



**NATIONAL AIDS AUTHORITY OF CAMBODIA**

*United Nations General Assembly Special Session on HIV/AIDS*

## Monitoring the Declaration of Commitment

January 2004 – December 2005

**December 31, 2005**



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## Abbreviations

ARV: Antiretroviral

BSS: Behavioral Sentinel Surveillance

DSW: Direct Sex Workers

FHI: Family Health International

HSS: HIV Sentinel Surveillance

IDSW: Indirect Sex Workers

MOEYS: Ministry of Education, Youth and Sport

MOND: Ministry of National Defence

MOP: Ministry of Planning

MORD: Ministry of Rural Development

MOWVA: Ministry of Women and Veteran Affairs

NAA: National AIDS Authority

NCHADS: National Centre for HIV/AIDS Dermatology and STIs

NGO: Non Governmental Organization

NMCHC: National Mother and Child Health Centre

NSP: National Strategic Plan (for Multi-Sectoral and Comprehensive Response to HIV/AIDS 2001-2005)

PMTCT: Prevention of Mother to Child Transmission

PSI: Population Service International

UNDP: United Nations Development Programme

UNGASS: United Nations General Assembly Special Session

UNICEF: United Nations Children's Fund



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HE Hong Sun Huot  
Chair  
National AIDS Authority





## Status at a glance<sup>1</sup>

### Reduced HIV prevalence, but still generalised

**The good news is that HIV prevalence among adults continues to decrease.** According to the 2003 HIV surveillance data released by the National Centre for HIV/AIDS, Dermatology and STIs (NCHADS) in December 2004, the estimate of the national prevalence of HIV stands at 1.9% of all people aged 15 to 49 years, down from 2.2% in 2001. In all sentinel groups that formed part of the HIV surveillance system, the decline in HIV prevalence is evident. Levels of awareness about HIV/AIDS have gone up, and behaviour has changed. The prevalence among ante-natal care (ANC) attendees declined from 2.9% in 1999 to 2.2% in 2003. Among sex workers prevalence decreased from over 40% to around 20% over the same period.

**The bad news is that Cambodia's mature epidemic continues to be the worst in the region.** Although HIV transmission is rapidly declining, it has not been eliminated. Almost half of new infections are now among married women. One third of new infections occur from mothers to children. As long as the epidemic is generalised, there remains a risk for rapid resurgence as soon as risk behaviours increase. Although prevalence stabilised among pregnant women, youngest women still have the highest prevalence.

**Relatively small but significant groups appear to be severely affected.** Men who have sex with men (MSM) have a high prevalence of HIV (14-15%), along with other sexually transmitted infections (STI). Heroin injectors, a rapidly growing group, have an even higher prevalence rate (37-45%). White-collar workers, amphetamine-type substance (ATS) users, park-based sex workers, truck drivers were also identified as emerging groups at risk to HIV.

### Pockets of risk behaviour and changing sexual networks

**Condom use in brothels is higher than ever before, and fewer men visit sex workers.** A more conscientious use of condoms appears to be mounting. Ninety-six percent of brothel-based sexual transactions are protected. Forms of sexual networking, meanwhile, are changing.

**Men increasingly turn to indirect sex workers and sweethearts for sex, with whom they are less likely to use a condom.** Indirect sex workers (including freelance and park-based sex workers) are more likely to deny involvement in sex work and are consequently difficult to reach. In 2004, the estimated number of IDSW was 16,091, more than twice the estimate in 2000, at 7,400.

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<sup>1</sup> Extracted from the 2005 Situation and Response Analysis report produced in the development of the National Strategic Plan on a Comprehensive and Multisectoral Response to HIV/AIDS 1006-2010.

Condom use by men with sweethearts is much lower than for beer promotion girls and karaoke workers because trust is a barrier to condom use. Condom use among married couples is even lower, at 1-4%.

### **Factors of vulnerability: some change, some remain**

**The ratification of the AIDS law in 2002 is a success story.** The law creates a favourable legal environment for prevention and care, and aims to reduce stigma and discrimination. Decriminalisation of risk behaviours is mixed: although sex work remains illegal, special permission is granted to sex workers to participate in the 100% Condom Use Policy (CUP). Male-to-male sex is not illegal, but highly stigmatised.

**Poverty, however, continues to drive men to leave their families and wives, and women to sell sex in order to make ends meet.** The benefits of Cambodia's economic growth in recent years have not been felt by many people. More people, especially those from rural areas, still live below the poverty line. There is increasing rural to urban migration by people in search of economic opportunities, among them many young women who work in garment factories and young men who work in construction. Cambodians also migrate in search of employment, removing them from the protective environment of family and society. In Thailand, for example, there are presently over 100,000 Cambodians registered as migrant workers, and a recent study of Cambodian fisherman in Thailand found that only 35% regularly used condoms with sex workers, as opposed to rates of condom use in commercial sex in Cambodia which are reportedly over 90%. Recently, there are fears that garment factories may close due to the end of preferential US textile quota for Cambodia, and that more women may enter sex work when these closures do happen.

**Gender inequities continue to fuel sexual transmission.** Condom negotiation within marriage is not acceptable for women. Cases of rape are often settled out of court while survivors themselves are often stigmatised. Violence or coercion is often used to force women into commercial sex work. For sex workers, violence is commonplace. Gang rape carried out by groups of men on park-based sex workers or those whom they perceive as 'easy women', is also a real danger.

**Access to basic health and social welfare services for most Cambodians is difficult, thus reducing the uptake and potential of new services such as PMTCT.** The rural poor, who live farthest from health centres and in areas with low service coverage, are significantly disadvantaged. Only one third of the population has access to the minimum package of health services, and only one in ten births takes place in a health facility. Of the estimated 500,000 pregnant Cambodian women per year, only 48.6% ever attend ANC at least once, the causes of which may be unacceptability, inaccessibility and/or unavailability of sexual and reproductive health services.

## **Increased need for care, support and impact mitigation**

**Every day, more people with HIV become sick and join the ranks of those needing care and support.** The number of adults with HIV/AIDS was estimated at 126,000 in 2003. Despite the limited health infrastructure, the Ministry of Health, through the National Centre for HIV/AIDS, Dermatology and STIs, as successfully implemented a comprehensive system for the provision of care to people living with and affected by HIV, and AIDS patients, the Continuum of Care (CoC). This includes voluntary counseling and testing, psychosocial support, treatment of opportunistic infections, home based care, antiretroviral therapy, support to households affected by HIV and palliative care. The system is being scaled-up by NCHADS in collaboration with non-governmental partners with funding from a number of donors, most notably the GFATM and DFID, and USAID respectively. The coverage of ART is a good indicator of the successful scaling up of the CoC, with 60% of eligible adults and 40% of children currently enrolled on ART.

**Family livelihood is severely affected as more families, spouses and children are left behind due to the death of a breadwinner.** Each day, fifty Cambodians die due to the consequences and complications of AIDS. There may be as many as 77,000 orphans and vulnerable children (OVC) in Cambodia, and thousands of families whose main providers are either ill or dead.

**Generalised epidemics in other countries have negatively impacted on crucial sectors like agriculture, education, security and industry.** In Cambodia, however, this wider impact of HIV has not been adequately assessed. There is, so far, no evidence of the negative impact of HIV/AIDS on the health care sector. In fact, the epidemic has generated new jobs in the health sector, in order to deal with the increasing number of clients.



## Overview of the AIDS epidemic

### *Impact indicators*

#### Prevalence of HIV in the general population

Surveillance data continues to show a declining prevalence of HIV in Cambodia. The current prevalence is now estimated at 1.9% of the general adult population (aged 15-49) (figure 1). In addition, previous prevalence estimates have been revised downwards as a result of refinements in the methodology used for prevalence estimation.

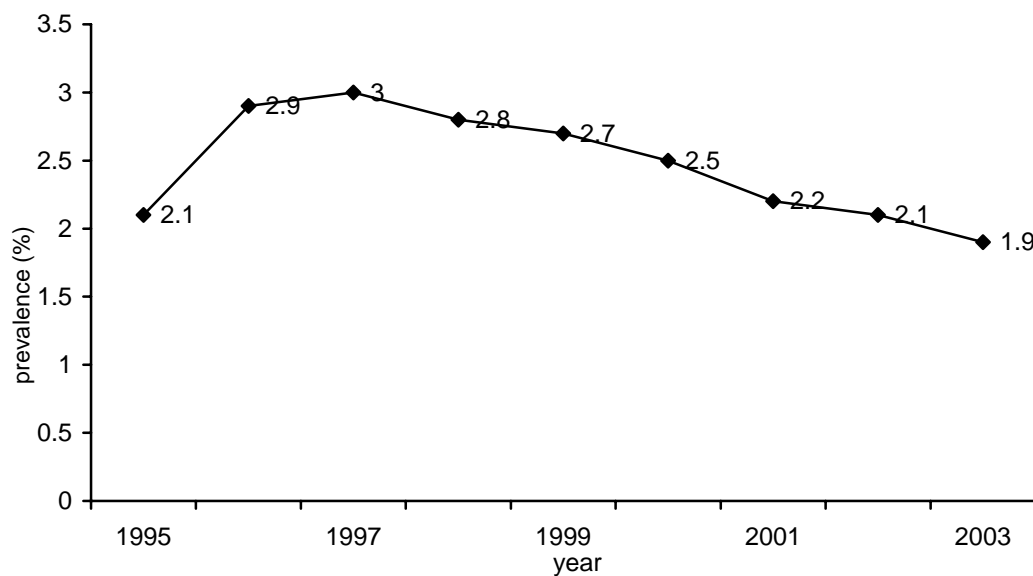


Figure 1. Estimated prevalence of HIV in the general adult population, 1990-2003. Source: HSS 2003 National Centre for HIV/AIDS, Dermatology and Sexually Transmitted Infections (NCHADS)

Using a prevalence estimate of 1.9% gives an estimated number of 126,000 adults living with HIV (figure 2).

