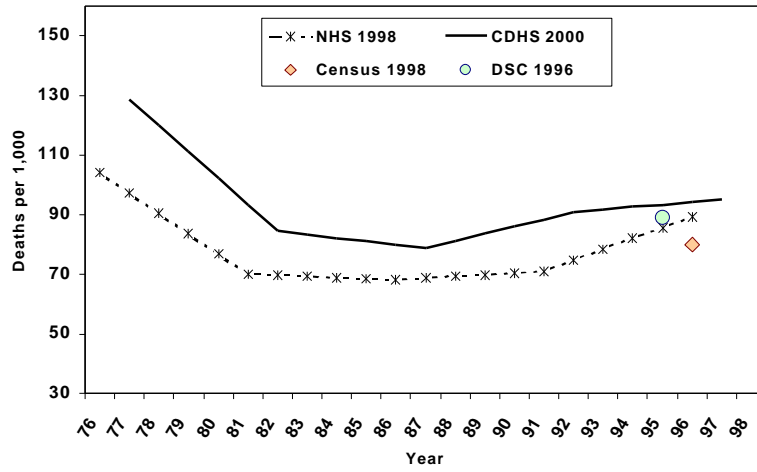
surviving at the first birthday. Mortality during the first month, or neonatal mortality, is high (37 per 1,000); but post-neonatal mortality (between the first month and the first birthday) is much higher than expected (58 per 1,000) and counts for 61 percent of the overall infant mortality.

The results in Table 13 can be used to explore the trend in early childhood mortality in Cambodia. In looking at the data, it is important to remember that the rates in table 13 are derived from retrospective data from the CDHS. Thus, they are subject to errors of omission and misreporting of date of birth and age at death, which are usually more common for events further back in time, particularly for events that occurred 20 or more years ago. In addition, women age 15-49 years at the time of the survey were age 10-44 years during the period 5-9 years before the survey: therefore, mortality of children born from women age 45-49 years are not recorded for this period. This truncated information generates a negligible margin of error for the most recent periods. However, for events further back in time, missing information are much important and the levels of mortality for these periods are likely to be much less accurate.<sup>2</sup> In particular, for the period 20-24 years before the survey, levels of mortality should be considered as rough evaluations, likely underestimated.

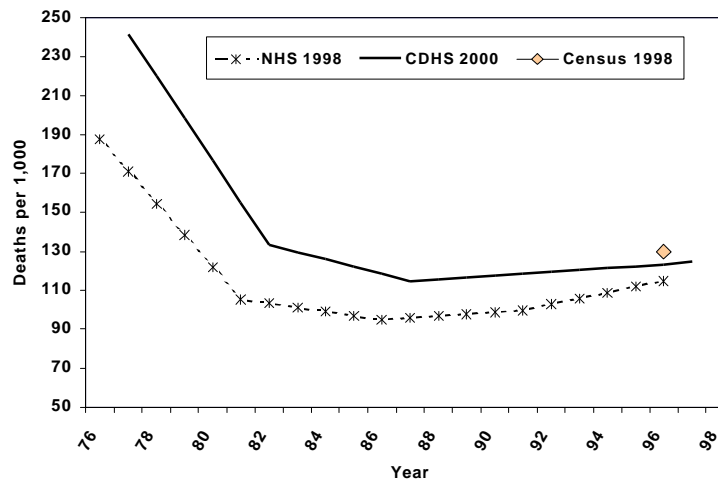
According to the CDHS results, early childhood mortality was very high 20-24 years before the survey (years 1975-1980), period of the Khmer Rouge rule (Figure 5). At this time, centered around year the 1977, about one in four Cambodian children died before their fifth birthday. Despite the 1980-1981 famine, early childhood mortality dropped considerably between the Khmer Rouge period and the next period; around the year 1982, child mortality was about one third of its level in the previous period. Between the period centered around year 1982 and the next periods, child mortality continued slowly to decline, from 53 per 1,000 to 31 per 1,000 (period centered around 1992), then remains approximately at the same level. Infant mortality also declined considerably between the Khmer Rouge period and the next period (from 129 per 1,000 to 85 per 1,000). Then the mortality level decreased slowly. However, figure 5 shows an increase in infant mortality during the most recent periods, from 79 deaths per 1,000 around the year 1987 to the current level of 95 per 1,000 centered around the year 1997.

