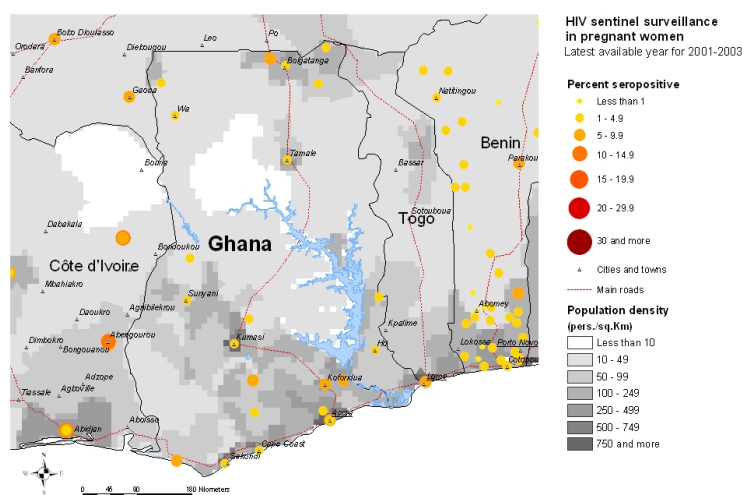


Estimated number of people needing antiretroviral therapy (0-49 years), 2005: 61 000  
 Antiretroviral therapy target declared by country: 30 000 by the end of 2005



## 1. Demographic and socioeconomic data

	Date	Estimate	Source
Total population (millions)	2004	21.4	United Nations
Population in urban areas (%)	2005	46.3	United Nations
Life expectancy at birth (years)	2003	58	WHO
Gross domestic product per capita (US\$)	2002	301	World Bank
Government budget spent on health care (%)	2002	8.4	WHO
Per capita expenditure on health (US\$)	2002	17	WHO
Human Development Index	2002	0.568	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.

\* Demographic And Health Surveys

## 2. HIV indicators

	Date	Estimate	Source
Adult prevalence of HIV/AIDS (15-49 years)	2003	1.9 - 5.0%	WHO/UNAIDS
Estimated number of people living with HIV/AIDS (0-49 years)	2003	210 000 - 560 000	WHO/UNAIDS
Reported number of people receiving antiretroviral therapy (0-49 years), 2005	Sep 2005	3 584	WHO/UNAIDS
Estimated number of people needing antiretroviral therapy (0-49 years), 2005	Dec 2005	61 000	WHO/UNAIDS
HIV testing and counselling sites: number of sites	Sep 2005	113	WHO
HIV testing and counselling sites: number of people tested at all sites	Sep 2005	40 272	WHO
Knowledge of HIV prevention methods (15-24 years)% - female*	2003	38	DHS*
Knowledge of HIV prevention methods (15-24 years)% - male*	2003	44	DHS*
Reported condom use at last higher risk sex (15-24 years)% - female**	2003	33	DHS*
Reported condom use at last higher risk sex (15-24 years)% - male**	2003	52	DHS*

## 3. Situation analysis

### Epidemic level and trend and gender data

The first AIDS case in Ghana was reported in 1986. By December 2004, 90 000 AIDS cases had been reported. The number of people currently living with HIV/AIDS is estimated to be around 400 000. Current surveys in Ghana show an increase in the prevalence of HIV infection among adults from 2.3% in 2000 to 3.4% in 2002. The prevalence is highest in the Eastern Region and lowest in the Northern Region. Rates are generally higher in densely populated areas, especially in regional capitals, such as Kumasi, Koforidua and Accra. Women are disproportionately affected. The female-male ratio was 6:1 in 1987 and an estimated 2:1 in 2001. The epidemic is primarily spread through heterosexual transmission, which accounts for up to 80-85% of infections. Mother-to-child transmission accounts for 10-15%, and the remaining 5% are transmitted through unsafe blood.

### Major vulnerable and affected groups

According to a sentinel survey conducted in 2004, the most severely affected age group is 25-29 years (4.5%) followed by 30-34 years (4.4%). People 15-24 years old are increasingly vulnerable, with an HIV prevalence rate of 2.0% among people 15-19 years and 2.7% among people 20-24 years. Vulnerable population groups include adolescents, sex workers, mobile populations, miners and kayaye: young female porters who have migrated from rural to urban areas. HIV seroprevalence rates among sex workers increased from 2% in 1986 to nearly 40% in 1991. By 1997-1998, the HIV prevalence in Accra and Tema had reached 74% among "seated" (home-based) sex workers and 27% among "roaming" sex workers. In 1999, sex workers in Kumasi had an HIV prevalence rate of 82%. The HIV prevalence among people attending sexually transmitted infection clinics in Accra increased from 2% in 1988 to nearly 9% in 1991. In 1998, the rate of HIV infection among women attending sexually transmitted infection clinics tested in Adabraka in the Greater Accra Region had reached 27%. In the Southern Region, the HIV prevalence is 24% among people attending sexually transmitted infection clinics and 3% among blood donors.

