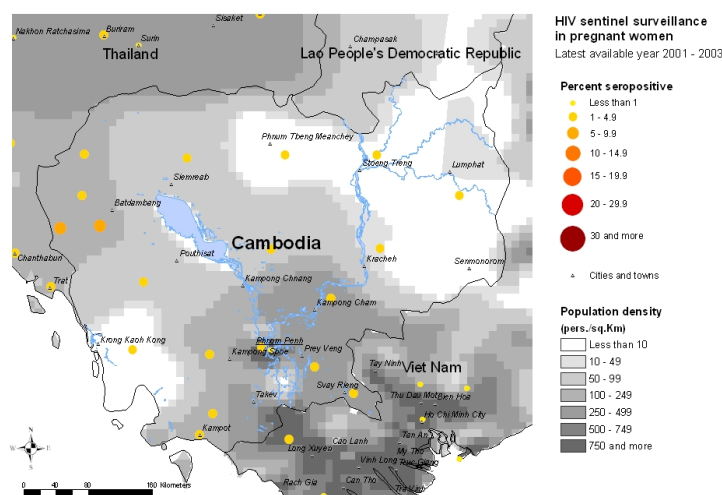


Estimated number of people needing antiretroviral therapy (0-49 years), 2005: 35 000\*\*  
 Antiretroviral therapy target declared by country: 10 000 by the end of 2005



World Health Organization

## 1. Demographic and socioeconomic data

	Date	Estimate	Source
Total population (millions)	2004	13.1	Ministry of Planning
Population in urban areas (%)	2004	16	Ministry of Planning
Life expectancy at birth (years)	2001	56.4 (male) 60.3 (female)	Ministry of Planning
Gross domestic product per capita (US\$)	2003	306	IMF
Government budget spent on health care (%)	2003	8.0	IMF
Per capita expenditure on health (US\$)	2003	33.6	Ministry of Health
Human Development Index	2003	0.571	UNDP

° = Percentage of young people 15-24 years who correctly identify two major ways of preventing the sexual transmission of HIV (using condoms and limiting sex to one faithful, uninfected partner), who reject the two most common local misconceptions about HIV transmission, and who know that a healthy looking person can transmit HIV.

\*\* = Percentage of young people 15-24 years reporting the use of a condom during sex with a non-regular partner in the last 12 months.

\* National Center for HIV/AIDS, Dermatology and Sexually Transmitted Infections  
 \*\* The Ministry of Health (MOH) and the Cambodia National Center for HIV/AIDS, Dermatology and STD (NCHADS) estimate that at the end of 2003, 19 814 people were in need of antiretroviral therapy. \*\*\* Demographic and Health Surveys

## 2. HIV indicators

	Date	Estimate	Source
Adult prevalence of HIV/AIDS (15-49 years)	2003	1.9%	Ministry of Health NCHADS*
Estimated number of people living with HIV/AIDS (0-49 years)	2003	123 100	Ministry of Health NCHADS
Reported number of people receiving antiretroviral therapy (0-49 years), 2005	Dec 2005	12 396	Ministry of Health/ NCHADS*
Estimated number of people needing antiretroviral therapy (0-49 years), 2005	Dec 2005	35 000**	WHO/UNAIDS
HIV testing and counselling sites: number of sites	Dec 2005	109	Ministry of Health/ NCHADS
HIV testing and counselling sites: number of people tested at all sites	Jan-Dec 2005	152 147	Ministry of Health/ NCHADS
Knowledge of HIV prevention methods (15-24 years)% - female°	2000	37	DHS***
Knowledge of HIV prevention methods (15-24 years)% - male°		NA	
Reported condom use at last higher risk sex (15-24 years)% - female°°		NA	
Reported condom use at last higher risk sex (15-24 years)% - male°°		NA	

## 3. Situation analysis

### Epidemic level and trend and gender data

Cambodia has a generalized epidemic and one of the highest prevalence rates in Asia. Following a peak of 3% in 1997, prevalence rates among people 15-49 years old declined to 2.1% in 2002 and to 1.9% in 2003 (HIV sentinel surveillance, Ministry of Health/National Center for HIV/AIDS, Dermatology and Sexually Transmitted Infections (NCHADS)). The Ministry of Health/NCHADS estimate that 123 100 people were living with HIV/AIDS in Cambodia in 2003, with women accounting for almost 50%. While the epidemic appears to have stabilized, the number of people with AIDS needing antiretroviral therapy is increasing. The Ministry of Health/NCHADS estimate that, by the end of 2003, 19 814 adults had AIDS and would have been eligible for antiretroviral therapy. Despite rates of condom use reportedly in excess of 90% in commercial sexual encounters, unprotected heterosexual intercourse still represents the main route of HIV transmission.