<sup>2</sup> Women age 15-49 years at the time of the survey were less than 30 years old during the period 20-24 years before the survey: therefore, mortality of children born from women age 30-49 years are not recorded for this period.

**Figure 5**  
**Infant Mortality Trends**



**Under-five Mortality Trends**



A comparison of the CDHS 2000 and the NHS 1998 data is also presented in figure 5. Trends in early childhood mortality are very similar: a considerable decline of mortality followed by a slight increase during the most recent years. However, according to the CDHS 2000, levels of mortality are always higher than those found in the NHS. This seems to indicate that the level of mortality was slightly underestimated in the NHS survey.

## **J. Maternity Care**

In the CDHS 2000, women who had given birth in the five years preceding the survey were asked a number of questions about maternal and child health care. For the last live birth in that period, the mothers were asked whether they had received tetanus toxoid injections while pregnant, whether they had obtained antenatal care during the pregnancy. For each birth in the same period, the mothers were also asked what type of assistance they received at the time of delivery. Proper care during pregnancy and delivery are important for the health of both the mother and the baby.

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, a major cause of death among infants in many developing countries. Table 14, which refers to births in the five years preceding the survey, indicates that mothers received a tetanus toxoid injection during pregnancy for 45 percent of births. Mothers who live in urban areas and those with secondary or higher education are more likely to receive tetanus toxoid injections during pregnancy (60 percent or higher). Mothers in Phnom Penh received tetanus toxoid injections for at least 79 percent of births. On the other hand, only 17 percent of mothers in Prey Veang received this injection during pregnancy.

For 38 percent of last births in the five years preceding the survey, a medically trained person provided antenatal care. Antenatal checks are more likely to be provided by a nurse or midwife than by a doctor (36 percent compared to 6 percent) (Table 14). Coverage of antenatal care is higher in urban areas than in rural areas (62 percent and 34 percent, respectively). Antenatal care is more common among women educated at a secondary or higher level. The majority of women in Phnom Penh are likely to have antenatal care provided by a medically trained professional (84 percent), while only the minority receive antenatal care provided by a medically trained professional in Mondulakiri/Ratanakiri (16 percent).

On the national level, 34 percent of births in the past five year period were assisted during delivery by trained medical personnel, almost entirely by midwives (30 percent). Differentials by background characteristics of the mother are similar to that for antenatal care. As with tetanus toxoid coverage and antenatal care, urban women and better-educated women are more likely than others to receive medically trained assistance during delivery. Babies are most likely to be delivered with medical supervision in Phnom Penh (90 percent). Only 15 percent of births in Siem Reap/Otdar Meanchey were assisted by a medically trained person.

## **K. Vaccination of Children**

In the CDHS 2000, mothers were asked to show the interviewer the yellow cards of all children born since January 1995 where immunization dates are recorded. The interviewer then copied from the cards the dates of each vaccination received. If a child never received a health card or if the mother was unable to show the card to the interviewer, the mother was asked what vaccinations the child had received. Questions were asked for each vaccine type. A child was considered fully vaccinated if he or she had received a BCG vaccination against tuberculosis; three doses of DPT vaccine to prevent diphtheria, pertussis, and tetanus; at least three doses of polio vaccine; and one dose of measles vaccine. The results presented here are based on both health card information and, for those children without a card, information provided by the mother.