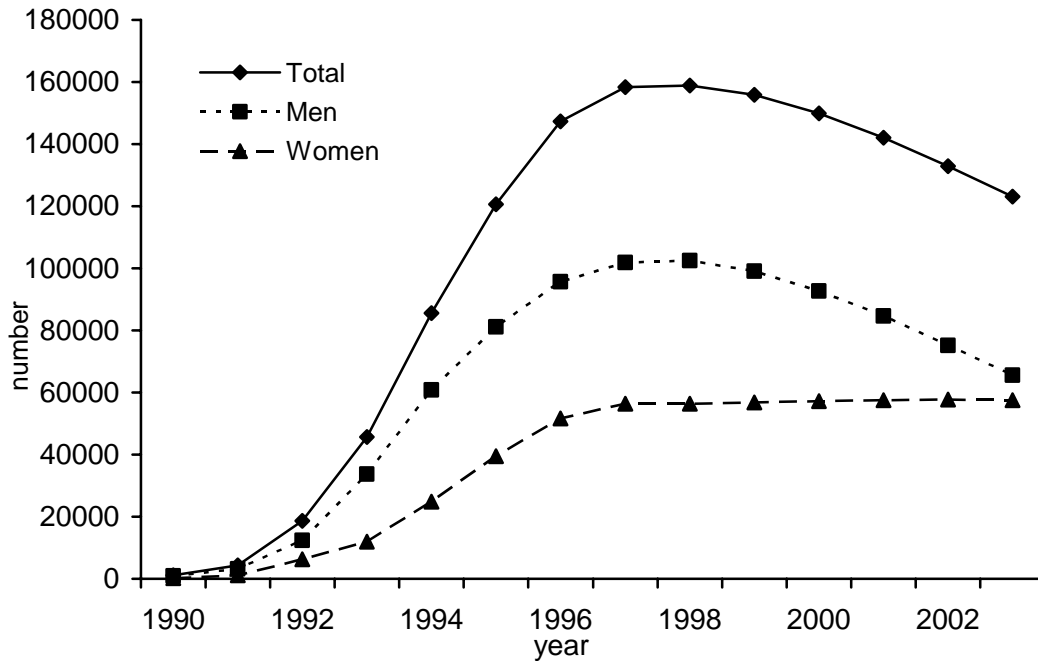


Figure 2. Estimated number of adults living with HIV, by sex, 1990-2003. Source: HSS 2003 National Centre for HIV/AIDS, Dermatology and Sexually Transmitted Infections (NCHADS).

### HIV incidence in the general population

While surveillance data continues to demonstrate falling prevalence, it is also apparent that the nature of the epidemic is changing. Of particular concern is the fact that the highest incidence of HIV is now observed in married women (figure 3) and their children. Almost 75% of new adult infections occur in women.

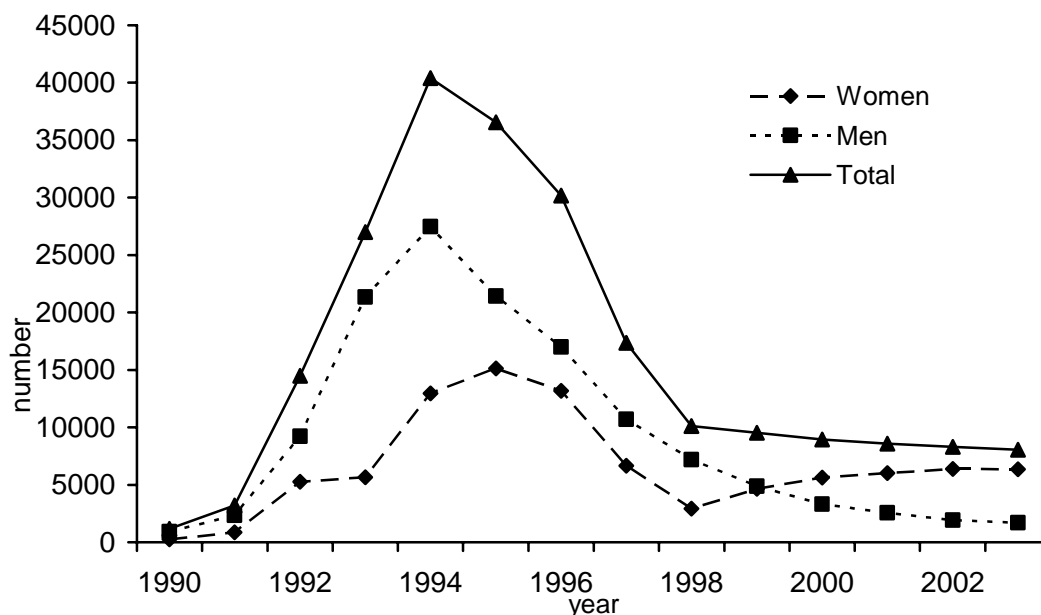


Figure 3. Estimated number of new HIV infections, by sex, 1990-2003, Cambodia. Source: NCHADS HSS 2003.

### Prevalence of HIV in young women

The prevalence of HIV in women aged 15 to 24 year is estimated to be approximately 0.36% (table 1).

This low figure largely reflects the relatively late age of sexual debut of women in Cambodia. As is presented later in this report, the mean age at first sex of both men and women is approximately 20 years. Excluding the non-sexually active section of this population results in a prevalence estimate of approximately 1.1%.

	15-19 years	20-24 years	15-24 years
<b>Women living with HIV</b>	1,147	4,827	5,818
<b>Prevalence</b>	0.14%	0.64%	0.36%

Table 1. HIV prevalence in young women. Source: NCHADS HSS 2003

### AIDS related mortality in the general population

Approximately 18,000 adults are estimated to have died from AIDS in 2003, and 100,000 since the beginning of the epidemic in 1990. Almost twice as many men have died from AIDS than women, reflecting the fact that the epidemic was initially fuelled by commercial sex work, and 65% of current mortality occurs among males (figure 4).

While still increasing, the rate of increase in mortality appears to be declining. Between 1995 and 1997, for example, the number of AIDS related deaths increased four-fold, while between 2001 and 2003 mortality increased by 8%. Given the delay in mortality likely to be associated with the rapid increase in

antiretroviral treatment coverage between 2003 and 2005 it is likely that mortality rates will plateau and begin to decline in the near future.

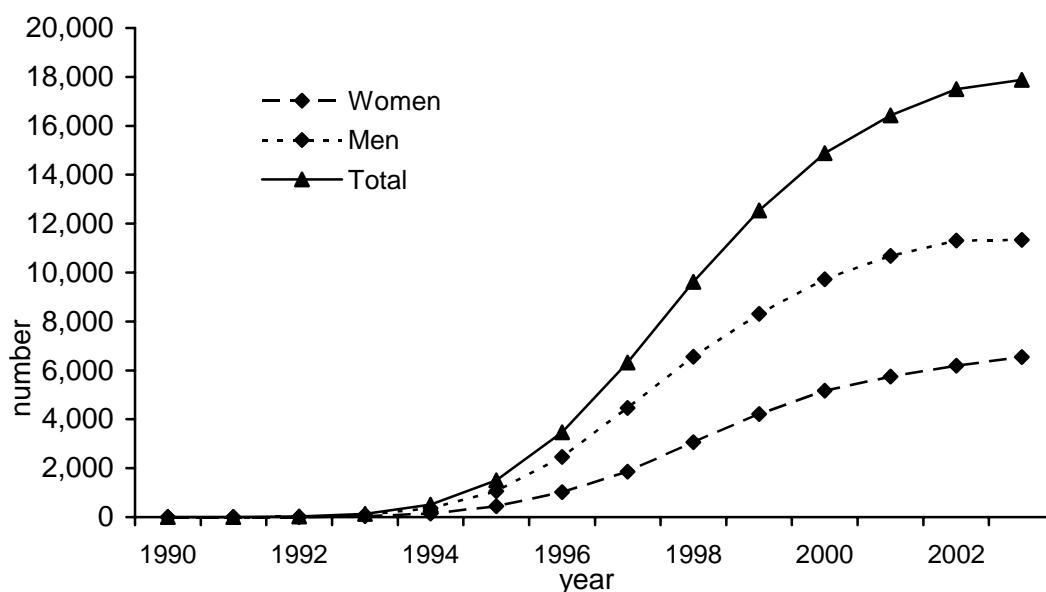


Figure 4. Estimated number of deaths from AIDS, by sex, 1990-2003, Cambodia. Source: NCHADS HSS 2003.

### Percentage of infants born to HIV infected mothers who are infected

Assuming a rate of transmission from mother to child of 25% in the absence of PMTCT and a 50% reduction in infection with PMTCT, it is estimated that 24.4% of infants born to HIV-positive women in Cambodia are infected. This is based on current coverage of PMTCT services, which are estimated to reach approximately 5% of HIV-positive pregnant women (table 2).

<b>Estimated number of HIV positive pregnant women</b>	8,600
<b>Proportion receiving PMTCT</b>	5%
<b>Number receiving PMTCT</b>	430
<b>Infections in infants of PMTCT mothers</b>	54
<b>Number not receiving PMTCT</b>	8,170
<b>Infections in infants of non-PMTCT mothers</b>	2,043
<b>Total infections</b>	2,096
<b>Proportion of infants born to HIV positive women who are infected</b>	24.4%

Table 2. Effectiveness of PMTCT services

### Prevalence of HIV in CSW

In the last round of the HIV Sentinel Surveillance system, the prevalence of HIV in direct (brothel-based) commercial sex workers was found to be 20%. The prevalence of HIV in indirect (non brothel-based) commercial sex workers



was 12%. This represents a continuing decline in HIV prevalence in this sentinel group (figure 5).