### Major vulnerable and affected groups

Major vulnerable and affected groups include sex workers; male police officers; garment factory workers; mobile populations (cross-border and road construction workers); clients of sex workers and the clients' partners; and men who have sex with men. Declining trends have been observed among high-risk groups such as brothel-based sex workers (from 43% in 1997 to 21% in 2003), indirect female sex workers (beer and bar girls) (from 18% in 1998 to 12% in 2003) and male police officers (from 4% in 1998 to 3% in 2003). These results are largely credited to the government programme to promote 100% condom use and the availability of services for the care and treatment of sexually transmitted infections in the commercial sex industry. Children born to infected mothers are also at high risk of HIV transmission. Injecting drug users are an emerging vulnerable group.

### Policy on HIV testing and treatment

The Ministry of Health regards voluntary and confidential counselling and testing as an important intervention to reduce HIV risk behaviour and an integral part of ongoing prevention and care strategies. The Ministry of Health published a document on policy, strategy and guidelines for HIV testing in December 2002, and NCHADS provided an updated implementation guide in January 2004. The strategy is based on anonymous, confidential services for counselling and testing. In the national health sector, the strategy tends to promote institutionalized voluntary and confidential counselling and testing rather than stand-alone services. New voluntary and confidential counselling and testing centres are linked and integrated into public health services within the Operational Framework for the Continuum of Care for People Living with HIV/AIDS. Scaling up antiretroviral therapy is included in the same Operational Framework for the Continuum of Care. The approach is phased-in and physician-led. The NCHADS has produced and updated national guidelines for the use of antiretroviral therapy among adults and adolescents, and more recently for antiretroviral therapy for children. New national guidelines on the prevention of mother-to-child transmission have been finalized to introduce more effective prophylaxis protocols as well as links with services for opportunistic infections and antiretroviral therapy. Technical working groups coordinated by NCHADS have developed training curricula and materials for the training of continuum of care teams. These include a five-month in-service course for clinicians, a specific course for care for children, a three-week course for counsellor nurses, a course for pharmacists and brief training activities for auxiliary staff. Increased collaboration between NCHADS and other public health programmes, including the National Center for Tuberculosis and Leprosy Control (CENAT) for strengthening joint care and treatment strategies for HIV/AIDS and tuberculosis and the National Maternal and Child Health Center for the prevention of mother-to-child transmission of HIV infection, has been recently formalized through the release of joint statements by the programmes leading to joint work planning for 2006.

Antiretroviral therapy: first-line drug regimen, cost per person per year

Stavudine + lamivudine + nevirapine (59% of adults) at an annual cost of US\$ 180-200 per person; stavudine + lamivudine + efavirenz (17% of adults) at US\$ 240 per person. Other first-line options, including zidovudine + lamivudine + nevirapine or efavirenz (21% of adults): US\$ 180-240 per person.

Assessment of overall health sector response and capacity

The overall response to HIV/AIDS in Cambodia is strong and extensive, benefiting from a wide range of national and international organizations and donors, including wide participation of civil society. The National AIDS Authority, an interministerial body established in 1999, is responsible for leading the national response to the epidemic. Political commitment is strong, and the Ministry of Health and NCHADS actively plan, mobilize and coordinate partners for scaling up the health sector response. The Operational Framework for the Continuum of Care for People Living with HIV/AIDS launched in 2003 provides the basis for scaling up HIV care, treatment and support in Cambodia and is a core component of the Health Sector Strategic Plan for HIV/AIDS and Sexually Transmitted Infections for 2004-2007. The comprehensive continuum of care is a package of HIV services provided at referral hospitals and in the community in provinces. It includes voluntary and confidential counselling and testing as an entry point for HIV prevention and care; prophylaxis and treatment of HIV-related opportunistic infections for adults and children; TB/HIV care and treatment; postexposure prophylaxis; antiretroviral therapy for children and adults; prevention of mother-to-child transmission; laboratory and X-ray support; and home-based care. It also includes activities undertaken by support groups for people living with HIV/AIDS; and a component called MMM (Mondul Mith Chuoy Mith, or "Friends help friends"), through which hundreds of people living with HIV/AIDS take part in monthly community meetings in collaboration with health care workers at referral hospitals. A successful 100% condom use programme and successful outreach programmes for sex workers and their clients are being implemented and have played an important role in reducing the rates of HIV transmission. Services for treating sexually transmitted infections, blood safety programmes and services for preventing mother-to-child transmission have been established and are currently under expansion. A law on the prevention of HIV/AIDS and the protection of people living with HIV/AIDS was adopted in 2002, and a commitment to provide universal access to treatment to all people living with HIV/AIDS was made at the Second National Conference on AIDS in 2002.