**Table 14 Tetanus toxoid vaccination, antenatal care and assistance at delivery**

Percentage of the last live birth (in the five years preceding the survey) for which mothers received at least one tetanus toxoid injection, percent distribution by source of antenatal care and by type of assistance at delivery, according to background characteristics, Cambodia 2000

Background characteristics	Tetanus toxoid (at least 1 dose)	Antenatal care							Assistance at delivery							Number of births
		Doctor	Nurse	Midwife	All trained personnel	Traditional birth attendant	Kru khmer/ Other	No one	Doctor	Nurse	Midwife	All trained personnel	Traditional birth attendant	Other	No one	
<b>Age</b>																
<20	48.8	1.1	5.8	38.6	45.5	5.3	0.0	49.1	3.4	1.8	32.8	38.0	60.4	1.2	0.2	465
20-34	47.0	1.4	4.6	32.9	38.9	6.5	0.1	54.4	2.7	2.0	31.3	36.1	63.0	0.5	0.1	3,918
35+	38.8	0.6	5.3	25.2	31.1	8.2	0.1	60.0	1.4	1.4	25.5	28.3	70.2	0.5	0.1	1,328
<b>Birth order</b>																
1	50.5	1.5	5.9	41.7	49.1	6.7	0.0	44.2	5.2	2.4	36.9	44.4	54.9	0.4	0.2	975
2-3	49.3	1.3	5.1	37.2	43.5	5.5	0.1	50.6	2.7	2.8	34.9	40.4	58.4	0.7	0.2	2,051
4-5	44.5	1.4	3.2	27.0	31.5	8.2	0.2	60.0	1.8	1.3	26.7	29.9	69.1	0.7	0.0	1,295
6+	36.3	0.6	5.4	20.6	26.5	7.4	0.0	65.5	0.9	0.6	21.3	22.8	75.9	0.4	0.1	1,390
<b>Residence</b>																
Urban	60.3	3.0	3.6	55.5	62.1	5.0	0.0	32.9	8.0	2.9	50.9	61.7	37.7	0.5	0.0	778
Rural	42.8	0.9	5.1	27.8	33.8	7.0	0.1	58.8	1.6	1.7	26.8	30.1	68.7	0.6	0.2	4,932
<b>Province</b>																
Banteay Meanchey	44.7	0.6	1.6	34.9	37.1	10.6	0.3	51.9	0.6	1.2	39.6	41.4	50.8	7.2	0.3	292
Kampong Cham	45.5	0.3	9.0	24.4	33.7	1.8	0.0	63.5	1.5	1.6	21.2	24.3	73.0	0.9	0.3	785
Kampong Chhnang	50.1	0.0	13.7	32.3	46.0	13.2	0.0	40.8	0.5	3.8	14.3	18.6	80.6	0.8	0.0	245
Kampong Spueu	46.1	1.1	6.5	20.7	28.3	3.2	0.3	68.2	3.9	0.8	12.1	16.8	82.7	0.0	0.0	342
Kampong Thom	41.0	0.8	5.3	22.9	29.0	8.9	0.0	62.1	0.6	4.7	12.0	17.3	82.7	0.0	0.0	305
Kandal	65.3	1.7	5.1	39.4	46.2	1.0	0.7	51.9	4.7	3.0	48.3	56.0	43.3	0.0	0.3	496
Koh Kong	20.5	1.6	0.3	24.2	26.1	0.9	0.0	72.2	1.7	0.0	33.0	34.7	64.2	0.0	0.0	67
Phnom Penh	78.6	6.2	2.9	74.8	83.8	0.0	0.0	16.2	11.0	2.5	76.6	90.1	9.9	0.0	0.0	333
Prey Veang	16.8	0.0	2.0	16.3	18.3	2.3	0.0	79.4	0.7	0.7	24.0	25.3	74.4	0.0	0.3	450
Pursat	49.9	0.2	1.9	40.2	42.3	5.0	0.0	52.7	1.5	0.2	20.1	21.8	77.9	0.3	0.0	186
Svay Rieng	53.6	1.3	6.6	38.6	46.5	2.3	0.0	50.2	0.8	3.1	20.1	24.0	74.7	0.3	0.0	229
Takeo	52.3	1.6	3.4	30.2	35.1	6.1	0.0	58.3	2.4	2.4	35.3	40.1	59.4	0.0	0.3	434
Bat Dambang/Pailin	47.2	2.4	9.9	35.9	48.2	4.2	0.0	47.6	4.3	1.2	42.1	47.7	52.1	0.0	0.0	419
Kampot/Krong																
Kaeb/Sihanoukville	40.6	1.0	0.6	32.8	34.3	0.3	0.0	65.4	1.9	0.6	31.9	34.4	65.6	0.0	0.0	384
Preah Vihear/Stung																
Treng/Kratie	33.6	0.7	1.0	38.4	40.0	7.2	0.0	52.8	1.6	0.2	41.1	42.9	56.7	0.0	0.2	249
Mondulkiri/ Ratanakiri	24.7	1.0	0.7	14.0	15.7	3.6	0.2	80.3	1.3	0.8	14.1	16.2	83.1	0.2	0.2	87
Siem Reab/Otdar Meanchey	27.7	0.0	1.5	19.3	20.8	42.5	0.0	36.5	0.6	2.5	11.7	14.8	85.0	0.0	0.0	409
<b>Education</b>																
0.0																
No education	32.9	0.5	3.9	20.3	24.8	9.8	0.1	65.3	1.0	1.2	18.8	21.0	77.5	1.0	0.1	1,827
Primary	46.3	0.8	5.2	30.8	36.8	5.6	0.1	57.2	1.7	2.0	29.8	33.4	65.7	0.3	0.2	3,066
Secondary +	68.7	4.1	5.6	60.0	69.7	4.3	0.0	25.7	9.0	2.7	56.4	68.2	30.9	0.4	0.1	817
All children	45.3	1.2	4.9	31.6	37.6	6.8	0.1	55.3	2.5	1.8	30.1	34.4	64.5	0.6	0.1	5,711

