Health and Access to Medical Care in Cambodia 2004

Draft statistical report

The 2004 Cambodia Socio-economic Survey
Sponsored by the UNDP/Sida and the World Bank
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Introduction

This report summarizes the main data on illnesses and access to medical care collected in the 2003/04Cambodia Socio-Economic Survey (CSES). Fieldwork was done monthly from November 2003 to January 2005 with nationally representative samples of 1 000 households. This final report is based on the fifteen months data (November 2003 to January 2005) collected from 15,000 households with a total of about 75,000 members. Interviews on health are done by trained non-medical interviewers who were in almost daily contact with the households over a whole month. Health questions were asked in the last of the four weeks of the month.

The main module on health is one of 14 modules in the long questionnaire. The questions in this module register data on (chronic) disabilities, (acute) illnesses, injuries or other health problems and the medical care used by all members of the households during the past four weeks. Respondent for all household members is normally the head of household or his spouse. This method of collecting data on individual's health was adopted for the 2004 survey mainly because it had been used in the previous surveys in 1999 and in 1997.

These questions with subjective evaluations of health status are complemented with questions on disabilities and (acute) illnesses in the past four weeks.

Children's health status is measured by anthropometric measurements and their vaccination status is registered from the yellow cards. The results of the anthropometric measurements will not e included in this report.

Medical care is registered by type of provider, length of hospitalization and total expenditure on medical care during the month.

Questions relating to prevention include smoking habits, mosquito nets, salt iodization and HIV/aids awareness.

The relevant questionnaires and excerpts from the manuals are included as annexes.

Some highlights

1. About 10 percent of Cambodians are in "bad" or "very bad" health condition according to layman health status evaluations done by household heads or spouses.

2. About 4 percent or 538 000 of the non-institutionalized population have some disability as reported by the household heads. Seeing, moving and hearing difficulties in old age dominate.

3. In an average month about 18 percent of the population has some episode of illness, injury or other health related symptom, of which two out of three sought treatment for the illness.

4. 97 percent of children below age two have been breastfed for some time but only 30 percent get breast milk as first intake and 28 percent get breast milk only after the first day. 13 percent of children under 2 years of age have no vaccination.

5. As to other prevention measures, CSES 2004 reports that salt iodization is spreading rapidly so that 28 percent of households were using iodized salt in 2004.

6. Fully 40 percent of Cambodian men over age 14 are daily smokers as against only 4 percent of Cambodian women. Smoking prevalence is higher in rural areas. Almost 90 percent of the population knows that smoking is harmful to one's health.

7. HIV/AIDS awareness is very high in Cambodia. Fully 90 percent of the population over age 14 have heard of the illness and almost 88 percent mention condom use as one of the methods to avoid the illness.

8. About 94 percent of Cambodian households use mosquito nets but only four percent have impregnated nets.

1. Profile of health and illness: Laymen's evaluation

For each member the household head or spouse is asked, "How would you evaluate his/ her health?" He or she can answer "Very good", "Good" "Average", "Bad", or "Very bad". A second question is: "Compared with others of the same age, would you say that his/her health is … Much better, somewhat better, about the same, somewhat worse, or much worse".

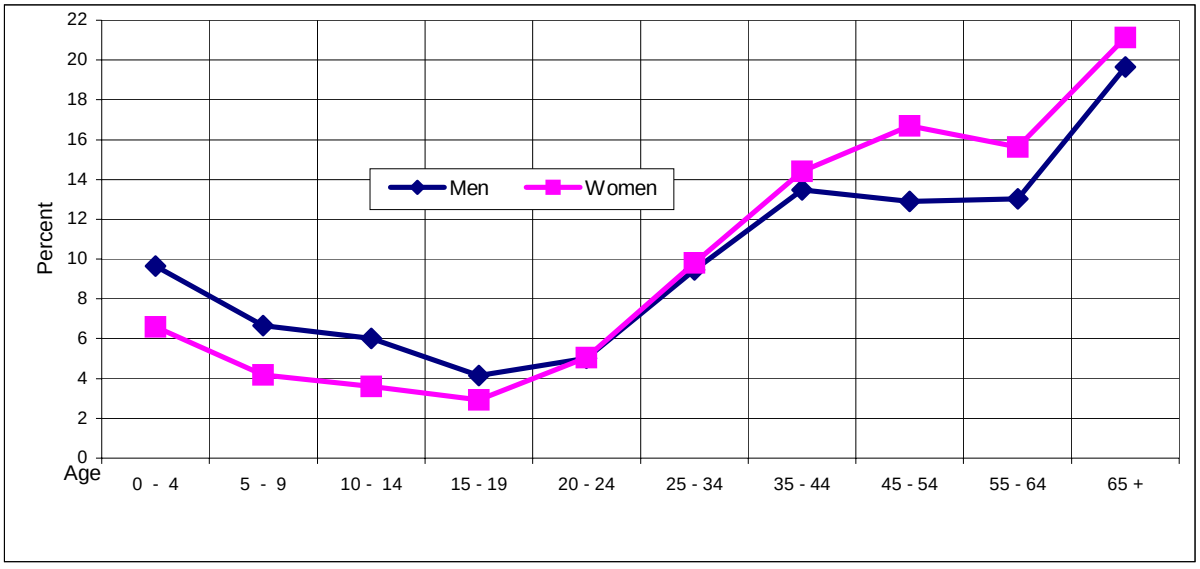
2.1. In good or in bad health?

Male members of the households are in better health than female members when their health is evaluated by the household heads or their spouses. For both sexes the proportion with "average" health is about 78 percent. The proportion in "very good" or "good health" is 14 percent among men 10.6 percent among women. The proportion in "bad" or "very bad" health is higher among women than among men, 11.1 percent against 7.9 and close to 10 percent with both sexes combined corresponding to close to 1.3 million in the Cambodian population.

In *Figure 1* we see that the differences in health (as evaluated by the household head) are smaller between men and women than between the age groups. Both men and women seem to have their best period in youth from about 10 to about 25 years of age. Only about 5 percent are judged to be in bad or very bad health in those ages.

More than 10 percent of small children below age 5 are reported to be in bad health, small boys more than small girls. This is consistent with the high infant and child mortality rates in Cambodia, although the rates have been falling over the past ten years.[1]

Figure 1. Household members health evaluated by household head or spouse. Percent "Bad" or "Very bad" by sex and age. (CSES Fifteen months' data 2003/04)



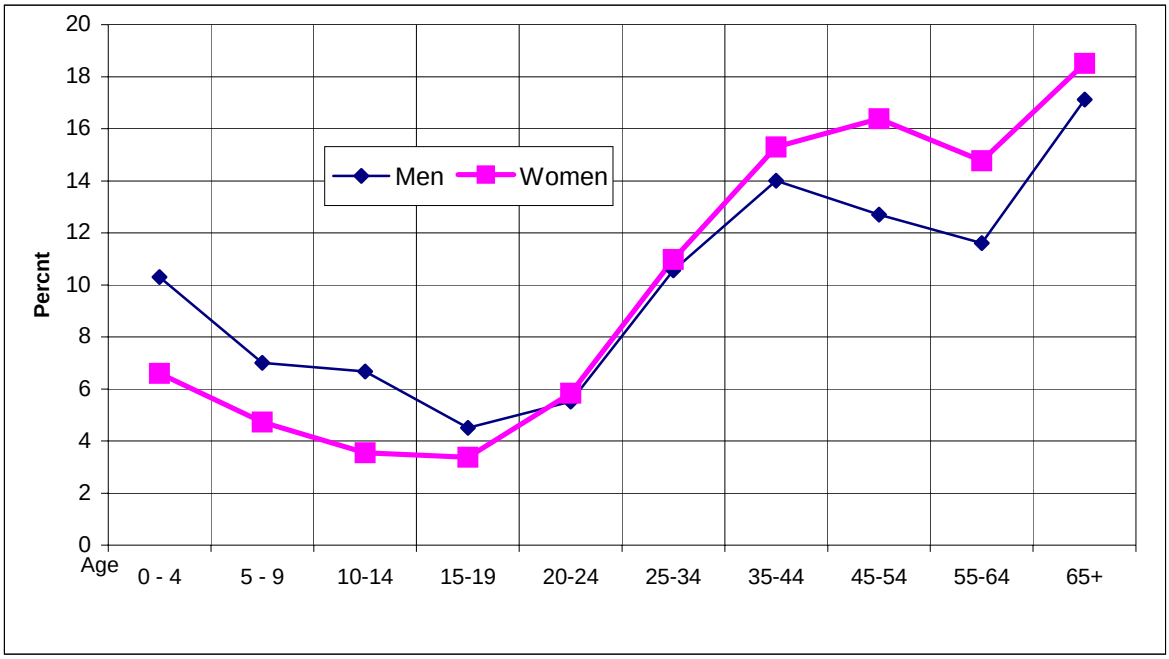
After age 25 the proportion in bad health is about the same and increasing for women and men until age 45. After that age the proportion in bad health is clearly higher among women.