Critical issues and major challenges

The ability of Cambodia's health sector to sustain the ongoing expansion of the continuum of care for people living with HIV/AIDS and to maintain the availability of services over time will largely depend on a continued influx of external resources to complement government funds made available for HIV/AIDS activities and on the capacity of provincial and district health departments to provide quality prevention and care services. As provision of services is being decentralized, major efforts are currently focusing to build human resource capacity and strengthen the infrastructure, especially at the provincial and district levels. Strengthening and linking systems for the procurement and supply chain management of all HIV-related supplies, quality control system for HIV testing and quality assurance for HIV counselling need to be addressed further. The development of an integrated monitoring and evaluation system for the health sector response to the epidemic is at an early stage of development and would require continued investment. In addition to these priorities, access to and distribution of antiretroviral therapy through the private sector will require further regulation and enforcement. Community involvement in scaling up care and treatment, including the involvement of people living with HIV/AIDS, has been a major strength of Cambodia's experience and will continue to be crucial towards the goal of universal access to prevention and care services. Further institutional collaboration and partnership with other public health priorities and programmes such as reproductive health, mental health and noncommunicable diseases are both challenges and opportunities for Cambodia's experience.

#### 4. Resource requirements and funds committed for scaling up treatment and prevention in 2004-2005

- NCHADS estimates that the total resources required to implement the Health Sector Strategic Plan for HIV/AIDS and Sexually Transmitted Infections for 2004-2007, which addresses all components of the continuum of care for people living with HIV/AIDS (including treatment for opportunistic infections, antiretroviral drugs, other health facility-related costs, laboratory costs, home- and community-based care services and HIV counselling and testing), was about US\$ 15 million for 2005. About US\$ 13.1 million was expected to be available to support activities in 2005. The funding gap of US\$ 1.9 million in 2005 was planned to be met by a reallocation of resources from within existing programmes, supported by additional resources anticipated to be committed by donors and nongovernmental organizations.
- Cambodia submitted successful Round 1 and 2 proposals to the Global Fund to Fight AIDS, Tuberculosis and Malaria for US\$ 15.7 million and US\$ 14.7 million, respectively, focused on reducing the burden of HIV/AIDS among vulnerable populations and providing care and treatment for people living with HIV/AIDS, including limited antiretroviral therapy. Cambodia also submitted a successful Global Fund Round 4 proposal for total funding of US\$ 36.5 million and two-year approved funding of US\$ 8.8 million, focusing on providing care and treatment for people living with HIV/AIDS and reducing the percentage of HIV-infected infants born to mothers living with HIV/AIDS. The grant agreement was signed in June 2005, and as of December 2005, US\$ 2.8 million has been disbursed. Cambodia recently submitted a successful proposal to Round 5 of the Global Fund, with a two-year approved allocation of US\$ 16.3 million (of an overall five-year budget of US\$ 35.0 million) for increasing coverage in key services including care and treatment (antiretroviral therapy and treatment of opportunistic infections). The Round 5 submission also included a successful US\$ 5.0 million proposal for strengthening the national health system.
- United Nations funds and programmes (UNICEF, United Nations Population Fund, UNDP, UNESCO, UNAIDS and the World Food Programme), international funding agencies (World Bank and Asian Development Bank) and bilateral partners including the United States Agency for International Development, United States Centers for Disease Control and Prevention, European Union, Japan International Cooperation Agency and United Kingdom Department for International Development contribute to the national effort. In addition, nongovernmental organizations and charity foundations, including Médecins Sans Frontières, Médecins du Monde, Family Health International, the French Red Cross, ESTHER (Ensemble pour une Solidarité Thérapeutique Hospitalière En Réseau), Center of Hope, CARE, Pharmaciens Sans Frontières, Douleurs sans Frontières, Khmer HIV/AIDS National Association (KHANA), World Vision Cambodia, the Reproductive Health Association of Cambodia, University Research Co., PSI and many others also provide financial and technical support to the national HIV/AIDS response.