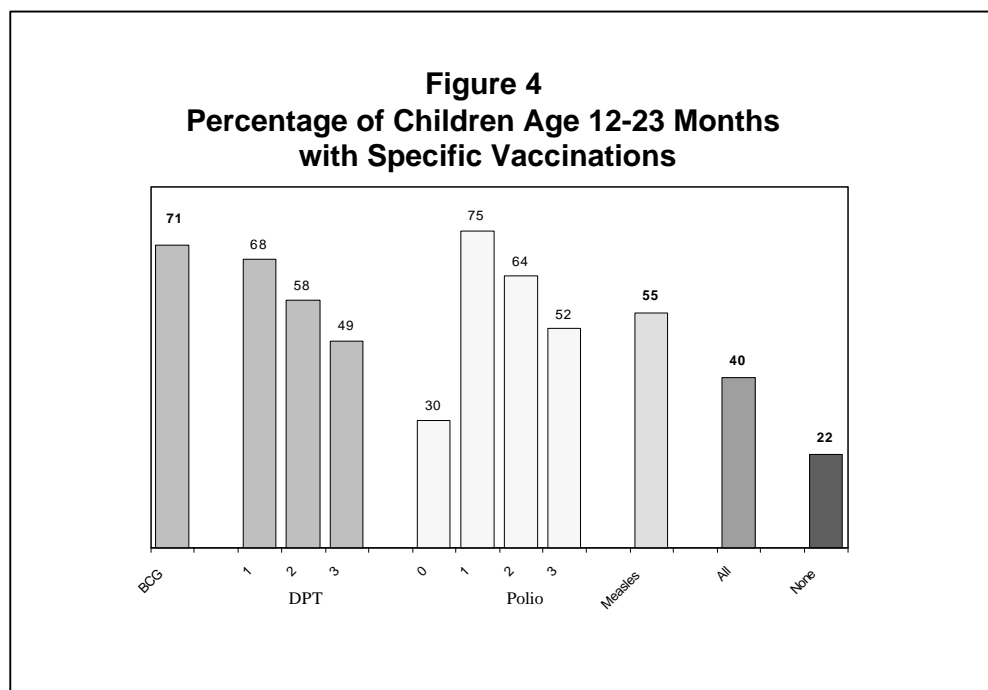
Table 16 Vaccinations by background characteristics