[1] See NIS report "New Demographic Estimates and Updated Projections for Cambodia". National Institute of Statistics, June 2005

1.2. Better or worse than others?

In *Figure 2* we see that own health compared to others in the same age group has the same pattern as in *Figure1*. The question about the person's health compared to others is giving almost the same age/sex pattern. The percent of women in worse or much worse health was lower than men in age groups 0 to 24, about the same in age 24-34. In ages 35 and over the percent of women was higher than of men. Only about 6 percent are judged to be in worse or much worse health than others in the same age group. More than 10 percent of small children

Figure 2: Health of individual household members evaluated as "worse" or "much worse" compared with others of the same age group. (CSES Fifteen months' data 2003/04)



below age 5 are in worse health condition, small boys more than small girls. The proportion in bad health is about the same and increasing for women and men until age 44. After that age, the proportion in worse or much worse condition is higher among women.

2. Disabilities in the population of private households

A restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being is defined as disability. It describes functional limitation or activity restriction caused by impairment. The survey collected information by asking household heads/spouses for each member of the household: "Does ..NAME.. have any disability?" The meaning of the question is whether s/he had any major problem with his/her body, mind or behavior that limited his/her ability to participate normally in work, school, or ordinary social life. It is a permanent or long-term condition but should not include a temporary illness.

2.1. Prevalence of disabilities

CSES 2004 estimates the disabled population at 4.0 percent of the total non-institutional population of Cambodia. This means that 4 out of 100 persons in the population are disabled with one or more types of disability. In absolute numbers, the disabled as covered in CSES 2004 constitute about 536 000 persons. Note that severely disabled living in institutional households are not included in the sample. The most severely disabled are covered by this survey only partially. They are covered only if they live in a private household.

Table 1. Disabilities in the household population as reported by household heads/spouses in CSES 2004

Type of disability	Mentioned first	Mentioned second	Mentioned third	Total disabilities
Seeing difficulties	178 000	10 000	1 000	***189 000***
Hearing difficulties	59 000	34 000	2 000	***95 000***
Speaking difficulties	24 000	8 000	4 000	***35 000***
Moving difficulties	130 000	23 000	7 000	***160 000***
Feeling difficulties	57 000	12 000	4 000	***73 000***
Psycholgical difficulties	40 000	10 000	3 000	***53 000***
Learing difficulties	5 000	1 000	1 000	***7 000***
People who have fits	8 000	1 000	-	***9 000***
Other	36 000	1 000	1 000	***38 000***
Total disabilities	***536 000***	***100 000***	***23 000***	***659 000***
Sample size	3 503	747	179	

The design of the question on disabilities as reported in *Table 1* allows respondents to report more than one disability. 100 000 or almost 20 percent who report a first disability mention another second disability and for some 23 000 persons the household heads/spouses mention three disabilities, different from and in combination with the two first mentioned.

2.2. Kind and cause of disabilities

CSES 2004 collected data on the type of disability and the cause of disability. A screening question ascertained whether the person had "any major problem with his/her body, mind or behavior that limits his/her participation in work, school or ordinary social life". In all, 20 types of disabilities were identified and pre-coded.

Figure 3 illustrates that the elderly constitute the major group among the disabled as registered in this survey. Of the elderly with a disability, 50 percent are reported to have seeing

difficulties often together with hearing and moving difficulties, the three not surprisingly forming an old-age syndrome.

Figure 3. Number of persons with a disability by sex and age in the non-institutional households as reported by household heads or spouses in Cambodia 2004.

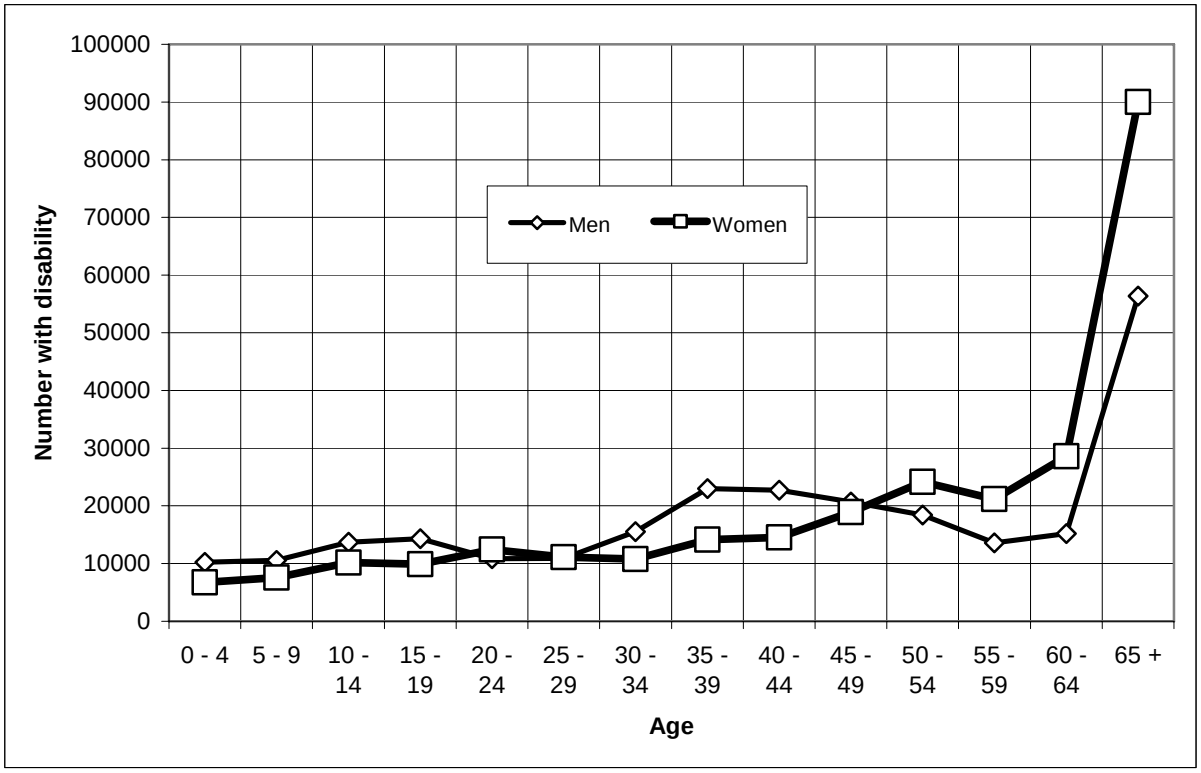


Table 4 provides the percent distribution of the disabled population according to kind of disability. Seeing difficulties, including the blind, constitute the largest group among the disabled, 30.6 percent among men and 35 percent among women with any disability.

The distribution of the disabled are not reported here in detail because the sample size does not allow robust estimates. The major causes reported by the household heads/spouses are disease and old age.

Table 2. Distribution of the disabled non-institutionalized population by kind of disability by sex and age group according to CSES 2004.