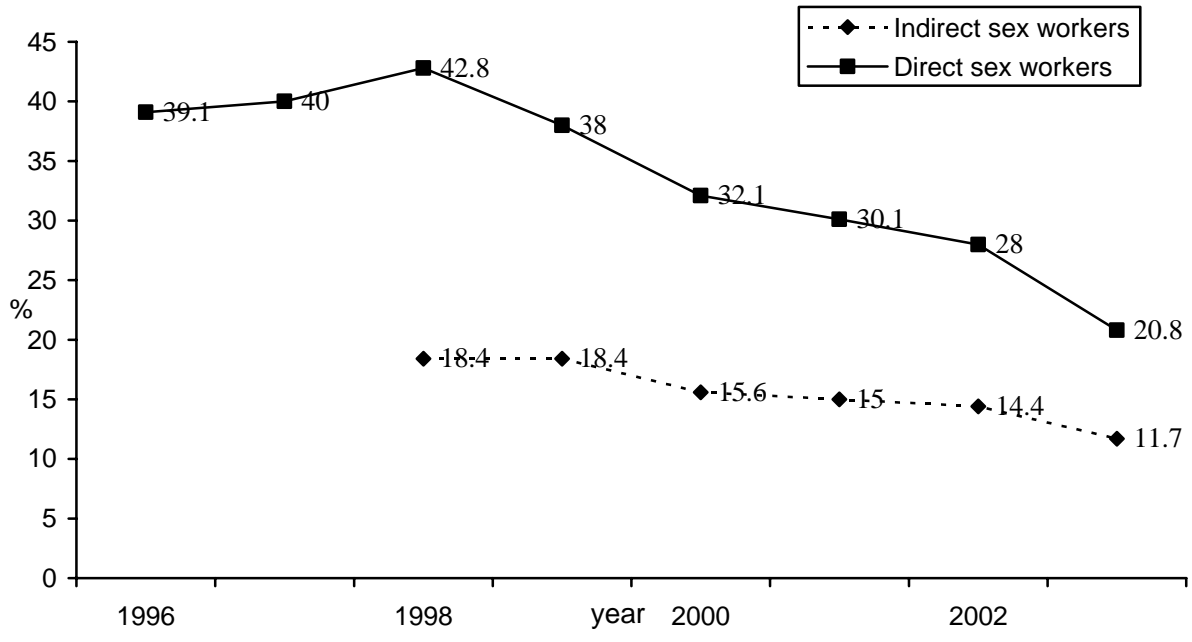


Figure 5. Estimated prevalence of HIV in commercial sex workers, 1996-2003. Source: NCHADS HSS 2003.



## National response to the AIDS epidemic

### *Government spending on HIV/AIDS*

Total government expenditure on HIV/AIDS in 2004 was \$1,012,000. This indicator does not take into consideration "in kind contributions" such as time involvement of government officials and the use of facilities and equipment of government at central, provincial and local level.

By contrast, the total amount of donor funding currently available for the national response to HIV/AIDS in Cambodia is over \$37 million annually.

This large amount of donor funds allows the Cambodian government to invest its resources in other developmental areas which do not attract such high levels of donor interest. It is therefore felt that government spending on HIV is a poor indicator of national commitment to the HIV/AIDS response.

Expenditure data is not yet available for 2005. The funding budgeted under the Royal Government of Cambodia's Priority AIDS Programme (Ministries of Health and Education and the National AIDS Authority) remained constant between 2004 to 2005, at approximately \$1.7 million per annum.

Following a prolonged difficulties in forming a coalition in 2003, a government was not formed until the latter part of 2004. In the interim period, very limited funds were released by the Ministry of Finance for any programme. Thus 2004 may have been an atypical year in terms of government spending on HIV/AIDS, and the proportion of budgeted funds disbursed by government in 2005 may be higher than that disbursed in 2004.

### *Percentage of people with advanced HIV infection receiving ARV combination therapy*

At the end of 2004 5,520 individuals with advanced HIV infection were receiving antiretroviral combination therapy. To bring the numerator into agreement with the age range of the denominator (15-49 years), those aged under 15 and over 49 should be excluded. Unfortunately data on adults receiving ARV treatment are not disaggregated by age, therefore those aged over 49 could not be identified for exclusion. However, it is known that 359 ARV patients were aged under 15. Excluding these gives 5,161 adults receiving ART. In 2005 this number increased to 11,284.

There are estimated to be 19,800 adults with advanced HIV infection in need of ART. Thus in 2004 26% of people with advanced HIV received ARV, while in 2005 57% of people with advanced HIV received ARV (figure 6).

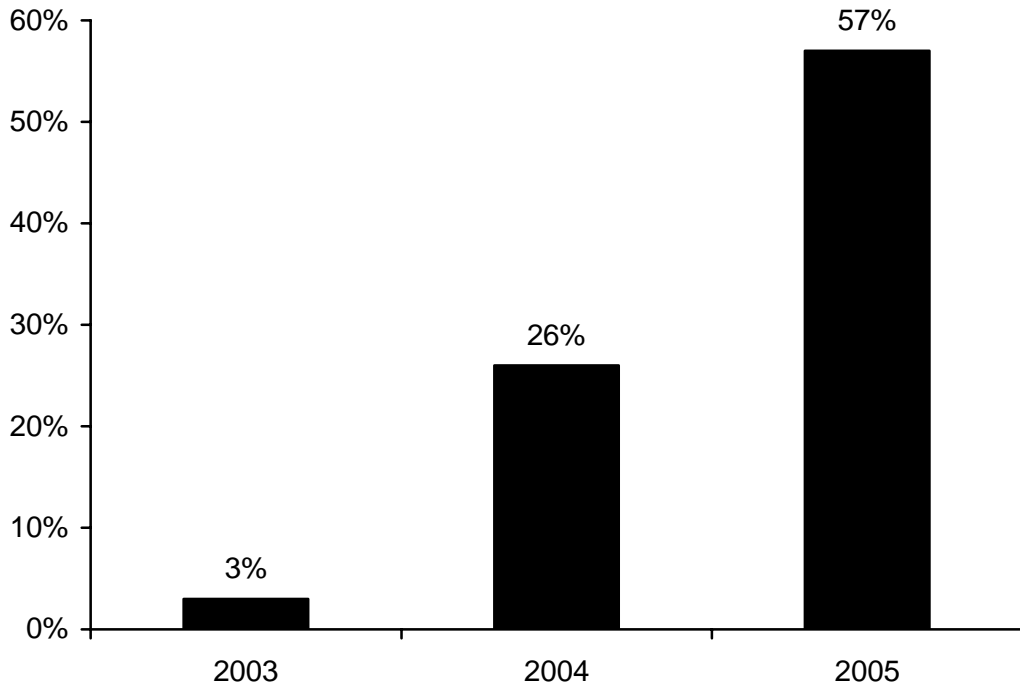


Figure 6. Proportion of adults with advanced HIV infection (CD4 count < 200) who are enrolled on antiretroviral therapy. Source: NCHADS, 2005.

As the HIV Sentinel Surveillance System does not sample children, there are no official estimates of the number of children living with HIV. However, modelling of HIV infected births based on the number of pregnant women with HIV results in an estimate of approximately 15,000 children (under 15 years) currently living with HIV, in addition to those adults reported above. Assuming that the proportion of children with HIV who are eligible for ART is the same as the proportion of adults, this gives an estimated 2,360 children with advanced HIV infection. Of these, 324 children (14% of eligible patients) were receiving ART at the end of 2004. By the end of September 2005, 1,071 children were receiving ART, increasing this proportion to 45% (figure 7).

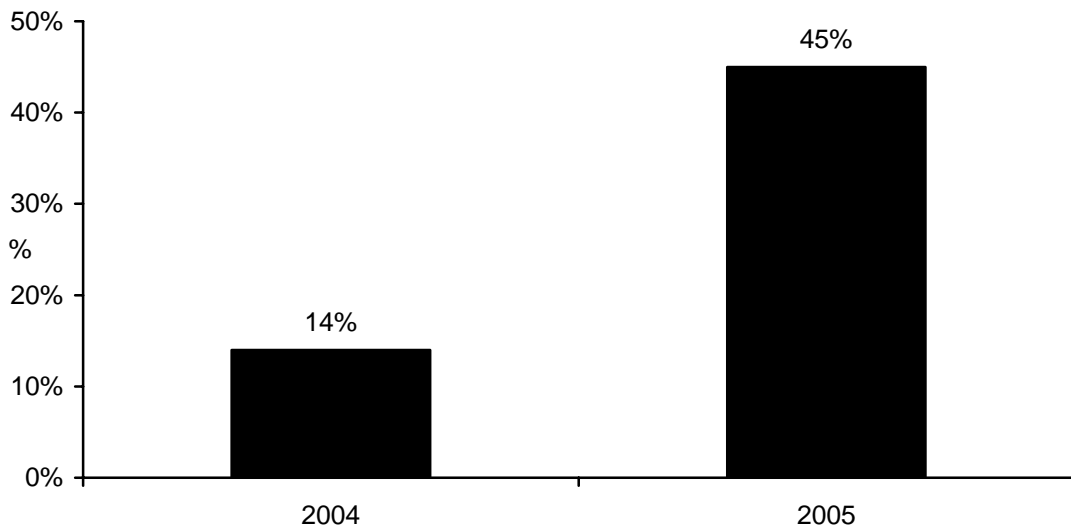


Figure 7. Proportion of children with advanced HIV infection (CD4 count < 200) who are enrolled on antiretroviral therapy. Source: NCHADS, 2005.