Among children aged 12-23 months, the percentage with vaccination cards seen by interviewer and the percentage who have received specific vaccines (according to the vaccination card or the mother's report), by background characteristics, Cambodia 2000

Background characteristics	Vaccination card seen	Percentage of children who had received:										No vaccinations	Number of children
		BCG	DPT 1	DPT 2	DPT 3	Polio 0	Polio 1	Polio 2	Polio 3	Measles	All		
<b>Child's gender</b>													
Male	46.5	71.2	68.0	58.5	50.0	29.3	74.3	64.2	52.2	56.9	42.6	22.7	
Female	48.6	71.5	68.1	57.8	47.0	30.3	75.0	63.9	50.7	53.8	37.2	21.0	
<b>Residence</b>													
Urban	48.7	75.2	72.5	64.5	53.3	36.7	76.7	67.8	54.7	60.7	46.1	20.4	
Rural	47.4	70.8	67.4	57.3	47.8	28.8	74.4	63.5	51.0	54.6	39.0	22.1	
<b>Province</b>													
Banteay Meanchey	39.9	70.2	64.0	52.7	36.4	27.6	68.9	55.2	37.6	58.8	28.8	24.9	
Kampong Cham	48.4	66.4	65.0	55.6	40.8	34.0	74.4	65.0	44.4	44.8	28.3	24.2	
Kampong Chhnang	57.6	88.0	75.3	68.0	63.5	34.6	92.5	84.7	73.4	65.0	53.2	4.0	
Kampong Spueu	44.6	73.4	71.0	58.3	53.5	19.1	81.4	67.3	58.2	58.2	47.8	16.3	
Kampong Thom	44.0	71.4	66.8	48.9	33.4	33.4	67.9	56.0	41.6	62.0	33.4	21.3	
Kandal	75.3	91.4	88.6	80.1	67.9	49.5	92.8	87.2	75.5	75.5	62.2	5.8	
Koh Kong	24.6	38.8	36.4	18.2	12.3	13.4	49.1	30.5	24.1	26.6	11.5	48.1	
Phnom Penh	84.6	87.0	80.9	80.9	70.4	64.2	89.0	86.9	76.4	74.1	61.8	6.9	
Prey Veang	44.2	54.8	48.9	38.2	33.5	13.4	53.3	39.7	32.0	38.0	26.0	40.7	
Pursat	40.2	72.8	64.8	52.1	46.0	16.0	76.3	68.4	53.8	48.4	35.5	22.6	
Svay Rieng	32.7	56.8	50.9	34.6	30.2	25.2	52.3	34.6	31.6	31.7	22.7	41.7	
Takeo	47.1	92.6	90.1	85.2	74.1	44.6	91.4	84.0	67.9	74.1	55.7	4.9	
Bat Dambang/Pailin	41.8	80.8	79.3	74.9	67.6	22.4	83.8	79.4	67.6	68.8	62.9	13.3	
Kampot/Krong Kaeb/Sihanoukville	18.1	49.4	51.1	43.1	28.7	13.2	61.6	47.1	33.9	41.1	22.1	33.9	
Preah Vihear/Stung Treng/Kratie	42.0	65.7	59.8	37.2	36.2	14.1	69.4	45.9	34.9	43.1	26.9	28.3	
Mondulakiri/ Ratanakiri	32.4	45.0	44.5	26.2	18.0	14.5	47.4	30.3	17.9	38.8	14.1	47.5	
Siem Reap/Otdar Meanchey	43.3	60.8	63.1	55.9	49.8	23.1	68.7	57.7	50.4	51.0	38.3	31.3	
<b>Education</b>													
No education	33.6	59.9	55.0	46.5	36.9	19.3	65.1	54.3	41.1	45.6	29.1	31.5	
Primary	50.7	74.2	71.2	59.7	50.2	31.1	76.5	65.3	53.5	57.1	41.4	19.4	
Secondary +	67.7	86.9	86.0	79.3	68.7	49.0	89.8	81.8	67.7	71.1	58.8	8.9	
All children	47.5	71.4	68.0	58.2	48.5	29.8	74.7	64.1	51.5	55.4	39.9	21.9	