Kind of Disabilities	0-24		25-64		65+		0-65+	
	Male	**Female**	**Male**	**Female**	**Male**	**Female**	**Male**	**Female**
Seeing difficulties	13.3	10.1	28.4	31.2	48.7	50.6	30.6	34.9
Hearing difficulties	12.3	11.0	9.6	11.2	15.0	11.7	11.5	11.3
Moving difficulties	31.4	25.4	28.5	20.2	15.4	17.1	25.8	19.9
Feeling difficulties	14.4	14.5	13.7	12.3	8.3	6.4	12.5	10.6
Psychological difficul	4.1	13.2	7.5	13.3	4.2	5.0	6.0	10.6
Learning difficulties	7.7	6.0	1.3	1.9	3.1	3.4	3.0	2.9
People who have fits	3.6	6.8	2.5	2.3	3.2	3.4	2.9	3.2
Other	13.2	13.0	8.5	7.5	2.0	2.4	7.8	6.6
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

3. Illness, injury or other health related symptom past four weeks

3.1. More Cambodians ill?

Household heads or spouses answer for each household member whether s/he has been ill or had any injury or other health related symptom in the last four weeks. The results indicate a rather high rate of acute illness in the Cambodian population according to *Table 2*, 18.5 for the total population, lower for males (16.8) compared to 20.1 for females. In absolute numbers this means that close to 2.5 million Cambodians has an illness episode in any month.

The rate is higher in Phnom Penh than in other urban areas and in the rural areas and the gender difference is also highest in Phnom Penh.

The 2004 rate of 18.5 percent is much higher than the 1999 rate of 10.8, almost double, and the 2004 rate is also higher than the 1997 rate of 14.7. Such big differences are not quite credible if meant to reflect serious health deterioration in the Cambodian population.

Two technical explanations must first be considered. We first turn to the exact formulation of the question in the three survey rounds.

2004 “Did ..NAME.. have any illness, injury or other health related symptom in the past 4 weeks?”

1999 “Did __ have any illness, injury or other health care need in the last 4 weeks?”

1997 “Did this person have any major illness, injury or other health problem in the last 4 weeks?”

There are indeed some differences in the formulations that might be part of an explanation of the differences in the results. The 1999 question asks for “*other health care needs*” instead of “*other health related symptoms*”as in 2004. Again, the 1997 question asks for “*any major illness*” rather than for “*any illness*” like in 2004. This might seem like rather minor modifications that could cause differences in answers only if respondents listened very carefully to the exact formulation of the question in the three survey rounds. In all the variations in the formulations it seems that the 2004 version is the most inclusive.

A second technical explanations might e related to the context of the interview. When this question was put to the household head or his/her spouse about each of the household members, the interviewer in CSES 2004 had visited the household almost daily in the previous 3-4 weeks.

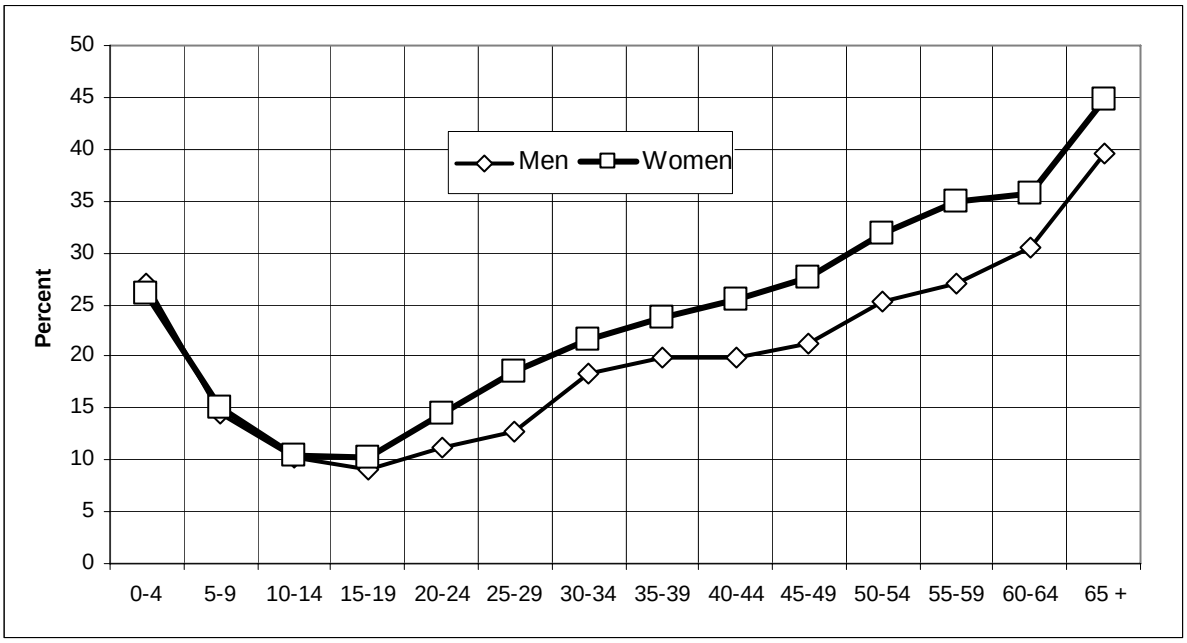
By this time, the interviewer was well-known to the household and the interviewer had started to know many of the members of the 10 households that s/he was responsible for. This gives one a reason to believe that the answers by the head or the spouse would be more open to the interviewer than would be the case if the interviewer came as a stranger on a first and only visit to the household as was the case in the previous CSES rounds in 1999 and in 1997. This might explain why the reported rate of illness in the last four weeks is as high as 18.5 percent in 2004 and almost double the 10.7 rate reported from the 1999 CSES.

Table 3. Rate of illness, injury or other health problem last four weeks. Percent by sex and stratum compared with results from CSES 1999 and 1997.

Health problem	Cambodia %	Phnom Penh %	Other Urban %	Rural %
2003/04				
Men	16.8	16.7	14.2	16.6
Women	20.1	22.0	16.3	19.8
Both Sexes	18.5	19.4	15.3	18.2
1999				
Men	10.0			
Women	11.4			
Both Sexes	10.7			
1997				
Men	13.8			
Women	15.4			
Both Sexes	14.6			

In *Figure 3* we see that the age pattern of (presumably) acute illness or injury in the past 4 weeks is broadly similar to the age pattern in the two previously reported general evaluations of the health status of household members: very high among small children, then lower among children surviving to adolescence and then ever higher for each cohort. However, the rate of acute illnesses is much higher than the evaluation of general health status as bad or very bad. One can note as an example that fully 25 percent of children under five have had an illness episode in the last four weeks but less than 10 percent are said to be in bad or very bad health by the household head or spouse.

Figure 4: Illness, injury or other health related symptom during the past 4 weeks. Percent by sex and age in CSES 2004.



One can also note that the gender difference for (presumably) acute illness/injury episodes in the last four weeks is different from the evaluations of members' general health status. There is no difference between boys and girls in the rate of illness episodes in the past four weeks while the general health status of girls is said to better – less frequently bad or very bad – than of boys. The age/sex pattern is different for acute illnesses also for young adults, ages 20-44, than for general health status. The rates of "bad" or "very bad" health are the same for young adults but rates for acute illness episodes are higher for women than for men.

3.2. Kind of illness, injury or other health related symptom

Unfortunately, this question is not well used to collect much relevant information. In order to facilitate the collection of data a list of 41 illnesses, injuries and symptoms was provided for coding by the fieldworkers. The list could have given better information if it had been divided into at least two categories: one with symptoms that could be easily recognized and identified by ordinary laymen and one that consisted of illnesses diagnosed by a medical doctor or at least some medically trained staff. To make things worse, there is the severe limit put on the information collected by the instruction in the questionnaire "If more than one, refer to the most important".