*Percentage of HIV positive pregnant women receiving a complete course of ARV therapy to prevent MTCT*

In 2004 328 HIV-positive pregnant women received HIV prophylaxis (single dose *Nevirapine*) to prevent transmission to their child<sup>2</sup>. In 2005 this number increased to 433<sup>3</sup>.

In both 2004 and 2005 8,600 HIV-positive pregnant women were estimated to have delivered<sup>4</sup>. Thus the coverage of PMTCT services in 2004 was 3.8% increasing to 5.0% in 2005 (figure 7).

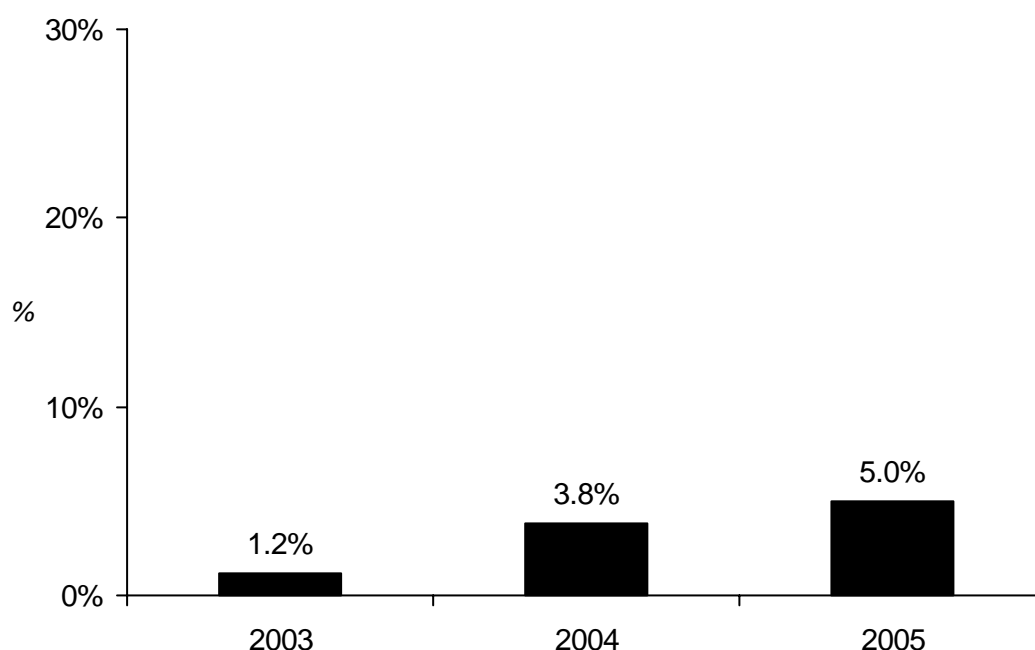


Figure 7. Percentage of HIV positive pregnant women who receive PMTCT services (single-dose *Nevirapine* at delivery).

In Cambodia's 2003 UNGASS report, the denominator used was the estimated number of HIV infected pregnant women attending antenatal clinics. Thus the coverage of PMTCT services was reported as 2.6%. Recalculating this indicator using the estimated total number of HIV infected pregnant women gives a figure of 1.17%.

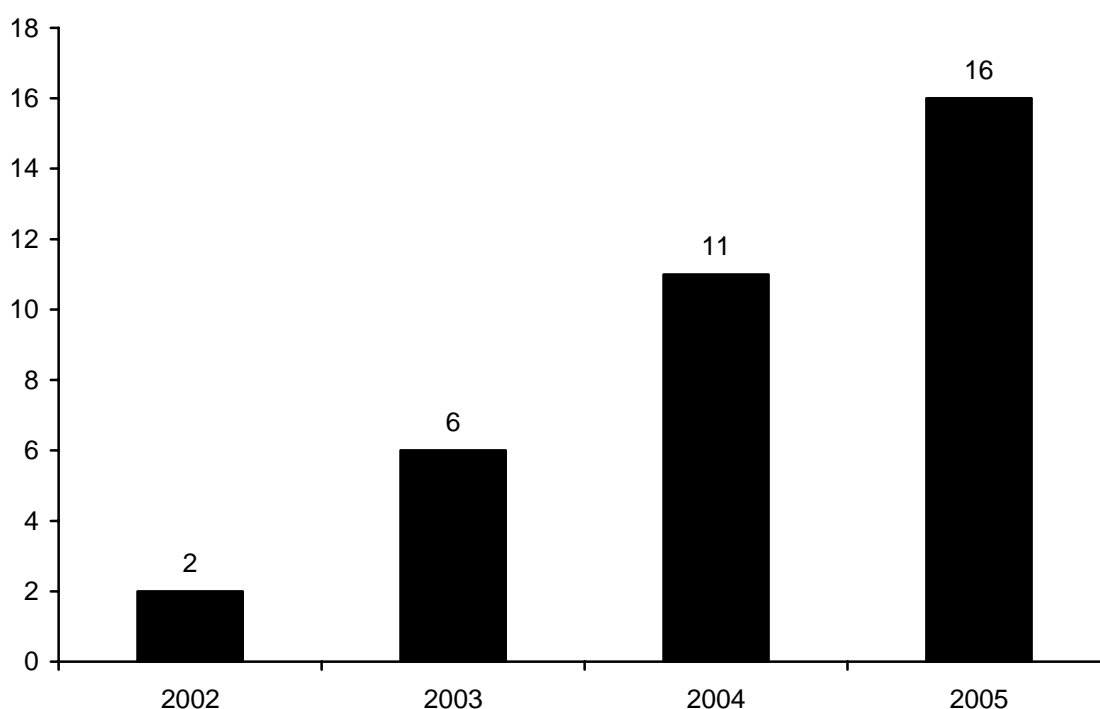
<sup>2</sup> Source: Maternal and Child Health PMTCT Program; Medecins sans Frontieres Belgium; Kantha Bopha Children's Hospital

<sup>3</sup> Data from 2005 was not yet available from Kantha Bopha or MSF. The coverage calculation assumes that the number treated at these sites in 2005 is equal to number treated in 2004. Data from NMCHC was only available for the first three quarters of the year, fourth quarter data extrapolated from first three quarters to estimate coverage for the full year

<sup>4</sup> Source: NCHADS ANC surveillance

In addition to the PMTCT programme of the Maternal and Child Health Centre, HIV prophylaxis is available through the private sector. In particular, Medecins sans Frontieres Belgium and France and the Kuntha Bopha Children's Hospital (Siem Reap). While these sites are not included in the following figures and tables, data from these service providers is included in the indicator calculation above.

The Ministry of Health, through the National Maternal and Child Health Centre (NMCHC), is rapidly scaling-up services for the prevention of mother-to-child transmission of HIV. This has resulted in a doubling of programme coverage between 2002 and 2004. In 2004 11 sites offered ARV prophylaxis under the NMCHC's PMTCT programme, while in 2005 the number of sites increased to 16 (Figure 8).



**Figure 8.** Number of sites offering HIV prophylaxis to HIV positive pregnant women under the Maternal and Child Health Centre's PMTCT programme, 2002-2005 (Maternal and Child Health Centre, 2004)

Ninety-four percent of women who delivered in these 16 sites **and** who were identified as being HIV positive received Nevirapine (Figure 9). However, of those who delivered in a health care facility, 71% were not tested for HIV. If the rate of HIV among those tested is applied to all those not tested, 240 HIV positive women delivered in health care settings, but were not identified as being HIV positive.

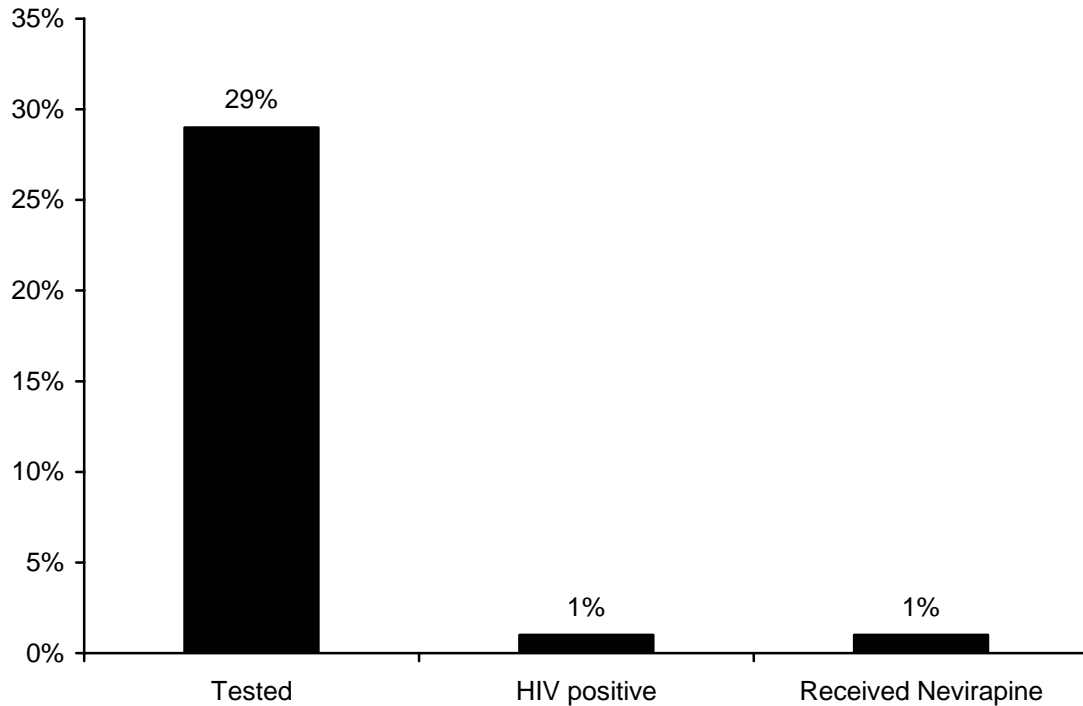


Figure 9. Percentage of women who delivered at health facilities who were tested for HIV; tested positive, and; were treated with *Nevirapine*.