1 Children who are fully vaccinated, i.e. those who have received BCG, measles and three doses of DPT and polio.

Table 15 pertains to children age 12 to 23 months, the age by which they should have received all vaccinations. Mothers were able to produce health cards for 48 percent of these children. Based on both the health cards and the mothers' reports, 40 percent of children have received all of the recommended vaccinations; only 22 percent have not received any vaccinations. The remaining 38 percent of children were partially vaccinated. While over two-thirds of all children receive BCG and the first dose of DPT and polio vaccine, less than half completed the dose (Figure 4). Coverage of vaccination against measles is slightly higher (55 percent).



A higher percentage of male children are completely vaccinated than female children (43 percent versus 37 percent). Children in urban areas, and whose mother has had secondary or higher education are more likely than other children to have completed the vaccination schedule (Table 15). The difference in the percentages of children completely vaccinated are pronounced across the provinces; less than 15 percent of children in Koh Kong and Mondulakiri/Ratankiri been immunized against the six diseases, children in Takeo (53 percent) lag substantially behind the national average. Only in the three domains of Kampong Chhnang, Phnom Penh, and Bat Dambang/Pailin did the percentage of complete vaccinations rise above 50 percent. Immunization coverage improves with mother's level of education; from 29 percent for children whose mother have had no education to 59 percent for children whose mother have had secondary or higher education.

## **L. Childhood Diarrhea**

Dehydration from diarrhea is an important contributing cause of childhood mortality in developing countries. In the CDHS 2000, for each child under five years of age, mothers were asked if the child had experienced an episode of diarrhea in the two weeks prior to the survey. Mothers were also asked what treatment was given to those children who had diarrhea. Table 16 shows that 19 percent of children under five were reported to have had diarrhea in the two weeks before the survey. Diarrheal prevalence is highest during age 6-23 months, a period when solid or semi-solid foods are being introduced.

Table 16 Prevalence of diarrhea and use of oral rehydration therapy

Percentage of children under five years of age who had diarrhea in the two weeks preceding the survey, and the percentage of children with diarrhea who received oral rehydration therapy (either ORS, home made solution or rice water), by background charact

Background characteristics	Percentage of children with diarrhea	Among children with diarrhea, the percentage treated with ORT				Num ber of children under five
		ORS	Home made solution	Rice water	Either ORS or Home solution or Rice water	
<b>Child's age</b>						
< 6 months	16.1	10.6	2.1	13.5	21.6	812
6-11 months	29.7	17.9	2.9	37.1	46.2	788
12-23 months	27.5	23.4	2.9	45.6	55.8	1,253
24-35 months	20.2	24.0	3.4	46.7	54.8	1,379
36-47 months	14.6	10.9	1.7	37.3	41.5	1,542
48-59 months	11.0	11.2	5.8	44.6	49.3	1,553
<b>Child's gender</b>						
Male	20.2	17.6	3.5	41.7	48.2	3,695
Female	17.6	18.1	2.6	37.7	47.0	3,631
<b>Residence</b>						
Urban	15.8	24.9	2.5	36.7	51.3	982
Rural	19.4	17.0	3.1	40.3	47.2	6,345
<b>Province</b>						
Banteay Meanchey	20.3	13.0	8.2	35.4	38.9	383
Kampong Cham	21.0	6.7	2.3	27.0	29.3	1,009
Kampong Chhnang	33.6	10.8	0.0	33.1	37.4	326
Kampong Spueu	6.0	20.7	0.0	31.2	44.9	443
Kampong Thom	19.9	11.6	0.0	42.1	47.4	406
Kandal	29.7	32.6	0.9	52.2	61.7	641
Koh Kong	19.8	13.9	5.8	53.0	57.5	87
Phnom Penh	24.4	39.8	0.0	44.7	62.7	420
Prey Veang	3.1	27.1	9.1	54.6	72.6	532
Pursat	32.4	8.2	2.9	40.5	47.6	238
Svay Rieng	27.3	13.0	4.0	34.7	41.7	276
Takeo	8.3	18.0	12.8	76.9	79.6	539
Bat Dambang/Pailin	9.7	33.5	6.6	51.8	65.7	563
Kampot/Krong						
Kaeb/Sihanoukville	20.9	10.8	6.1	42.9	47.8	451
Preah Vihear/Stung						
Treng/Kratie	22.9	21.9	7.0	32.7	44.0	335
Mondulkiri/ Ratanakiri	21.5	20.2	3.4	65.6	72.0	115
Siem Reab/Otdar						
Meanchey	18.5	11.1	0.8	23.0	34.6	562
<b>Education</b>						
No education	18.8	10.5	2.9	35.6	40.7	2,363
Primary	19.7	18.7	3.5	40.4	48.9	3,916
Secondary +	16.1	32.9	1.7	48.9	59.9	1,047
All children	18.9	17.8	3.1	39.9	47.6	7,327