What kind of illness, injury or other health related symptom?		
01=Stomach ache	13=Diabetes	27=Jaundice
02=Back pain	14=Disease of urinary system	28=Skin disorder
03=Headache	15=Disease of the heart	29=Leprosy
04=Ear pain	16=Measles	30=Malaria
05=Eye pain	17=Hypertension	31=Food-borne disease
06=Fever	18=Typhoid fever	32=Water-borne disease
07=Diarrhoea	19=Dengue fever	33=Mental disorders
08=Cold & cough with-out rapid or difficult breathing	20=Chicken pox	34=Dropsy (swollen belly)
	21=Meningitis	35=Aids
	22=Encephalities	36=Mine injury
09=Cold & cough with rapid or difficult breathing	23=Cancer	37=Road accident
	24=Gynaecology	38=Other injury
	25=A-vitaminosis and other nutritional deficiencies	39=Antenatal care
10=Bronchitis		40=Postnatal care
11=Pleurisy	26=Anaemia	41=Other care need (Specify)
12=Tuberculosis		

The results presented in *Table 4* show that in the country as a whole, a common cold is the most frequently reported illness as the most important. This might be medically trivial in most otherwise healthy persons unless it develops into pneumonia, indicated by "rapid or difficult breathing" further down in the list, which is life-threatening unless medicine is available.

The percentages in *Table 4* do not sum to 100 column-wise since there are more illnesses and symptoms with a lower share. To understand the percentages one must keep in mind that the base for the Cambodia columns is the 16.8 percent of males and the 21.1 percent of females that had an illness episode in the past four weeks. So the 28.7 percent of males who reported cold and cough without rapid breathing means that more than a quarter of the 16.8 percent who had an illness period in the last four weeks had a cold. Recalculated according to the formula (0,287*0.168=0,048) it means that 4.8 percent of the population were ill with a cold as the most important health problem in the past four weeks.

Table 4. Most important illness, injury or other health problem in the last four weeks. Percent by sex and stratum. (CSES 2004)

Most important symptom	Cambodia		Phnom Penh		Other Urban		Rural	
	Male	Female	Male	Female	Male	Female	Male	Female
Cold & cough without rapid or difficult breathing	28.7	26.2	39.6	27.8	31.2	30.6	27.3	25.5
Fever	20.6	18.4	13.4	12.8	19.0	14.1	21.5	19.6
Other care need	8.8	7.8	12.7	14.6	9.8	7.2	8.3	7.0
Headache	6.4	11.5	5.9	14.1	6.1	10.2	6.5	11.3
Stomach ache	4.8	3.8	3.4	2.8	2.9	3.7	5.2	3.9
Diarrhea	4.3	3.3	2.7	2.4	3.0	3.9	4.6	3.3
Typhoid fever	3.9	3.3	3.7	2.5	4.1	3.4	3.9	3.4
Back pain	3.2	3.1	1.9	2.3	2.3	3.1	3.4	3.2
Cold & cough with rapid or difficult breathing	2.9	2.9	1.7	0.9	3.1	2.6	3.0	3.1
Bronchitis	2.5	2.2	2.7	0.8	1.8	2.7	2.5	2.3
Malaria	2.2	0.6	-	-	3.6	1.2	2.2	0.6
Hypertension	1.5	2.9	3.9	5.1	2.4	4.4	1.1	2.5

3.3. Utilization of health care facilities

All households were asked whether any member was sick or injured at any time in the 30 days before the interview. If any members was sick, questions were asked as to whether the ill or injured household members sought care, where they sought care and how much they spent on treatment.

Two out of three who reported an illness, injury or other health problem had sought treatment, a slightly higher percent among women (67.2) than among men (65.8). The percent of ill that sought some kind of treatment was markedly higher in Phnom Penh (about 85 percent) but mainly by a high proportion of self care, higher than in the other two strata.

Table 5 Utilization of health care among persons with an episode of illness, injury or other health problem in the past four weeks. Percent by sex and stratum in CSES 2004. [2]

Indicator	Cambodia		Phnom Penh		Other Urban		Rural	
	Men	Women	Men	Women	Men	Women	Men	Women
Health care								
Seek care for health	**65.8**	**67.2**	85.3	86.5	66.1	66.9	63.7	65.0
Type of care								
Public care	**16.6**	**16.8**	10.3	9.3	15.0	15.3	17.6	18.1
Private medical care	**30.4**	**30.8**	32.0	32.1	40.7	38.9	28.9	29.7
Self care	**31.2**	**31.9**	53.4	54.2	30.9	31.4	28.1	28.5

[2] Public care includes health center, referral hospital, provincial hospital and national hospital. Private care includes private hospital, private clinic, doctor's or nurse's home. Self care includes dedicated drug store, other shop selling drugs, patients home. Traditional care includes healer/herbalist, traditional midwife, monk and other.

Traditional care	**21.8**	**20.5**	4.3	4.3	13.4	14.3	25.4	23.7

The proportion of private medical care was highest in other urban areas. The ill in rural areas had highest proportions in public care and in traditional care.

Comparison with CSES 1997 and CSES 1999 data shows that the proportion that sought treatment has increased in Phnom Penh where both public and private facilities have increased.

Men and women are using health care in almost equal amount. Private health care is more popular (or more available) than public care in all three strata.

3.4. Health Care Expenditure

Table 6. shows the cost of treatment in the country. Among persons with an illness episode in the past four weeks, 11.6 percent have spent nothing or had no money to pay for care or medicine. Percent with nothing spent is much lower in Phnom Penh than in other strata. 48.6 percent spent 500 to 5,000 Riels or about US $0.12 to US $1.2. Urban people are spending more on health care than rural.

Average spending on medical care among persons with an illness episode in the month is 24 840 Riels (about US $6), 25 822 among men and 24 067 among women.

Table 6. Monthly spending on medical care in Cambodia 2004 according to CSES 2004. Percent by classes of spending and average spent by strata.

Health care spending	**Cambodia**	**Phnom Penh**	**Other Urban**	**Rural**
Nothing spent	11.6	5.7	11.6	12.2
500 - 5,000	48.6	32.7	43.7	50.9
5,001 - 10,000	12.2	20.0	13.7	11.1
10,001- 20,000	10.0	14.8	10.6	9.4
20,001- 50,000	9.3	12.4	11.4	8.7
50,001- 6,500,000	8.4	14.4	9.0	7.6
Total	100.0	100.0	100.0	100.0
Average spent monthly	**24 840**	**47 627**	**29 517**	**21 743**
Men	25 822	45 563	32 256	22 944
Women	24 067	49 112	27 137	20 798
No of ill past 4 weeks	2 477 000	229 000	225 000	2 023 000
Number in sample	14 009	1 546	1 587	10 776

4. Nutrition and Prevention measures for Child Health

The nutritional status of children is a comprehensive measure that reflects the level of household, community, and national development. Inadequate nutrition is a direct result of insufficient food intake, or repeated infectious diseases, or a combination of both. It results in increased risk of illnesses and death. Anthropometric measurements of height and weight of children can be thought of as outcome measures together with infant and child mortality of all the factors that affect children's health. Such measurements have been done in CSES 2004 but are not yet ready for presentation in this report. What is reported here are some first tabulations on two other factors of singular importance for infant and child health; breastfeeding practices and vaccinations.

4.1. Breastfeeding

Breast milk is the primary source of nutrients for infants and also transfers immunities from mother to child. 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 diarrhea disease.

From six months to 24 months, breast milk 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 child.

It often replaces breastfeeding and allows pathogens to be introduced to the child due to preparation in unsanitary conditions. *Table 5* shows the percentage of children who are exclusively breastfeed, the percentage of children who are giving semi-solid/solid foods along with continued breastfeeding and the percent of children who are feed with a bottle with a nipple.

The CSES 2003/04 collected data on infant feeding for all children born in the two years preceding the survey. As shown in Table 5, as many as 97.0 percent of children under age 2 have been breastfed during some period. However, only 30 percent of children were given breast milk as first thing after birth. Almost two out of three children are first given water or sugar water.

Table 5. Breastfeeding of children under two years of age. Percent by age

Ever breastfeed the child	Cambodia	Phnom Penh	Other urban	Rural
Yes	**97**	95	96	97
Given to child directly after birth				
Water	**39.8**	38.7	38.8	39.9
Sugar water	**24.2**	6.6	26.2	25.2
Juice/coconut water	**1.0**	0.2	0.9	1.1
Tea	**0.5**	0.6	1.6	0.3
Sweet condensed milk	**1.8**	2.4	3.7	1.5
Infant formula	**1.2**	3.7	1.9	0.9
Breast milk	**30.0**	45.4	25.5	29.4
Other	**1.6**	2.5	1.5	1.6

Of children ever breastfed about 25 percent were given breast milk within an hour after birth. This increased to about 30 percent getting breast milk within two hours and to 35 percent within three hours. However, as many as 28 percent of new born babies are not given breast milk during the first day after birth.