#### 5. Treatment and prevention coverage

- NCHADS estimates that 19 814 adults in Cambodia had AIDS at the end of 2003. The government declared a national target of treating 10 000 people, including 1000 children, by 2005.
- Treatment and care services are provided in hospital-based settings as well as through home-based care programmes run by the nongovernmental sector. Selected hospitals are providing antiretroviral therapy free of charge.
- Antiretroviral therapy was started in 2001 at few major hospitals in Phnom Penh (the capital) and in Siem Reap. When the Operational Framework for the Continuum of Care for People Living with HIV/AIDS was launched in August 2003, four sites were providing 2230 people with antiretroviral therapy. Over the past two years, the availability of services for opportunistic infections and antiretroviral therapy has increased dramatically, and by December 2005 32 sites providing antiretroviral therapy and treatment for opportunistic infections have been established across 16 provinces. In 2005, an average of 1152 new people were enrolled for opportunistic infection prophylaxis and management each month and, since July 2005, an average of 765 people being treated for opportunistic infections were enrolled on antiretroviral therapy each month. In December 2005, a total of 12 396 people, including 1071 children, were receiving antiretroviral therapy, achieving the national treatment target of 10 000 people by the end of 2005. Gender equity in antiretroviral therapy was achieved in 2005, as women accounted for 48% of all recipients.
- By December 2005, 28 health facilities were providing services for preventing mother-to-child transmission, some of which were integrated in the continuum of care framework for the referral of mothers living with HIV/AIDS to sites providing antiretroviral therapy and treatment for opportunistic infections. In 2005, of the 32 760 first-visit antenatal clinic attendees seen at antenatal care clinics offering services for preventing mother-to-child transmission, 17 382 (53%) were tested for HIV and 15 696 (48%) received their test result through post-test counselling. Among women tested for HIV, 279 (1.6%) were HIV positive. More than 80% of the women who tested HIV positive and their children received antiretroviral prophylaxis.
- Voluntary and confidential counselling and testing services have expanded significantly in the past years. There were only 12 sites in 2000, mainly of the stand-alone model. By December 2005, 109 licensed sites were offering voluntary and confidential counselling and testing services, including 86 sites directly managed by government, 18 by partner nongovernmental organizations and 5 by the private sector. These achievements are in line with the target set by the government for having at least one voluntary, confidential counselling and testing site linked to each of the referral and district hospitals across the 24 provinces of Cambodia. The number of people tested at licensed sites increased from 1766 in 1997 to 152 147 in 2005. This figure is well above the target of 1.64% of 15- to 49-year-olds set by government. More women (54%) than men undertook voluntary HIV testing in 2005. Almost everyone tested received their results through individual post-test counselling (97.5%). Declining trends of HIV seroprevalence have been observed along with the increase in the uptake of testing and counselling services. National estimates indicate that overall HIV prevalence rates among clients of voluntary, confidential counselling and testing sites were down to 12% in 2005 versus 24% in 2002.
- In parallel to the scaling up of health facility-based services, community- and home-based care networks have also grown exponentially, from 52 teams established in 2001 to 261 groups spread over 17 provinces in September 2005. Likewise, the number of support groups of people living with HIV/AIDS has increased from 24 in 2002 to 466 in December 2005. The support network is primarily (90%) established in provinces and counts 15 533 registered members in December 2005. A key element of the Operational Framework for the Continuum of Care for People Living with HIV/AIDS is the MMM (Mondul Mith Chuoy Mith, or "Friends help friends") model, through which hundreds of people living with HIV/AIDS take part in monthly community meetings in collaboration with health-care workers at referral hospitals. The MMM programme strengthens synergy between health facilities, homes and communities. Participants receive health education, information, support and counselling and share information and experiences on a range of issues including physical and spiritual support, income generation, stigma, treatment adherence and prevention issues.

#### 6. Implementation partners involved in scaling up treatment and prevention

Leadership and management

The National AIDS Authority was created in 1999 and comprises 26 ministries, 24 provinces and representatives of civil society. It coordinates the multisectoral response to the epidemic, provides the legal and policy framework and strengthens partnerships among all stakeholders. It is chaired by a senior minister. The Ministry of Health and the NCHADS provide leadership and coordination for the health sector response to HIV/AIDS, as indicated in the Health Sector Strategic Plan for HIV/AIDS and Sexually Transmitted Infections for 2004-2007 developed by the NCHADS. A wide range of partners support the implementation of the health sector plan, including the United Kingdom Department for International Development, Japan International Cooperation Agency, the French Cooperation, United States Agency for International Development and its partner nongovernmental organizations, the United States Centers for Disease Control and Prevention, Roche through the University of New South Wales, the William J. Clinton Foundation, UNICEF, Médecins Sans Frontières, Médecins du Monde and others partners. WHO collaborates with NCHADS on various technical areas of work and provides support in coordinating all partners involved in the national health sector response. NCHADS manages a number of technical working groups that assure broad participation of partners and usually lead to consensus-based decision making. Technical working groups are called to providing technical input and advice on a wide range of technical matters faced by the national programme.