While over 97,000 women attended ANC at least once, only 15,180 (17%) of these delivered at a health care facility. Of those who delivered outside a health care facility, 192 had been identified as being HIV positive. An additional 870 are likely to have been HIV positive, but were not identified.

Therefore, 206 women who were identified as being HIV positive in ANC did not receive PMTCT (14 individuals delivered in a health facility but did not receive Nevirapine, while 192 did not deliver in a health facility). An additional 1,110 pregnant women who attended ANC are likely to have been HIV positive but were not identified as being HIV positive.

A commonly cited explanation of the poor coverage of PMTCT services in Cambodia is the low level of utilization of ANC services (variously report as being between 30% and 50%). While this is correct (table 3), it can also be seen that even among those attending ANC, the majority (76%) of HIV infected pregnant women do not receive Nevirapine because they either (i) do not deliver at a health care facility (70% of all births), or (ii) are not tested for HIV (74% of all births) (table 4).

	Received <i>Nevirapine</i>	Did not receive <i>Nevirapine</i>	Total
Attended ANC	214	1,316	1,530
Did not attend ANC	0	7,070	7,070
<b>Total</b>	214	8,386	8,600

Table 3. HIV prophylaxis received by HIV positive pregnant women, by ANC attendance.

	Delivered at a health facility	Delivered outside a health facility	Total
Identified as being HIV positive	228 (15%)	192 (13%)	420 (28%)
Not identified as being HIV positive	240 (16%)	870 (57%)	1,110 (73%)
<b>Total</b>	468 (31%)	1062 (70%)	1,530 (100%)

Table 4. Location of delivery of HIV positive women attending ANC (assuming an equivalence of HIV prevalence among those tested to those not tested).

The PMTCT programme of the National Centre for Maternal and Child Health is a subrecipient in round 4 of the Global Fund. The first tranche of funds under this grant were received in September 2005. Given the success of the Ministry of Health in scaling up ART with funds from the GFATM it appears likely that a similar scale-up of PMTCT services will occur.

The National Centre for Maternal and Child Health has begun to address both issue of quality and coverage of PMTCT service. The national protocol for PMTCT was recently revised, from single-dose Nevirapine to the mother at delivery to Ziduvudine from 28 weeks, Nevirapine to the mother at delivery and at labour, single-dose Nevirapine to the infant within 72 hours of birth. In addition, a mechanism has been established to refer HIV positive pregnant women to ART services and eligibility criteria for pregnant women eased from a CD4 count of less than 200 to a CD4 count of less than 250. Infants are referred to paediatric AIDS care.

#### *Percentage of transfused blood units screened for HIV*

All transfused blood (100% of units) are screened for HIV. However, transmission of HIV through contaminated blood products remains a concern. Even though all blood donations are screened for HIV, there is always a risk that HIV positive donations will not be detected due to lack of sensitivity of the test, the window period (when the donor is infectious but does not test positive), or to errors or problems with processing (particularly mislabelling of samples, donations or misreading test results) or documentation.

The Ministry of health has successfully secured funds from the GFATM under round 5 to address this issue. The objectives of the round 5 grant are to 1) to reduce the HIV prevalence in donors, and 2) increase the quality of the blood system's processes so that an HIV infected donation will not be transfused.

#### *Percentage of OVC whose households received free basic external support*

There are no estimates of the number of households containing orphans and vulnerable children, precluding the calculation of coverage of such services. However, counts are available of the numbers of households receiving such



support. As at the end of September 2005, almost 14,000 households with OVC were receiving free basic external support<sup>5</sup>.

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<sup>5</sup> Source: Khana, NCHADS.

## Knowledge and behaviour

### *Young peoples' knowledge*

The only large scale nationally representative survey of young people's knowledge of HIV conducted in 2004 or 2005 was the Cambodian Socio-Economic Survey (CSES). Data collection for this survey took place in 2004. A total of people aged between 15 and 24 were sampled for this survey (0.5% of the population). The only survey to have asked all 5 questions that comprise the young peoples knowledge indicator battery was a survey conducted by Population Services International (table 5). This survey was undertaken in 2003 (n= 1,605) and again in 2005 (n= 825). No significant differences were found in young people's knowledge between the two time periods.

	male		female		total
	urban	rural	urban	rural	
Prevent HIV by using condoms	98%	92%	91%	89%	95%
Prevent HIV by one faithful partner	20%	20%	17%	15%	18%
HIV transmitted by mosquitoes	8%	15%	13%	23%	14%
HIV transmitted by food	1%	5%	3%	4%	3%
Can't tell if someone is HIV positive by looking	83%	87%	79%	79%	82%
All 5 questions correct	15%	13%	8%	10%	12%

Table 5. Young people's knowledge of HIV. Source: PSI, 2005

Comparing the PSI data with the CSS data showed general concurrence (figure 10). The PSI survey appears to have over-estimated the proportion of young people who believe that HIV can be transmitted by mosquitoes, and may have overestimated the proportion of young people who recognise that condoms can prevent HIV transmission.

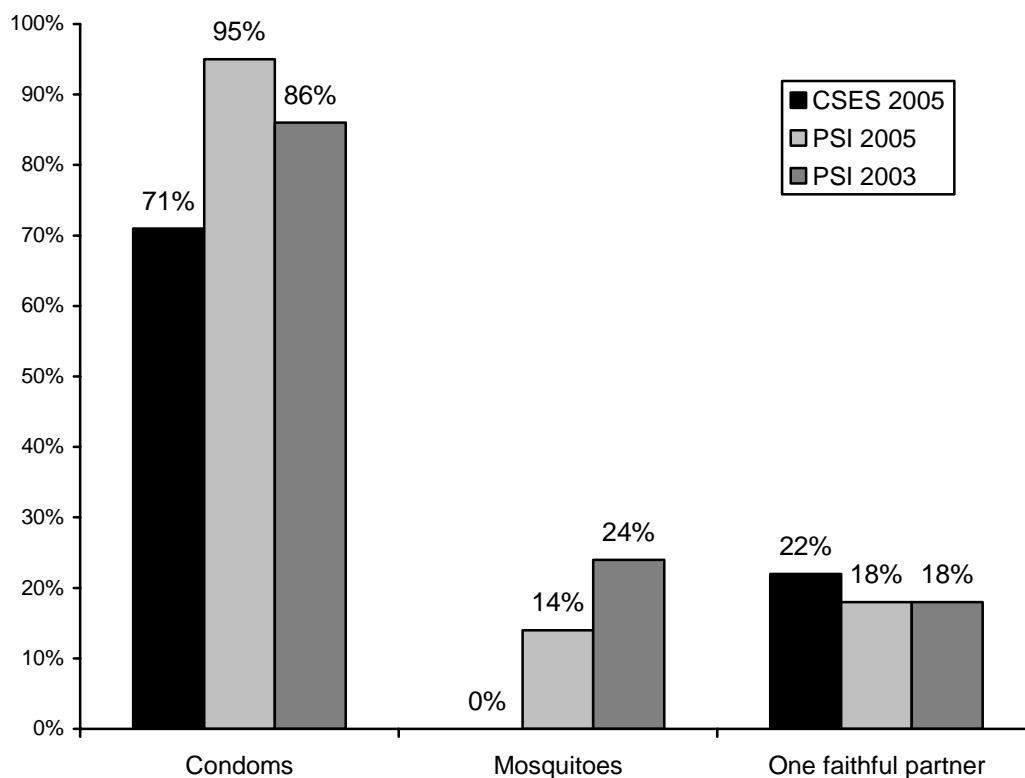


Figure 10. Comparison of knowledge data from two sources

It should be noted that in both surveys respondents were not prompted with potential answers. For items 1 to 4 respondents were asked: “How is HIV transmitted?” and “How can HIV be prevented?”. This indirect phrasing may underestimate people’s level of knowledge.

Similarly, item 5 may underestimate HIV knowledge. This question was phrased as “Can you tell if a person has AIDS just by looking?”, as the local language (Khmer) does not have separate terms for HIV and AIDS. It is therefore possible that some respondents may have been aware of the wasted appearance that is typical of AIDS patients and replied “yes”.

Finally, it was felt that in the context of Cambodia, where the greatest incidence of HIV is currently reported among married women who report high rates of fidelity to their husbands, item one in this indicator lends itself to misinterpretation. High levels of awareness of HIV among young people suggest that this population may recognise the realities of HIV transmission among couples. Respondents may have responded to item one in the negative, on the grounds that their fidelity to their partners may not be reciprocated and in reality, therefore, offers poor protection from HIV.

## Young people's sexual behaviour (15-24 years)

### Sex before age 15

Of 852 young people surveyed by PSI in 2005, 218 (26%) were sexually active. The youngest reported age at first sex was 15 years old. The mean age at first sex in this sample was 19.25 +/-1.9 years (19.1 years males; 19.4 females) (figure 11). Median age at first sex was 19 years.

This finding is consistent with the Cambodia Demographic and Health Survey (2000) which reported women's mean age at first sex (as reported by both 20-24 and 25-49 year age groups) as 19.9 years (20.6 years urban; 19.8 years rural).