These figures are given as approximations because data are not finally edited for inconsistencies between length of time given in minutes, hours and days after birth.

4.2. Vaccinations

In the CSES, mothers were asked to show the interviewer the yellow cards of all children less than two years 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.

Table 6 shows the percentage of children with yellow cards 81%; no yellow cards 6% and never vaccinated 13%.

Table 6. Children under two years with yellow cards or not vaccinated. Percent by stratum.

Has child yellow card?	Cambodia	Phnom Penh	Other urban	Rural
Yes yellow card	**81**	88	79	81
No yellow card	**6**	4	6	6
Never vaccinated	**13**	8	15	13
Total	**100**	100	100	100

83 percent of children have received vitamin A. and thus 17 percent have not. Children in Phnom Penh areas were slightly higher than other sectors (85 percent).

Table 7 Percent of children 2 years not given vitamin A by stratum

Given Vitamin A	Cambodia%	Phnom Penh%	Other urban%	Rural %
Not	17	15	17	17

Three percent of the Cambodian children 2 years or younger have suffered from night blindness.

Table 8. Percent of children suffering from night blindness by stratum

Night-blindness	**Cambodia%**	**Phnom Penh%**	**Other urban%**	**Rural %**
Yes	**4**	4	2	3

5. Prevention for public health

Prevention of illness is better than curing illnesses that have occurred. But even with the most comprehensive of public health prevention measures some will inevitably be hit by illness or injury over the life time course. Even if modern medicine can perform miracles not all illnesses can be cured so there must also be care for the illnesses and disabilities that cannot be cured.

The 2004 CSES collected data on some of the preventive measures that are included in public health policies by the Royal Government of Cambodia and other actors in prevention policy. These measures include salt iodization, anti-smoking measures, HIV/Aids awareness and the use of mosquito nets. In this first version of the report, some preliminary tabulations are presented mostly to indicate the scope of data available in the CSES 2004.

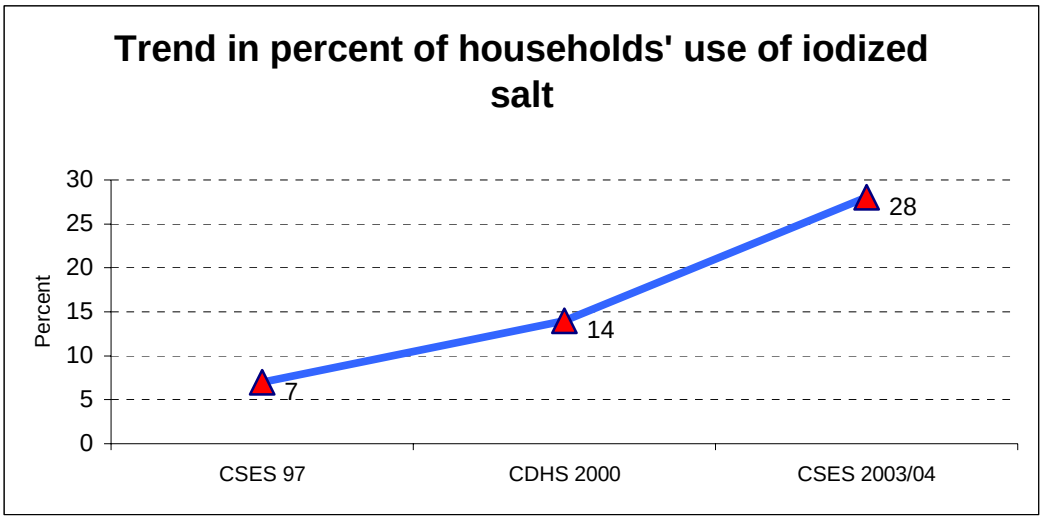
5.1. Salt Iodization

Households using iodized salt have increased from 7 percent in 1997 (CSES97) to 28 percent in 2004 (Figure 4.6). There are huge differences between the strata, ranging from only 19percent in rural areas to 86percent in Phnom Penh.

Table 9. Use of Iodize salt by Cambodian household. Percent users by stratum.

Household using Iodize salt	Cambodia	Phnom Penh	Other urban	Rural
Yes	**28.3**	86	39	19

Figure 7.



5.2. Reducing smoking

This section presents information on smoking prevalence among the Cambodian population. In addition to the numerical values by stratum we show that one out of five persons 15 years and over are smoking regularly. Smoking is typically male dominated with more than four out of ten men smoking.

The daily smoking is more widespread in the rural than in urban areas, smoking in rural sector amounted to 23 % as against 9 % in Phnom Penh.

The low rates for women can partly depend on under reporting of female smoking. It is often more accepted that men smoke than that women do.

Table 10. Prevalence of smoking in the population 15 years and over. Percent by sex and stratum in Cambodia 2004 CSES.

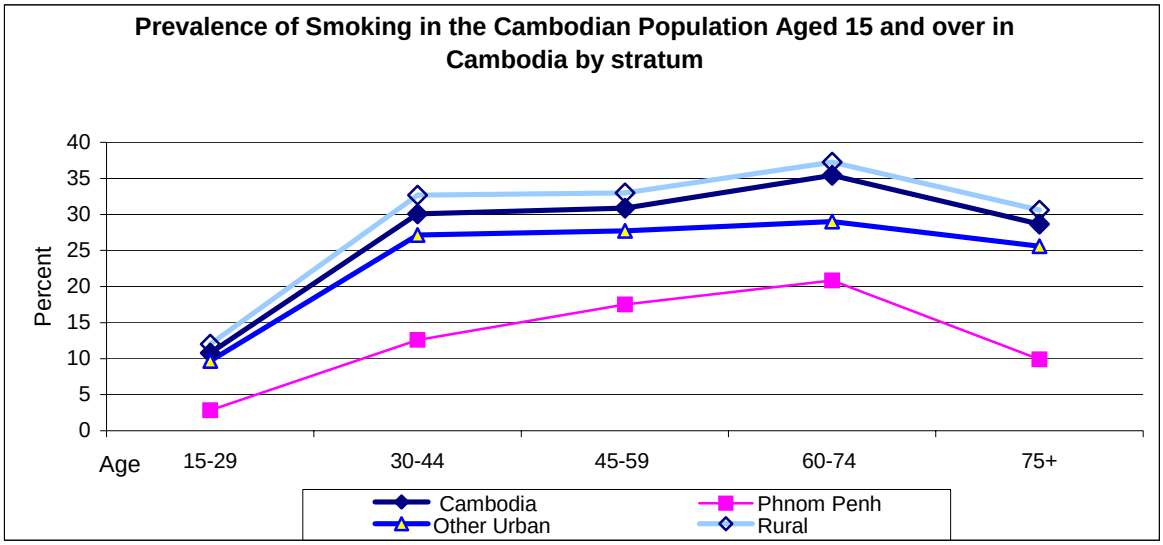
Daily smoker	Cambodia	Phnom Penh	Other Urban	Rural
Yes, Men	**41**	17	35	45
Yes, Women	**4**	1	4	4
Yes, Both sexes	**21**	9	19	23

5.2.1. Prevalence of smoking

Young people are smoking much less than old people and urban people are smoking less than rural people. The lower smoking among the oldest can be an effect of shorter lifetime for smokers. Those who have been smoking have died prematurely.