The prevalence of diarrhea is higher for boys than for girls (20 percent versus 18 percent). It is also higher among children in rural areas than those in urban areas (19 percent versus 16 percent). There is no real difference in diarrheal disease by children of women with no education compared to children of women who received education at the secondary or higher level. The prevalence of diarrhea is highest in provinces Kampong Chhnang and Pursat (over 32 percent). The prevalence of diarrhea is lowest in Kampong Speu and Takeo (8 percent or less).

Almost one-half (48 percent) of children with diarrhea were treated with oral rehydration therapy (ORT), i.e., a prepared oral rehydration packet (Oralyte), a homemade sugar-salt-water solution, or rice water. The majority of children were given rice water (40 percent) as a form of ORT. The highest rates of giving at least one treatment of ORT to children with diarrhea are in provinces Bat Dambang/Pailin, Mondolkiri/Ratanakiri, and Prey Veang (over 70 percent). The lowest rates of giving at least one treatment of ORT to children with diarrhea is in Kampong Cham (less than 30 percent).

## M. Infant Feeding Practices

Breast milk is the primary source of nutrients for young infant. Children who are exclusively breastfed receive only breastmilk. The WHO recommends exclusive breastfeeding during the first six months of life. Supplementing breast milk with liquids or other foods before this time is discouraged because it increases the likelihood of contamination and hence, risks of diarrheal disease. From six months to 24 months, breastmilk should be supplemented with appropriate and adequate food to promote healthy growth and development of the child. Bottle feeding children in lesser developed countries can have a negative impact on the health of the young child. It often replaces breastfeeding and allow pathogens to be introduced to the child due to preparation in unsanitary conditions Table 17 shows the percentage of children who are exclusively breastfed, the percentage of children who are giving semi-solid/solid foods along with continued breastfeeding and the percentage of children who are feed with a bottle with a nipple.

Table 17 Breastfeeding status

Percent distribution of living children by breastfeeding status and food supplementation, and the percentage using a bottle with a nipple, according to age, Cambodia 2000

Age in months	Breastfeeding status						Total	Percentage using bottle with nipple	Number of living children
	Not breastfed	Exclusively breastfed	Breastfed and given						
			Plain water only	Other liquids	Solid/mushy foods				
0-5	1.2	6.8	66.8	8.1	17.2	100.0	11.6	801	
6-9	6.4	1.2	16.3	1.8	74.3	100.0	18.0	530	
10-11	4.2	0.0	10.5	0.4	84.9	100.0	19.2	251	
12-15	12.1	0.0	3.0	0.5	84.3	100.0	16.4	462	
16-19	26.9	0.6	1.4	0.2	70.9	100.0	23.6	372	
20-23	41.4	0.0	0.1	0.7	57.8	100.0	16.0	367	
24+	81.1	0.0	0.1	0.1	18.8	100.0	14.6	2,535	