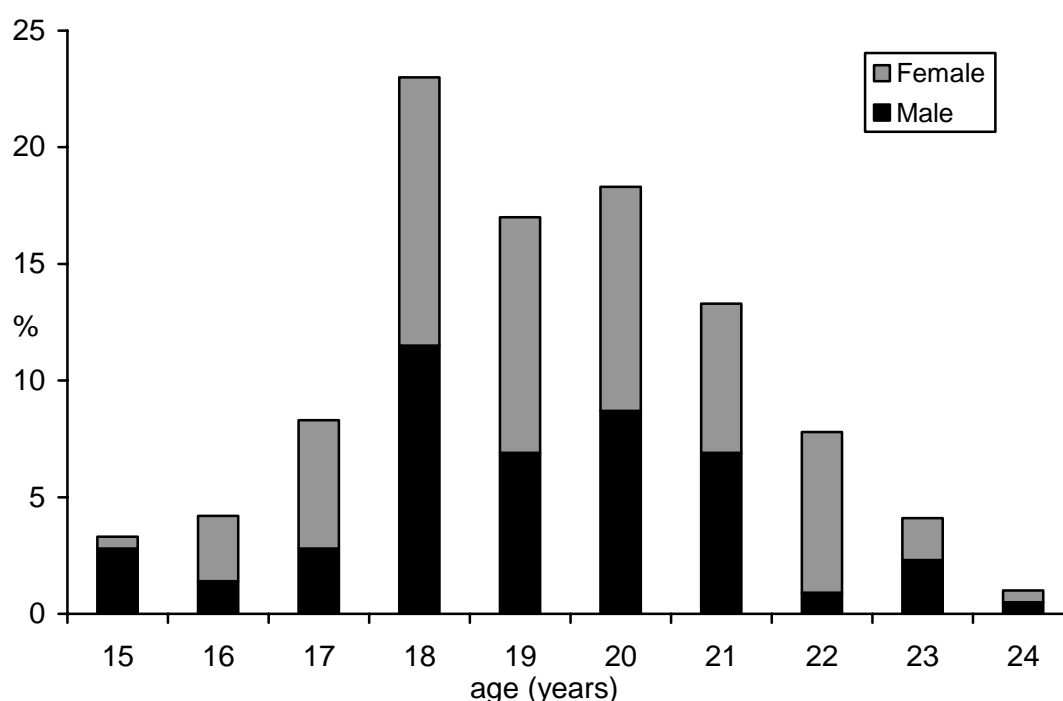


Figure 11. Age at first sex (n=218). Source: PSI 2005.

### Sex in past year among 15-24 year olds

Of all the 846 young people surveyed in 2005 only 26% of sample was sexually active, with no significant difference observed between males and females (table 6). Comparison of the 2003 and 2005 surveys found no significant difference in rates of sexual activity.

	Male			Female			Total
	15-19	20-24	Total	15-19	20-24	Total	
Urban	2%	7%	9%	1%	8%	9%	18%
Rural	0%	2%	3%	1%	4%	6%	8%
<b>Total</b>	2%	9%	11%	2%	12%	14%	26%

Table 6. Sex in the past year, by sex and age group (n=846). Source: PSI 2005.

The vast majority of women who reported being sexually active (sex in the past year) were married (table 7). The only unmarried group to report significant sexual activity in the past year were urban males.

	Male		Female		Total
	Married	Unmarried	Married	Unmarried	
Urban	12%	22%	33%	0%	68%
Rural	9%	1%	21%	0%	32%
Total	19%	24%	9%	1%	100%

Table 7. Marital status among those sexually active (n=218). Source: PSI 2005.

### Sex with a non-regular partner (non-marital, non-cohabiting) in past year among sexually active 15-24 year olds

Only five females (4% of the sexually active female sample) surveyed by PSI in 2005 reported having had sex with a non-regular partner<sup>6</sup> in the past year, all of which were in the context of a “sweetheart” (boyfriend-girlfriend) relationship (table 8). Only two urban females reported having had casual sex, while no female reported having purchased commercial sex.

	Male	Female	Total
Urban	53/75 (71%)	4/74 (5%)	38%
Rural	4/22 (18%)	1/47 (2%)	7%
Total	59%	4%	28%

Table 8. Sex with a non-regular partner in past year, among those sexually active (n=218). Source: PSI 2005

By contrast, 59% of sexually active males reported having had sex with a non-regular partner in the past year. Of these, 12 individuals reported having sex with a sweetheart; 12 with another casual partner; and 43 with a commercial sex worker. Of those males who had had sex with a non-regular partner, 93% (53 of 57 individuals) were from urban areas. All those who reported having had casual sex were from urban areas.

It appears, therefore, that sex with a non-spousal partner is uncommon among females and in males in rural areas. Of the 846 young people surveyed in this study, non-spousal sex appears to be limited to older (20-24 years) urban males.

These findings are substantiated by the first Demographic and Health Survey conducted in Cambodia (2000), which found that over 99% of unmarried women aged between 15 and 24 had never had sex (n=4,153). One hundred percent of married women (n=1,447) had only ever had sex with one person

<sup>6</sup> The definition of a non-regular partner in this sample was any partner with whom the respondent was either not married to or living with “as if married”. This included “sweetheart” relationships, as well as casual partners and commercial sex.

(presumably their spouse). No data on male sexual behaviour was collected in this survey. A second Demographic and Health survey is currently underway, with results expected in the third quarter of 2006.

### Condom use in non-marital non-cohabiting sex in the past year

Non-marital non-cohabiting sex is too rare among young people to derive reliable condom use rates from the sample surveyed by PSI. However, data collected through the Behavioural Sentinel Surveillance system can provide an indication of condom use rates in sweetheart relationships and in commercial sex. Among the sentinel groups of men sampled (mean age 32 to 38 years), rates of consistent condom use with commercial sex workers are approximately 90%, while rates of consistent condom use with sweethearts are between 40 and 55% (figure 12).

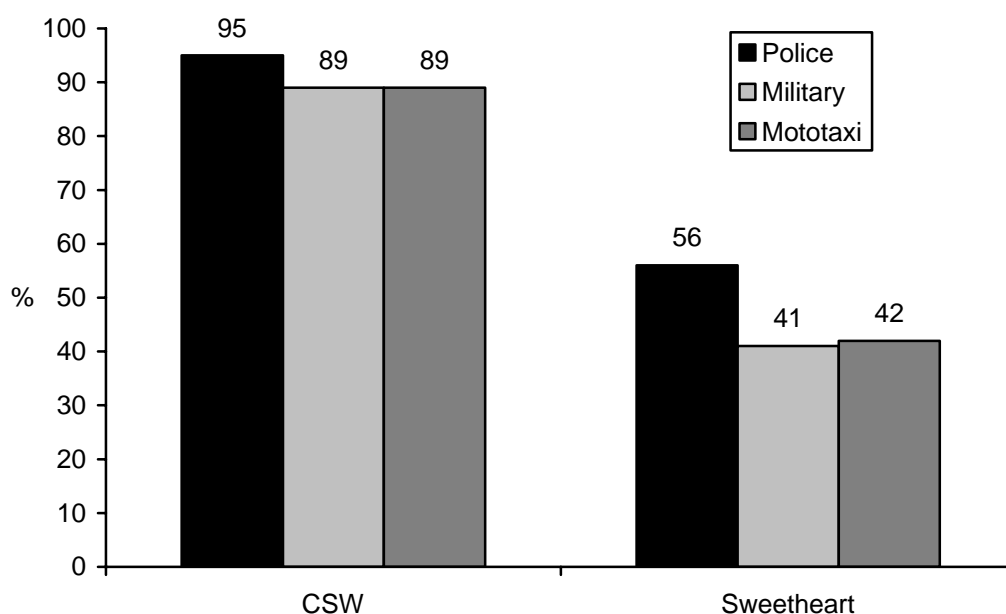


Figure 12. Consistent condom use in the past three months among various male sentinel groups, by partner type. Source: NCHADS BSS 2003.

### *Percentage of female sex workers reporting use of a condom with their most recent client*

In the last round of the Behavioural Sentinel Surveillance system, 96% of direct (brothel-based) commercial sex workers reported consistently using a condom with clients. Of indirect (non brothel-based) commercial sex workers approximately 80% reported consistently using a condom with clients (figure 13).

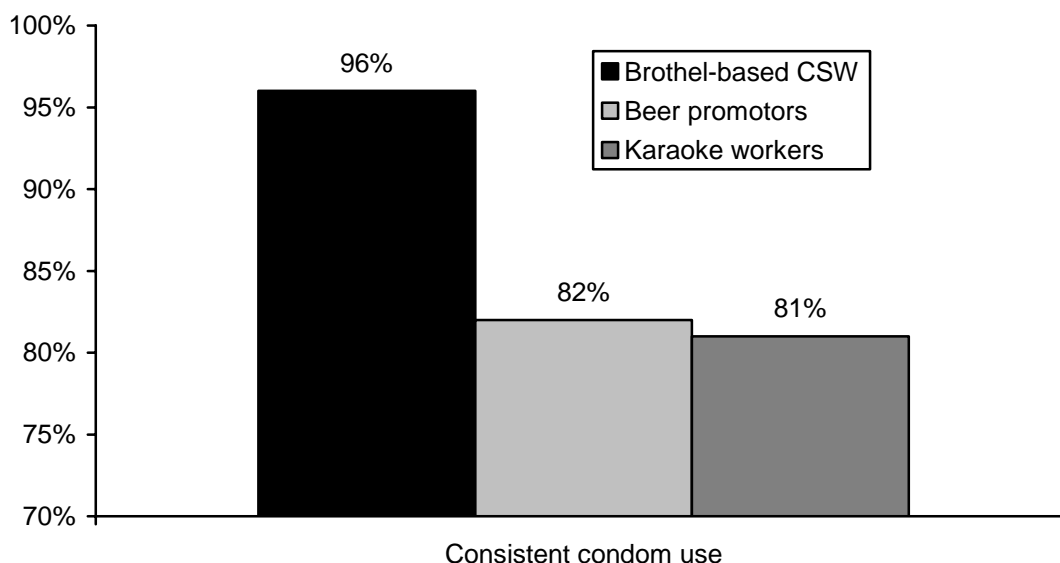


Figure 13. Rates of consistent condom use by direct and indirect female sex workers. Source: NCHADS BSS 2003

*Percentage of female sex workers who have been tested for HIV*

Slightly over half (51%) of brothel-based commercial sex workers surveyed in the last round of Cambodia’s Behavioural Sentinel Surveillance had been tested for HIV and received the results.