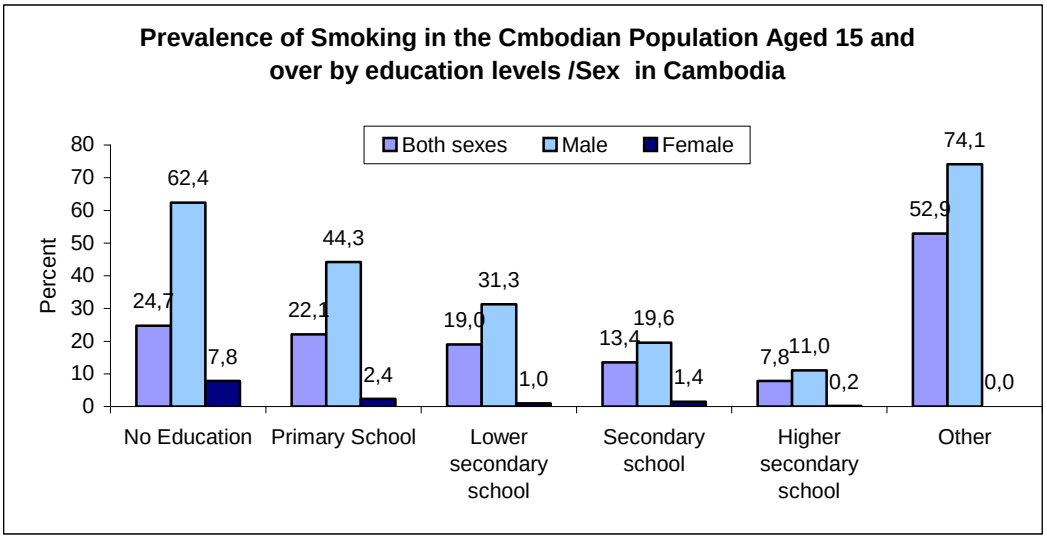
A comparison with the results of CSES 1999, this survey shows the current prevalence of smoking for both sexes in Cambodia have slightly increased (15% - 21.3%) in all ages. Therefore the prevalence of smoking in Cambodia was actually increased slightly within these ages during the last 5 years (from 1999-2004).

Figure 8.



As shown in *Figure 8* the highest smoking rate for both sexes is about 25 percent across to whom were never pass any education level, especially for males among hundred persons had smoking sixty two persons, second false into the level in primary school by 22 percent, for males had reported their smoking daily 44 persons among hundred. The one hand, smoking rates apparently coming down and downward whenever the smokers are becoming higher education level. The current prevalence of smoking both sexes for the other education level have strongly increased. Smoking is well correlated with education, the higher education the lower prevalence of smoking for both sexes.

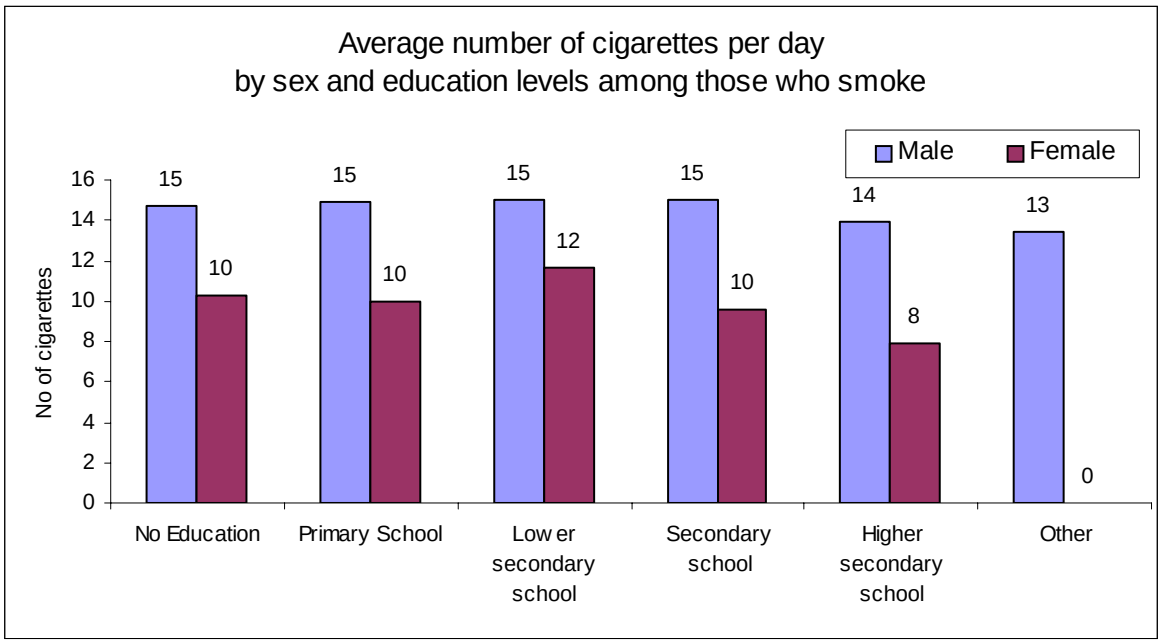
Figure 9.



5.2.2. Average cigarettes per day per person

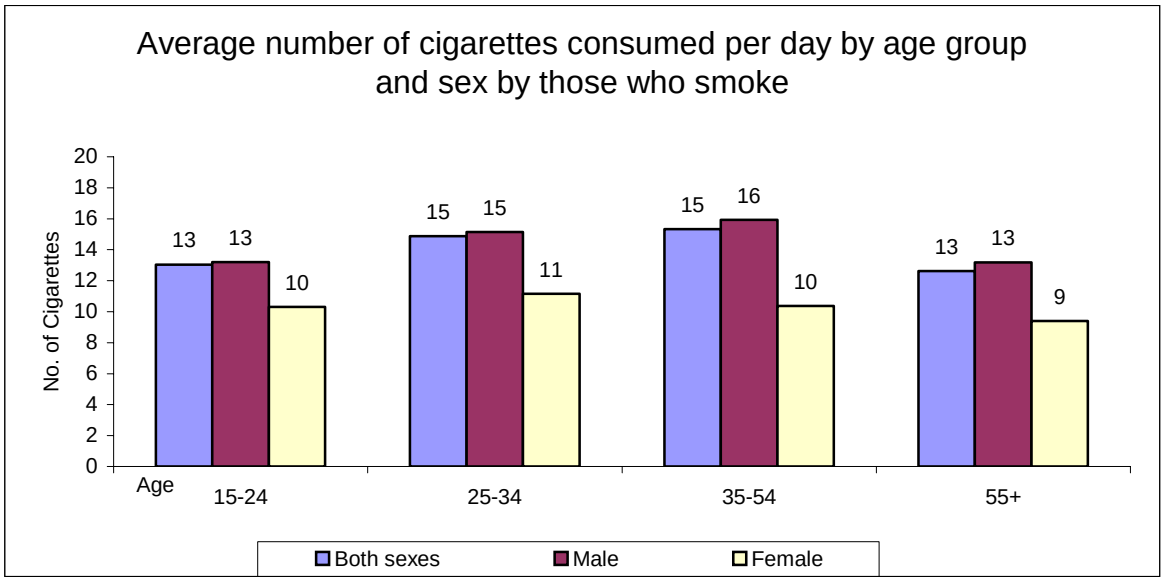
The CSES survey estimated the average consumed among smoked of cigarettes daily per person by sex in Cambodia. The lowest cigarettes consumed for female higher education level respectively 8 pieces and slightly increased for female lower secondary school 12 pieces respectively. However it was noted that the number cigarettes consumed may also differ between males and female and the higher for male respectively 15 pieces of the cigarettes. The average daily consumption of cigarettes is about 15 cigarettes per day for men and 10 for women. The number of cigarettes is almost the same for all education levels.

Figure 10



The average consumption of cigarettes is slightly bigger for the middle aged than the younger and the older.

Figure 11.



5.2.3 Knowledge about Smoking effect

Table 4.4.3. shows the percentage of population by sex and aged 15 years and over who were aware of or knowledgeable about smoking problems. Regardless of their age, about 87 percent of the population in Cambodia reported that smoking tobacco could cause dangers to the smokers in a great deal. The awareness was slightly different. Higher education level leads to higher awareness.