Service delivery

The NCHADS provides leadership and support to provincial and operational district health managers who coordinate and oversee the network of sites established for providing continuum of care services for people living with HIV/AIDS. Annual work planning and review exercises are conducted with provincial health managers to support the high degree of decentralization achieved in the health sector response to HIV/AIDS. NCHADS ensures the overall supply chain management of antiretroviral drugs and other HIV-related supplies, although their actual procurement is still fragmented through various mechanisms, including those operated directly by the NCHADS, another through a pool led by the World Bank, a third through nongovernmental organizations such as Médecins Sans Frontières and lastly by the Global Fund for its subrecipients. The National Institute of Public Health and NCHADS coordinate the provision of laboratory services in collaboration with Institut Pasteur and the United States Centers for Disease Control and Prevention. NCHADS signed a leasing agreement brokered by the William J. Clinton Foundation for the establishment of a network of CD4 counting machines at the provincial level.

#### Community mobilization

Over 150 international and national nongovernmental and community-based organizations are engaged in HIV/AIDS control, with more than 70% of them focusing on treatment and care. Umbrella nongovernmental organizations such as the Khmer HIV/AIDS National Association (KHANA) and the Cambodia Network of People Living with HIV/AIDS (CPN+) implement and coordinate functions of affiliated nongovernmental organizations, community-based organizations and an extended network of people living with HIV/AIDS, particularly in-home and community-based care, including adherence and psychosocial support.

#### Strategic information

The National AIDS Authority coordinates the monitoring and evaluation of the national multisectoral response to HIV/AIDS. The NCHADS is mandated to monitor the health sector response. WHO is currently providing support to the NCHADS in strengthening its data management capacity and in establishing a sector-wide monitoring and evaluation system linking the central level to service delivery points through a network of regional hubs supported by information and communication technology. UNAIDS and other partners support the National AIDS Authority in monitoring and evaluating the multisectoral response. Family Health International and the Global AIDS Program of the United States Centers for Disease Control and Prevention provide support to NCHADS in surveillance activities. Médecins Sans Frontières, the Institute for Tropical Medicine (Antwerp-Belgium), the University of New South Wales, the Agence Nationale de Recherches sur le SIDA, the University of California at San Francisco and others support the operational research unit at NCHADS.

## 7. Staffing input for scaling up HIV treatment and prevention

#### WHO's response so far

- Conducting a scoping mission in January 2004 to assess the situation of antiretroviral therapy in Cambodia and to identify opportunities and challenges for scaling up antiretroviral therapy and areas for WHO support
- Collaborating with NCHADS and other stakeholders in developing the Operational Framework for the Continuum of Care for People Living with HIV/AIDS
- Supporting NCHADS in developing a national operational plan for scaling up antiretroviral therapy
- Supporting NCHADS in developing systems for monitoring patients receiving antiretroviral therapy and for monitoring antiretroviral therapy programmes
- Providing technical support for the development of a procurement and supply management plan covering all commodities related to HIV/AIDS
- Supporting the review and updating of technical norms and standards
- Supporting the development of training curricula
- Supporting blood safety and injection safety activities
- Supporting NCHADS and the Ministry of Health in resource mobilization, including developing the HIV/AIDS proposals for Rounds 4 and 5 of the Global Fund to Fight AIDS, Tuberculosis and Malaria
- Supporting the coordination of partners involved in the health sector response to HIV/AIDS
- Establishing an HIV/AIDS country team to support the government and all partners in scaling up antiretroviral therapy

#### Key areas for WHO support in the future

- Providing ongoing technical assistance for updating and finalizing normative standards, tools and guidelines
- Providing assistance to strengthen the capacity of NCHADS for monitoring and evaluation of the health sector response, including development of a patient tracking system for antiretroviral therapy and treatment for opportunistic infections
- Providing technical assistance for training health workers in service delivery
- Providing assistance to strengthen collaboration between NCHADS and other public health programmes, including tuberculosis, maternal and child health, reproductive health and mental health
- Providing technical support for preventing blood transmission of HIV through blood safety, injection safety, infection control and universal precautions
- Providing technical support for preventing HIV transmission resulting from illicit drug use through harm reduction and for providing services for injecting drug users living with HIV/AIDS

#### Staffing input for scaling up HIV treatment and prevention

- Current WHO country office staff for HIV/AIDS and sexually transmitted infections include one Senior Adviser on HIV/AIDS, one Medical Officer for HIV/AIDS care and treatment, one Technical Officer on harm reduction, one short-term Medical Officer on Blood Safety and HIV/AIDS and a Technical Officer on injection safety-infection control and universal precautions.