*Ratio of orphaned to non-orphaned children aged 10-14 who are currently attending school*

Only one survey conducted in 2004 or 2005 collected data that can be used to derive the ratio of school attendance among orphans and non-orphans<sup>7</sup>. School attendance among children aged 10 to 14 who have lost both parents was estimated to be 63%, while school attendance among children who had at least one living parent was estimated to be 92%. The ratio of attendance among orphans to non-orphans was therefore 0.68:1.

*Schools with life-skills education*

No data is currently available on the proportion of schools with teachers trained in life-skills education. However, the Ministry of Education reports that 20% of all secondary school teachers have received such training. The proportion of these that are currently teaching life-skills education is unknown.

<sup>7</sup> Source: USAID/WHO/Macro/FHI, 2004.

*Proportion of large enterprises that have workplace HIV policies and programmes*

While a workplace survey has yet to be undertaken, it is estimated that approximately 10% of enterprises with HIV policies and programmes. This estimate is based on a count of those enterprises known to be involved in the HIV programmes of various non-governmental organizations, divided by the number of large enterprises.



## **Major challenges faced and actions needed to achieve the goals/targets**

The major challenge faced in achieving the targets for 2005 has been in strengthening government capacity. While government institutions are being rebuilt after Cambodia's period of conflict, these institutions remain weak. This weakness is compounded by low salaries that reflect the government's limited revenue stream, which reduce staff motivation and impedes the government's ability to attract and retain qualified staff.

In the community, poverty presents a barrier to accessing limited health services. Furthermore, poverty increases vulnerability to HIV through such mechanisms as population mobility and economic migration.

While commercial sex workers appear to be adequately covered by interventions, as assessed by rates of condom use, other vulnerable populations remain a concern. Specifically, the recent emergence of drug use has the potential to fuel a sub-epidemic if not adequately addressed, while there remains a lack of proven effective interventions, with limited access, for men who have sex with men.

In the general population women's disempowerment creates difficulties in negotiating condom use (as evidenced by continued low rates within marriage, despite married women having the highest incidence) and fuels sexual violence including domestic violence, rape and gang-rape.

The major future challenge faced by the Royal Government of Cambodia in achieving the targets set in the Declaration of Commitment is ensuring the sustainability of the response to HIV. External donors currently provide more than 95% of the funding for the response. Concerns about the sustainability of this level of support from the international community in turn create concerns about the sustainability of the HIV response.

## **Support required from country's development partners**

There is a clear need to strengthen the national monitoring system, including quality control of data collection, timely reporting and effective utilisation of data.

In addition, efforts need to be strengthened to prevent mother-to-child transmission and to prevent transmission through contaminated blood products. Finally, the emergence of problem drug use has necessitated the need to develop a full package of harm reduction services, including HIV prevention; drug treatment; and ART for drug users.

## Monitoring and evaluation environment

The response to HIV in Cambodia is currently monitored through sectoral or programme monitoring systems. While there is a willingness to share data generated by these systems, a system for the collation and reporting of these data to provide a multi-sectoral overview is still in development.

The development of this system is the mandated responsibility of the National AIDS Authority. In preparing the National Strategic Plan for a Comprehensive and Multisectoral Response to HIV/AIDS 2006-2010, the NAA, through its Monitoring and Evaluation Advisory Group, developed a monitoring framework. This framework includes the identification of a set of core indicators for monitoring progress under the Plan. The collation of data for these indicators will begin in 2006.

The Royal Government of Cambodia faces a number of challenges related to the monitoring of the response to the epidemic. Firstly, primary data collection is poorly coordinated. A number of surveys were conducted between 2004 and 2005 which investigated young peoples' knowledge and behaviours related to HIV. However, many of these data could not be used to report on progress made under the declaration of commitment due to incompatibility in the definition of variable, age ranges and inadequacies of sample size to produce location, age and sex disaggregation. Of particular concern is that a number of surveys whose results could not be used to measure progress towards the HIV/AIDS UNGASS targets or the Millennium Development Goals were conducted by United Nations agencies

Secondly, private sector services remain poorly understood. The quality of services provided by the private sector is unknown, the private sector does not report to national authorities and there is limited regulation of the sector.

Thirdly, a passive surveillance system has yet to be established to utilize secondary data for monitoring the epidemic.

Finally, there is a need to strengthen data collection activities to ensure the quality of data collected.

## **Annex 1: Consultation/preparation process for this national report**

Planning for data collection was undertaken by the Monitoring and Evaluation Advisory Group of the National AIDS Authority. The Group selected the most appropriate indicators from the generalised and concentrated epidemics indicator lists and identified potential data sources.

The National AIDS Authority, with the assistance of UNAIDS, collected and compiled available data on the selected indicators before holding a national vetting workshop to ensure that the data reported was the most reliable and recent available, and to ensure consensus on the data reported.

The Advisory Group were consulted on the first draft of the report, which was then disseminated to various stakeholders for comment, including the two umbrella organizations of civil society working on HIV/AIDS- the Khmer HIV/AIDS NGO Alliance (Khana), the HIV/AIDS Coordinating Committee (HACC) and the Cambodian Network of People living with HIV (CPN+).



## Annex 3 : National Return Forms

GE-1

Amount of national funds disbursed by governments in low- and middle-income countries

Indicator data is available for the following time periods - places:

2005 [Cambodia](#)

---

**Data source name:**

**Data source type:**

**TimeFrame:** 1/1/2004 **to:**

**Frequency:**

**As of date:**

**Comments:**

---

US\$

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**Amount of national funds disbursed by government:**

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GE-4  
(NPBI -2)

Percentage of large enterprises/companies that have HIV/AIDS workplace policies and programmes

Data source name:

Data source type:

TimeFrame: to:

Frequency:

As of date:

Comments:

Part I	Men	Women	All
Data requirements			
<b>FORMAL SECTOR EMPLOYMENT</b>			
1. Formal sector workforce ('000s)			
2. Population aged 15-64 years ('000s)			
Formal sector employment rate			
	<b>Public sector</b>	<b>Private sector</b>	<b>All employers in sample</b>

**Numerator**

**Anti-discrimination at work policies**

3. Staff recruitment and promotion
4. Staff benefits
5. Number of employers providing *both* of the above

**Workplace HIV/AIDS prevention, control and care programmes**

6. HIV/AIDS education
7. Work-related hazards and safeguards
8. Condom distribution
9. Voluntary counselling and testing
10. STI services
11. Provision of HIV/AIDS-related drugs
12. Number of employers providing *all* of the above

**Comprehensive  
workplace policies**

**13.**Number of employers with anti-  
discrimination policies (line 5.) *and*  
workplace programmes (line 12.)

---

**Denominator**

**14.**Number of employers in sample

---

**INDICATOR COMPUTATION**

**15.**Indicator scores by employment sector

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CRIS Concept and Software developed and supplied by UNAIDS



**GE-6  
(NPBI -4)**

**Percentage of HIV-infected pregnant women receiving a complete course of antiretroviral prophylaxis to reduce the risk of MTCT**

Indicator data is available for the following time periods - places:

December 2005 [Cambodia](#)

December 2004 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 1/1/2004 to:

Frequency:

As of date:

Comments:

Part I	Public sector	Private sector	Total
Data requirements			

**Numerator**

1. Number of HIV+ pregnant women provided with ARV therapy to reduce the risk of MTCT in the last 12 months

**Denominator**

- 2. Number of women who gave birth in the last 12 months\*
- 3. HIV prevalence in pregnant women (%)\*\*
- 4. Estimated number of HIV+ pregnant women in the country in the last 12 months

**INDICATOR COMPUTATION**

5. Indicator scores by health sector

\* Use national Central Statistics Office estimates of current annual births.

\*\* In most countries, national sentinel surveillance estimates of HIV prevalence among antenatal clinic attendees can be used.



**GE-6  
(NPBI -4)**

**Percentage of HIV-infected pregnant women receiving a complete course of antiretroviral prophylaxis to reduce the risk of MTCT**

Indicator data is available for the following time periods - places:

December 2005 [Cambodia](#)

December 2004 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 1/1/2005 to:

Frequency:

As of date:

Comments:

Part I	Public sector	Private sector	Total
Data requirements			

**Numerator**

1. Number of HIV+ pregnant women provided with ARV therapy to reduce the risk of MTCT in the last 12 months

**Denominator**

- 2. Number of women who gave birth in the last 12 months\*
- 3. HIV prevalence in pregnant women (%)\*\*
- 4. Estimated number of HIV+ pregnant women in the country in the last 12 months

**INDICATOR COMPUTATION**

5. Indicator scores by health sector

\* Use national Central Statistics Office estimates of current annual births.