Table 11 Percentage who believe that smoking cigarettes can be harmful to health by education level and sex

Percent

Health knowledge	Both sexes	Male	Female
No Education			
• Yes	79.6	82.9	78.1
Primary School			
• Yes	87.6	88.3	87.0
Lower secondary school			
• Yes	92.7	93.2	91.9
Secondary school			
• Yes	93.6	93.9	93.1
Higher secondary school			
• Yes	97.7	97.5	98.2
Other			
• Yes	75.8	72.0	85.2

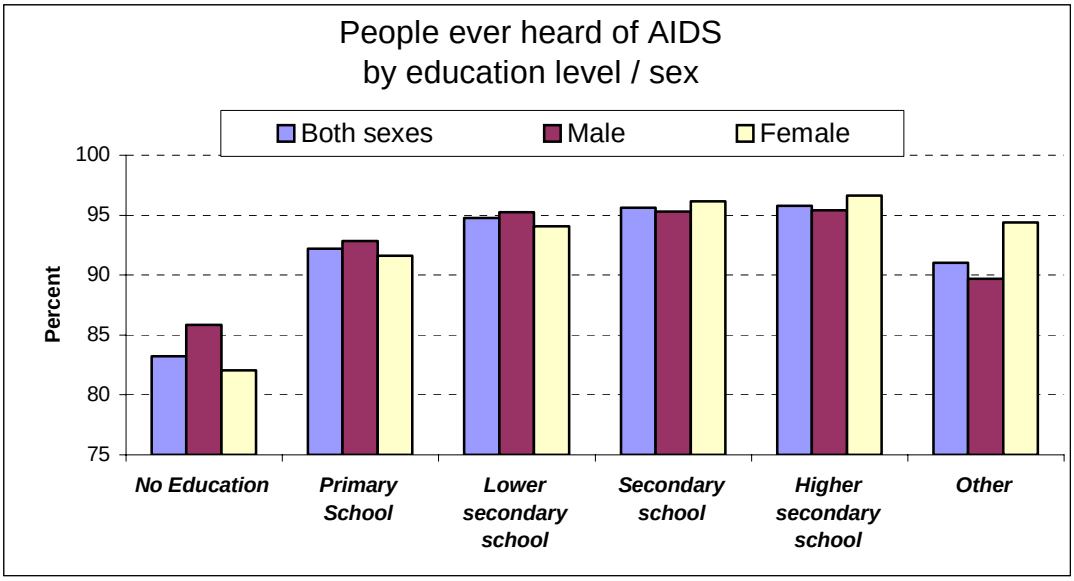
5.3. HIV /Aids awareness

The CSES 2004 included a section of questions that addressed awareness of HIV/AIDS for person age 15 years and over. 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).

5.3.1. Knowledge of HIV/AIDS

A very high percentage of Cambodian (90 percent) has heard of AIDS. They know someone personally who has AIDS or who has died of AIDS. Given the high levels of awareness of this syndrome in both sexes, knowledge of HIV-related issues is also important in understanding how to prevent contracting HIV and in checking the spread of the disease in a population. Their believe that a healthy-looking person can have the virus, and especially most people also recognize that the infection can be transmitted to another person by sexually, injection, blood transfusion and from a mother to her child in a variety of ways. The awareness is lower for lower educational levels.

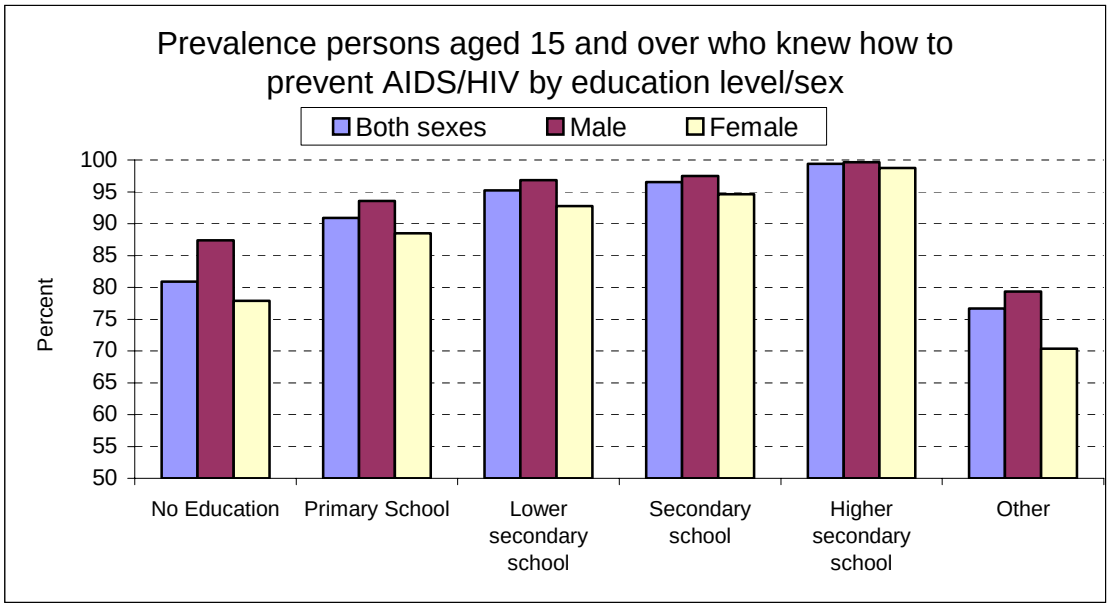
Figure 12.



5.3.2. Prevention of HIV/AIDS

Awareness of HIV/AIDS is nearly universal among people aged 15 years or more 90 percent of person interviewed report to have knowledge of the disease. Respondents were asked if they know of ways to prevent HIV/AIDS. About 90 percent know of at least one method to prevent AIDS. 73 percent report that use of condoms can prevent the disease. Limiting sexual activity to one partner and abstain from sex is known by 7 percent (See appendix on table H5).

Figure 13.



5.4. Using mosquito nets

Almost all households (94%) are using mosquito nets but only 4 percent are impregnated.

Table 12. Distribution of households using mosquito nets by sectors, percent.

Malaria protection	Cambodia	Phnom Penh	Other Urban	Rural
Use mosquito nets				
Yes	94.3	96.4	97.5	93.7
Nets impregnated				
Yes	4.0	1.7	4.6	4.2
Don't know	3.3	1.0	2.0	3.8

Annex 1. Excerpts from the fieldwork manual

14-HEALTH

This section must be completed during week 4

Respondent: The interviewer must contact the head of household to complete this part. If he/she is not at home then and only then try with his/her spouse. If both of them are absent, then the interviewer can contact another adult household member.

Ask about all the household members.

A. ILLNESS DURING THE PAST 4 WEEKS

Column 1: It is pre-printed and is the "**Id. Number**" of each household member.

Note: You must write the entries for each person on this section **against the same *Id Number* from the household list**.

It is vitally important to record the information about a person in front of the same unique Id number (from col.1 of the List of Household Members: Initial visit, Part A)

Column 2: Ask how the respondent would evaluate the health of the household member you are asking about.

Column 3: Ask for a similar evaluation, but comparing with people of the same age.
Column 4: Ask what disability has the household member you are asking about . If none, then write "00" and skip to column 6.

Disability
A restriction or lack of ability to perform an activity in the manner or within the range considered normal for a human being is defined as disability. It describes functional limitation or activity restriction caused by an impairment. The survey ascertained information by inquiring whether the person had any major problem with his/her body, mind or behavior that limited the persons ability to participate in work, school, or ordinary social life, which is a permanent or long-term condition but not temporary illness.

Column 5: Ask what was the cause of this disability.

Column 6: Ask if the household member you are asking about has had any illness, injury or other health problem in the past 4 weeks. If no, then skip to column 13.

Illness
For the purpose of this survey, any short-term or long-term health problem such as a sickness, injury, or a pregnancy related problem was defined as illness.

Column 7: Ask what was the type of illness, injury or other health related symptom. Ask for the most important one.

Column 8: Ask whether the household member seek care for any health problem in the past 4 weeks. If no, write code 2=No and skip to column 10.

Column 9: Ask which provider the household member usually consults for care. .

Column 10: Ask if the household member you are asking about was hospitalised for treatment/care during past 4 weeks. If no, write code 2=No and skip to column 12.

Column 11: If yes, ask how many days was he/she hospitalised during past 4 weeks. If he/she entered the hospital prior to four weeks ago, but remained in the hospital for some time during the four week period then also you should enter "1=Yes".

