1. Demographic and socioeconomic data

<table>
<thead>
<tr>
<th>Date</th>
<th>Estimate</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total population (millions)</td>
<td>2004</td>
<td>13.1</td>
</tr>
<tr>
<td>Population in urban areas (%)</td>
<td>2004</td>
<td>16</td>
</tr>
<tr>
<td>Life expectancy at birth (years)</td>
<td>2001</td>
<td>56.4 (male) 60.3 (female)</td>
</tr>
<tr>
<td>Gross domestic product per capita (US$)</td>
<td>2003</td>
<td>306</td>
</tr>
<tr>
<td>Government budget spent on health care (%)</td>
<td>2003</td>
<td>8.0</td>
</tr>
<tr>
<td>Per capita expenditure on health (US$)</td>
<td>2003</td>
<td>33.6</td>
</tr>
<tr>
<td>Human Development Index</td>
<td>2003</td>
<td>0.571</td>
</tr>
</tbody>
</table>

2. HIV indicators

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

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 people were in need of antiretroviral therapy. **Demographic and Health Surveys

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
Sulfadiazine + azithromycin (95% 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 (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. 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 (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 in children and adults; TB/HIV care and treatment; postexposure prophylaxis; antiretroviral therapy for children and adults; prevention of mother-to-child transmission of HIV; and voluntary and confidential counselling and testing services undertaken by support groups for people living with HIV/AIDS.

A component called MMH (Mondial Mth Chuy Mth, or “F-friends help friends”), through which hundreds of people living with HIV/AIDS take part in monthly community meetings in community settings and referral hospitals. This programme is a successful 100% community 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 are currently established and are being continually evaluated. 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 for all people living with HIV/AIDS was made at the Second National Conference on AIDS in 2002.

Critical issues and major challenges
Cambodia’s ability to 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 available made 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 commodities is critical because of the high cost 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 care and treatment services 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 the 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 care and treatment testing), was about US$ 15 million for 2005. About US$ 13.1 million was expected to be available to support activities in 2005, US$ 1.9 million in 2006 and US$ 1 million in 2007. Additional resources were committed by donors and nongovernmental organizations.

- Cambodia Round 2 and 3 submissions 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 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, as and of Dec 2005, US$ 2.8 million has been disbursed.

- Cambodia recently submitted a successful Global Fund submission 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$ 30.8 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, UNFPA, WHO, UNDP, UNESCO, UNAIDS and the World Food Programme), international funding agencies (World Bank and International 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


- 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 2005 at several 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 signed in August 2003, four hospitals were providing antiretroviral therapy. The availability of treatments for opportunistic infections and antiretroviral therapy has increased dramatically, and by December 2005, 32 sites across the country had initiated antiretroviral therapy and opportunistic infections treatment. Antiretroviral therapy interventions have been established across 16 provinces, and the number of new people living with HIV/AIDS under treatment 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 children, including 10171 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, 19 490 mothers (59%) were offered testing for HIV. Nine thousand six hundred and forty women (37% of all Offered) were tested. Of these women, 15 696 (48%) received a diagnosis, and 1 382 (9%) were pregnant at the time of testing.

- As of December 2005, 40% of the 10 000 people living with HIV/AIDS and 40% of the 300 pregnant women living with HIV/AIDS were tested for HIV.

- In parallel to the scaling up the health facility-based services, community- and home-based care networks have also grown exponentially, from 52 teams established in 2001 to 2612 teams by 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 MMH (Mondial Mth Chuy Mth, or “F-friends help friends”) model, through which hundreds of people living with HIV/AIDS take part in monthly community meetings in their communities as service providers in collaboration with health-care workers at referral hospitals. The MMH model strengthens synergy between health facilities, homes and communities.

- Participants receive health education, information, support and care and share experiences on issues that include physical and spiritual support, income generation, stigma, treatment adherence and prevention issues.

6. Implementation partners involved in scaling in treatment and prevention

Leadership and management
The National AIDS Authority (NCHADS) was established 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 Ministry of Health and supported by the United Kingdom Department for International Development (DfID), the United Nations Development Programme (UNDP), the United Nations Population Fund (UNFPA), the United Nations World Food Programme, the United Nations Children’s Fund (UNICEF), 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.

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Service delivery
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
- Providing the review and updating of technical norms and standards
- Supporting the development of training curricula
- Supporting blood safety and infection 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, infection 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 Advisor 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.