\*\* In most countries, national sentinel surveillance estimates of HIV prevalence among antenatal clinic attendees can be used.





**GE-7  
(NPBI -5)**

Percentage of people with advanced HIV infection receiving antiretroviral combination therapy

Indicator data is available for the following time periods - places:

- 2005 [Cambodia](#)
- 2004 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 1/1/2004 to:

Frequency:

As of date:

Comments:

Part I Data requirements	Males		Females		Both sexes	
	Public	Private Total	Public	Private Total	Public	Private Total

**Numerator**

1. Number of people receiving ARV therapy at the beginning of the year ('000)
2. Number of people who commenced treatment in the last 12 months ('000)
3. Number of people receiving ARV therapy at the start of the year who died in the year ('000)

4. Number of people for whom treatment was discontinued for other reasons ('000)
- 

5. **Number of people receiving ARV therapy at the end of the year ('000)**
- 

**Denominator**

6. Number of people (adults and children) with HIV infection in the total population ('000)\*
7. Percentage of people with HIV who are at an advanced stage of infection

8. **Number of people with advanced HIV infection ('000)**
- 

**Part II**

Indicator computation

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9. INDICATOR SCORES BY SEX AND HEALTH SECTOR
- 

\* From National HIV sentinel surveillance estimates.

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**GE-7  
(NPBI -5)**

Percentage of people with advanced HIV infection receiving antiretroviral combination therapy

Indicator data is available for the following time periods - places:

2005 [Cambodia](#)

2004 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 1/1/2005 to:

Frequency:

As of date:

Comments:

**Part I**

Data requirements

**Males**

**Females**

**Both sexes**

**Public Private Total Public Private Total Public Private Total**

**Numerator**

1. Number of people receiving ARV therapy at the beginning of the year ('000)
2. Number of people who commenced treatment in the last 12 months ('000)
3. Number of people receiving ARV therapy at the start of the year who died in the year ('000)

4. Number of people for whom treatment was discontinued for other reasons ('000)
- 

5. **Number of people receiving ARV therapy at the end of the year ('000)**
- 

**Denominator**

6. Number of people (adults and children) with HIV infection in the total population ('000)\*
7. Percentage of people with HIV who are at an advanced stage of infection

8. **Number of people with advanced HIV infection ('000)**
- 

**Part II**

Indicator computation

---

9. INDICATOR SCORES BY SEX AND HEALTH SECTOR
- 

\* From National HIV sentinel surveillance estimates.

CRIS Concept and Software developed and supplied by UNAIDS



GE-9

## Percentage of transfused blood units screened for HIV

Indicator data is available for the following time periods - places:

2005 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 1/1/2003 to:

Frequency:

As of date:

Comments:

Part I	Public sector	Private sector	All
Data requirements			

Numerator

1. Number of units of blood screened for HIV in the last 12 months up to WHO or national standards

Denominator

2. Total number of blood units transfused in the past 12 months

Part II

**INDICATOR COMPUTATION**

3. INDICATOR SCORES BY HEALTH SECTOR



**GE-10  
(NPBI-7)**

**Percentage of young people aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission**

Indicator data is available for the following time periods - places:

- 2005 [Cambodia](#)
- 2004 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 9/1/2003 to:

Frequency:

As of date:

Comments:

Part I Data requirements	Males			Females			Both sexes		
	Urb.	Rur.	Nat.	Urb.	Rur.	Nat.	Urb.	Rur.	Nat.

**Numerator**

- i) Select *only* those respondents who gave answers (including "don't know") to *all* questions
- ii) Line 1-5: enter the number of respondents who gave the correct answer by category of respondent (i.e.: male-urban, male-rural,etc)
- iii) Line 6: enter the number of respondents who gave the correct answer to *all* 5 questions.

1. HIV can be avoided by having sex with only one faithful, uninfected partner
2. HIV can be avoided by using condoms
3. A healthy looking person can have HIV
4. A person can get HIV from mosquito bites
5. A person can get HIV by sharing a meal with someone who is infected

**6. Number of respondents giving the correct answers to *all* of the above 5 questions**

**Denominator**

7. **Number of respondents (age 15-24) who gave answers (including "don't know") to all of the above 5 questions or had never heard of AIDS**
8. Percentage of the national population (aged 15-24) who live in urban areas\*

**Part II  
INDICATOR COMPUTATION**

## 9. Indicator Scores by Sex and Residence

## 10. Indicator Scores by Sex (National)

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\* From National Census Office statistics.

CRIS Concept and Software developed and supplied by UNAIDS



**GE-10  
(NPBI-7)**

**Percentage of young people aged 15-24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission**

Indicator data is available for the following time periods - places:

2005 [Cambodia](#)

2004 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 9/1/2005 to:

Frequency:

As of date:

Comments:

Part I Data requirements	Males			Females			Both sexes		
	Urb.	Rur.	Nat.	Urb.	Rur.	Nat.	Urb.	Rur.	Nat.

**Numerator**

- i) Select *only* those respondents who gave answers (including "don't know") to *all* questions
- ii) Line 1-5: enter the number of respondents who gave the correct answer by category of respondent (i.e.: male-urban, male-rural,etc)
- iii) Line 6: enter the number of respondents who gave the correct answer to *all* 5 questions.

1. HIV can be avoided by having sex with only one faithful, uninfected partner
2. HIV can be avoided by using condoms
3. A healthy looking person can have HIV
4. A person can get HIV from mosquito bites
5. A person can get HIV by sharing a meal with someone who is infected

**6. Number of respondents giving the correct answers to *all* of the above 5 questions**

**Denominator**

7. **Number of respondents (age 15-24) who gave answers (including "don't know") to all of the above 5 questions or had never heard of AIDS**
8. Percentage of the national population (aged 15-24) who live in urban areas\*

**Part II  
INDICATOR COMPUTATION**



## 9. Indicator Scores by Sex and Residence

## 10. Indicator Scores by Sex (National)

---

\* From National Census Office statistics.

CRIS Concept and Software developed and supplied by UNAIDS



GE-12

**Percentage of young women and men aged 15–24 who have had sex with a non-marital, non-cohabitating partner in the last 12 months**

Indicator data is available for the following time periods - places:

2005 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 9/1/2005 to:

Frequency:

As of date:

Comments:

Part I Data requirements	Males			Females			Both sexes		
	Urb.	Rur.	Nat.	Urb.	Rur.	Nat.	Urb.	Rur.	Nat.
<b>Numerator</b>									
1. Number of respondents aged 15-24 who had sex with a non-marital, non-cohabiting partner in the last 12 months									
<b>Denominator</b>									
2. Numbers of respondents (aged 15-24) who reported having a sexual relationship in the last 12 months									
3. Percentage of the national population (15-24) who live in urban areas									

**Part II**  
INDICATOR COMPUTATION

**4. INDICATOR SCORES BY SEX & RESIDENCE**

**5. INDICATOR SCORES BY SEX (NATIONAL)**

\* The data collected here also provide the information needed for the first two additional indicators recommended in the UNGASS indicator. guidelines



GE-11

## Percentage of young women and men who have had sex before the age of 15

Indicator data is available for the following time periods - places:

2006 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 9/1/2005 to:

Frequency:

As of date:

Comments:

Part I Data requirements	Males			Females			Both sexes		
	Urb.	Rur.	Nat.	Urb.	Rur.	Nat.	Urb.	Rur.	Nat.
<b>Numerator</b>									
1. Number of respondents who report their age at sexual initiation as under 15									
<b>Denominator</b>									
2. Numbers of respondents (aged 15-24)									
3. Percentage of the national population (15-24) who live in urban areas									

### Part II INDICATOR COMPUTATION

#### 4. INDICATOR SCORES BY SEX & RESIDENCE

#### 5. INDICATOR SCORES BY SEX (NATIONAL)

\* The data collected here also provide the information needed for the first two additional indicators recommended in the UNGASS indicator. guidelines

CRIS Concept and Software developed and supplied by UNAIDS



**GE-17  
(11-2)**

**Percentage of HIV-infected infants born to HIV-infected mothers**

Indicator data is available for the following time periods - places:

2005 [Cambodia](#)

**Data source name:**

**Data source type:**

**TimeFrame:** 1/1/2005 **to:**

**Frequency:**

**As of date:**

**Comments:**

List in the comments area the 3 most common forms of treatment provided during the last 12 months and the %'s of all treatment that each represents.

**Part I**

Data requirements

1. Proportion of HIV+ pregnant women provided with ARV treatment T

2. MTCT rate in the absence of any treatment v

3. Efficacy of treatment provided (proportionate reduction in MTCT rate) e

**Part II**

INDICATOR COMPUTATION

4. INDICATOR SCORE



CLPE6

Percentage of female and male sex workers reporting the use of a condom with their most recent client

Indicator data is available for the following time periods - places:

2005 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 1/1/2003 to:

Frequency:

As of date:

Comments:

Part I	Men	Women	Both sexes
Data requirements			
<b>Numerator</b>			
1. Number of respondents who reported that a condom was used with their last client			
<b>Denominator</b>			
2. Numbers of respondents who reported having commercial sex in the last 12 months			
<b>Part II</b>			
<b>INDICATOR COMPUTATION</b>			
3. INDICATOR SCORES BY SEX			

CRIS Concept and Software developed and supplied by UNAIDS



CLPE9

Percentage of Sex Workers who are HIV-infected

Indicator data is available for the following time periods - places:

2005 [Cambodia](#)

Data source name:

Data source type:

TimeFrame: 1/1/2003 to:

Frequency:

As of date:

Comments:

Data requirements

Capital city

HIV+ Tested HIV+%

1. Sex Workers