Note: The term hospitalization used refers to treatment in a hospital or clinic which requires spending at least one night in the facility. A synonym is "inpatient care". "Outpatient care" refers to treatment in a hospital or clinic which does not require an overnight stay.

Column 12: Ask how much in total was spent on medical care in the past 4 weeks, including all fees or charges paid to health personnel or health care institutions, cost of medicines, and other supplies, for that household member.

Column 13: Ask if the household member uses (hammock) mosquito net while sleeping.

Column 14: Ask if the nets of this person were impregnated with safe pyrethroid insecticide to prevent malaria transmission during the past 12 months, that is since ..[MONTH]..last year.

B. CHILD FEEDING AND VACCINATIONS

Respondents: Each woman who has a child aged up to 2 years (do include adopted children). You must try to interview **each woman personally**. If there are no children aged up to two years old, then go on with the next section.
Column 1: It is a serial number, used to identify the children.

Column 2: In this case the "**Id Number**" of the woman is not pre-printed. You must copy the "**Id Number**" from the list of household members (Initial Visit: Part A).

Column 3: If the child lives in the household, then copy his/her "**Id Number**" from the list of household members (Initial Visit: Part A). Otherwise, write "98" and go on with following child of the same woman or with the next woman.

Note: The same woman can use one, two or even more lines: One for each child aged up to 2 years.

Column 4: Ask after birth of that child, what was the first thing she gave to him/her to drink.

Column 5: Ask if she ever breastfed the child. If no, write code 2=No and skip to column 7a.

Column 6: Ask her how long after birth of the child she initiated breastfeeding him/her.

If she started breastfeeding the child only some minutes after the delivery, then write the answer in column 6a (Minutes), and leave columns 6b (Hours) and 6c (Days) blank.

If she started breastfeeding the child some hours after the delivery, then write the answer in column 6b (Hours), and leave columns 6a (Minutes) and 6c (Days) blank.

If she started breastfeeding the child some days after the delivery, then write the answer in column 6c (Days), and leave columns 6a (Minutes) and 6b (Hours) blank.

Column 7: There are 7 questions in this big column. You should ask each of them and write down then answer in the corresponding column:

a. "In total, how many times yesterday during the day and night was your child given *plain water*? **Write down the answer in column 7a.**

b. "In total, how many times yesterday during the day and night was your child given *infant formula*? **Write down the answer in column 7b.**

c. "In total, how many times yesterday during the day and night was your child given *other milk, such as powered or sweet condensed milk*? **Write down the answer in column 7c.**

d. "In total, how many times yesterday during the day and night was your child given *fruit juice, such as coconut water*? **Write down the answer in column 7d.**

e. "In total, how many times yesterday during the day and night was your child given *any other liquids, such as sugar water, teas, canned soft drink (Coca Cola, 7 up etc...)*? **Write down the answer in column 7e.**

f. "In total, how many times yesterday during the day and night was your child given *rice soup water, samlo broth and soup broth*? **Write down the answer in column 7f.**

Column 8: Ask how many times did the child eat foods, such as rice, rice soup snack etc other than liquids yesterday during the day and night. Write the number of times. Write "0" if nothing.

Column 9: Ask if she (the mother of child) had night-blindness during the child´s pregnancy (the child you are asking about).

VACCINATIONS:

Column 10: Ask if the child has a yellow card.

There are several options:

The child has a yellow card.

You can see the card. Then, copy the information from the card into columns 11 to 14.

The yellow card has been lost, so you cannot see it. Try to collect the information from the mother of the child or other household member.

If the mother or other household member does remember the information on vaccinations for that child then complete the information in columns 11 to 14.

If the mother or other household member do not remember the information on vaccinations for that child then write “98” for "don´t know" for year and month.

The child **does not** have a yellow card. Try to collect the information from the mother of the child or other household member.

If the mother or other household member does remember the information on vaccinations for that child then complete the information in columns 11 to 14.

If the mother or other household member does not remember the information on vaccinations for that child but she/he remembers the child **was** vaccinated, then write “66” for "don´t know" for year and month.

The child has never been vaccinated. In this case, write code 3, and go on with next child.

12-HEALTH CHECK OF CHILDREN

This section must be completed during week 4

To be asked about each household member who is a child aged up to 6 years old.

Column 1: Is a pre-printed serial number.

Column 2: Copy the child´s “**Id Number**” from the list of household members (Initial Visit: Part A).

Column 3: Write down the date the child was measured.

Column 4: Write down the child´s height measured **in centimeters**. Do write down one decimal point, even if it is zero. If the child was not measured, then write down “998.0”

Column 5: Only if the child was measured, ask if the height was measured standing up or lying down.

Column 6: Write down the child´s weight measured **in kilograms**. Do write down one decimal point, even if it is zero. If the child was not weighted, then write down “998.0”

Column 7: Ask the mother or other household member if the child is given vitamin A.

Column 8: **Only for children 1 year old or more**: ask the mother or other household member if the child suffers from night-blindness.

B. SMOKING INFORMATION

To ask about all household members aged 15 and over.

Column 1: It is pre-printed and is the "Id. Number" or the "Id Code" of each household member.

Note: You must write the entries for each person on this section **against the same *Id Number* from the household list**.

There will be some ampty lines: those that correspond to household member that are outside the age-range defined for this section.

It is vitally important to record the information about a person in front of the same unique Id number (from col.1 of the List of Household Members: Initial visit, Part A

Column 2: Ask if the person is a daily smoker, that is if he/she smokes at least one cigarrete everyday. Is yes, then write code 1=Yes and skip to column 5.

Column 3: If the person is not a daily smoker, then as if he/she smokes sometimes.

Column 4: Ask if he/she has at any time during his/her life, been a daily smoker.
If yes, then write code "1=Yes" and skip to column 6.
If no, then write code "2=No" and skip to column 7.

For daily smokers:
Column 5: Ask how many cigarettes does he/she usually smoke per day.

Column 6: Ask for how many years in total he/she has been smoking daily. *If less than one year, write '0'*

For all household members aged 15 years and more:
Column 7: Ask whether the household member thinks smoking cigarettes can be harmful to one's health.

15-HIV/AIDS

This section must be completed during week 4

Respondents: Each household member aged 15 years and older. ***You must interview each member personally***.

Column 1: It is pre-printed and is the "**Id. Number**" of each household member.

Note: You must write the entries for each person on this section **against the same *Id Number* from the household list**.

There will be some ampty lines: those that correspond to household member that are outside the age-range defined for this section.

It is vitally important to record the information about a person in front of the same unique Id number (from col.1 of the List of Household Members: Initial visit, Part A

Column 2: Aks the person if he/she has ever heard of an illness called AIDS. If no, then write code 2=No and go on with next household member aged 15 years or more.

Column 3: Ask the person if he/she thinks there is something one can do to avoid getting AIDS or the virus that causes AIDS.

If no, then write code "2=No" and skip to column 5
If don´t know, then write code "3=Don´t know" and skip to column 5

If yes, then:

Column 4: Ask what he/she thinks one can do to avoid becoming infected.

Note: ***Do not read the codes to the respondent.***

When he/she mention the first thing, then look for the code in the list and write this code in column 4a.

You can probe the respondent: "*Anything else…?*" Write the code of the second answer in column 4b, ond so on.

Code up to 5 answers.

Column 5: Ask if he/she has ever been tested to see if he/she has AIDS.

If **no**, then write code "2=No" and skip to column 7
If **unsure**, then write code "3=Unsure" and skip to column 7

If yes, then:

Column 6: Ask where did he/she go for the test.

Note: ***Do not read the alternative codes!***

After this answer, go on with next household member aged 15 years or more.

For persons who have never been tested to see if they have AIDS:
Column 7: Ask if he/she would want to be tested for AIDS.

Column 8: Ask if he/she knows a place where he/she could go to be tested for AIDS.

If **no**, then write code "2=No" and go on with next household member aged 15 years or more.

If yes,
Column 9: Ask where he/she can go for the test. Use the codes from column 6.

Note: ***Do not read the alternative codes!***