The CDHS 2000 collected data on infant feeding for all children born in the five years preceding the survey. As shown in Table 17, only seven percent of mothers exclusively breastfed their children through the first five months of life. Among infants 0-5 months old, over two-thirds were given water along with breastmilk, eight percent were given breastmilk and other liquids, and 17 percent of the children were introduced to solid/mushy food prematurely. By age of 6-9 months, almost three-quarters of children were fed solid or mushy food along with breastmilk as recommended. The majority of children 12- 15 months of age continued to breastfeed while consuming complementary foods (84 percent). The rate of continued breastfeeding remained high for children aged 20-23 months of age (58 percent). Almost 12 percent of children aged 0-5 months of age were fed with a bottle with a nipple. The rate of bottle feeding increases with the age of the child. Almost one-quarter of all children aged 16-19 months were bottle fed. Bottle feeding remains

prevalent even in children aged 24 months and higher (15 percent).

## N. Knowledge and Prevention of HIV/AIDS

The CDHS 2000 included a section of questions that addressed women's awareness of HIV/AIDS. These question sought information on respondents source of knowledge, methods of prevention such as the use of condoms for the prevention of HIV/AIDS and other sexually transmitted diseases (STD's).

**Table 18 Knowledge of HIV/AIDS and of ways to avoid HIV/AIDS**

Percentage of women who have heard of HIV/AIDS, and among these women the percentage who know of ways to avoid HIV/AIDS, by urban-rural residence, Cambodia 2000

Knowledge of HIV/AIDS	Urban	Rural	All women
<b>Percentage who know of HIV/AIDS</b>	97.6	94.3	94.8
Number of women	2,697	12,654	15,351
<b>Among women with knowledge of HIV/AIDS, the percentage who know specific ways to avoid HIV/AIDS</b>			
At least 1 method to avoid HIV/AIDS	87.7	73.7	76.2
Abstain from sex	29.3	23.0	24.2
Use condoms	81.5	67.3	69.9
Limit sex to one partner	46.3	35.5	37.4
Limit number of partners	32.0	17.4	20.0
Avoid prostitutes	30.3	18.2	20.4
Avoid sex with person whith multiple partner	17.3	8.6	10.1
Avoid sex with homosexuals	10.2	3.3	4.5
Avoid sex with person taking injected drugs	10.6	3.3	4.6
Avoid blood transfusion	24.9	12.1	14.5
Avoid injections	24.9	10.5	13.1
Avoid kissing	0.7	0.3	0.4
Avoid mosquito bites	0.9	0.6	0.7
Get protection of traditional healer	0.8	0.4	0.5
Avoid sharing razors, blades	20.0	6.1	8.6
Avoid manicure or pedicure	24.4	9.5	12.2
Other	0.4	0.2	0.3
Do not know any way	1.0	1.7	1.6
<b>Declare HIV/AIDS can not be avoided</b>	11.3	24.6	22.2
Number of women who know of HIV/AIDS	2,632	11,927	14,559

Awareness of HIV/AIDS is nearly universal among women as 95 percent of women interviewed report to have knowledge of the disease. Respondents were asked if they know of ways to prevent HIV/AIDS. Over three-quarters of the women know of at least one method to prevent AIDS. Twenty-two percent of women state that AIDS cannot be avoided. Seventy percent report that use of condoms can prevent the disease. Thirty-seven percent state that AIDS can be prevented by limiting sexual activity to one partner. There are large rural-urban differences between knowledge of methods to prevent AIDS. More urban women know that condom use reduces the chance of contracting AIDS (82 percent), than rural women (67 percent). More rural women state that AIDS cannot be avoided (25 percent) that urban women (11 percent).

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Bangladesh	June	2000	(English)
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