### Policy on HIV testing and treatment

The National HIV/AIDS Policy states that voluntary testing should be provided in a non-stigmatizing environment. It aims to encourage vulnerable groups to undergo regular voluntary testing and seek early diagnosis and treatment for sexually transmitted infections. The Policy states that, except for blood donors and people showing symptoms suggesting AIDS, testing for HIV/AIDS should not be performed routinely or without the knowledge of the individual. Guidelines for managing sexually transmitted infections and opportunistic infections have been developed, and guidelines for the provision of antiretroviral therapy are being developed. On 1 December 2004, the President announced a commitment to provide highly subsidized antiretroviral therapy to everyone in need and to expand voluntary counselling and testing sites.

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

The first-line drug regimen is zidovudine + lamivudine + nevirapine (or efavirenz) or stavudine + lamivudine + nevirapine (or efavirenz). The cost per person per year is about US\$ 300 for the first-line regimen. The second-line treatment regimen is abacavir + didanosine + nelfinavir; or abacavir + didanosine + lopinavir boosted with ritonavir; or stavudine + didanosine + lopinavir boosted with ritonavir. The cost of second-line treatment is about US\$ 460 per person per year.

### Assessment of overall health sector response and capacity



The Ghana AIDS Commission was established in 2001 under the Office of the President. The national strategy is multisectoral, guided by the National Strategic Framework on HIV/AIDS (2001-2005). The National AIDS Control Programme is in the process of developing an implementation plan to guide the provision of antiretroviral therapy in Ghana, within the framework of the National Strategic Framework and the Health Sector HIV/AIDS Strategic Plan (2002-2006). The second National Strategic Framework on HIV/AIDS (2006-2010) is being developed. High-level political commitment is evident up to the presidential level. Ghana's health system is highly decentralized, and a sector-wide approach to health sector financing is in place. Every region has an HIV/AIDS coordinator, and multisectoral AIDS committees have been established at the regional and district levels. The national response has included prevention interventions including condom promotion and distribution, school- and workplace-based programmes, voluntary counselling and testing services, prevention of mother-to-child transmission, blood safety and universal precautions to prevent infection. Antiretroviral therapy has been provided since 2003. All districts have district hospitals, and the services provided include antenatal care. Public laboratory facilities are available at the regional level. A national monitoring and evaluation framework has been developed through a broad participatory process, and monitoring and evaluation focal points have been appointed in all 110 districts. HIV/AIDS surveillance is undertaken in partnership between the Ghana Health Service, WHO and the United Kingdom Department for International Development. The Ghana Health Service has developed a national human resource plan to address the shortage of health workers, and efforts are underway to train health workers to deliver antiretroviral therapy. As of September 2005, 483 health workers had been trained to deliver antiretroviral therapy services in accordance with national standards.

#### Critical issues and major challenges

Human resource capacity is the major bottleneck for scaling up the national HIV/AIDS response, both the numbers of health care workers and technical capacity. Ghana suffers from high turnover of highly skilled personnel, as the emigration rate is high. Services for voluntary counselling and testing need to be scaled up. Other areas that need strengthening include legal and ethical policy, including legal protection for people living with HIV/AIDS; and the establishment of links and referral systems between the public sector and civil society.

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

- WHO estimates that between US\$ 37.1 and US\$ 38.2 million was required for scaling up antiretroviral therapy to reach the "3 by 5" treatment target of 26 000 in 2005.
- Following the Declaration of Commitment of the United Nations General Assembly Special Session on HIV/AIDS in 2001, the government directed that 15% of Ghana's health budget will be committed to HIV/AIDS activities and encouraged all ministries to create an HIV/AIDS budget line. In 2003 Ghana also established the National Health Insurance Scheme to provide subsidized health care services to all residents.
- Ghana is a beneficiary of the World Bank Multi-Country HIV/AIDS Program for Africa, with approved funding of US\$ 25 million for 2002-2007. Ghana is also part of the World Bank Multi-Country HIV/AIDS Program for Africa regional project Abidjan-Lagos, covering Benin, Côte d'Ivoire, Ghana, Nigeria and Togo, that was approved for US\$ 16.6 million in 2003. Through the Ghana AIDS Commission, the World Bank Multi-Country HIV/AIDS Program for Africa and the Ghana AIDS Partnership Programme funded by the United Kingdom Department for International Development have become important mechanisms for channelling funds to civil society and ministries, departments and agencies.
- Ghana is a beneficiary of the Treatment Acceleration Project of the World Bank, which awarded an International Development Association grant of US\$ 60 million aimed at scaling up access to HIV/AIDS treatment in three African countries: Burkina Faso, Ghana and Mozambique. The Treatment Acceleration Project strategy in Ghana is based on establishing infrastructure for health care delivery and scaling up treatment by leveraging resources in the private sector.
- Ghana's Round 1 proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria was approved for voluntary testing and counselling activities as well as treatment at three public hospitals and one mission hospital. Total funding approved was US\$ 14.2 million. The proposal focused specifically on accelerating prevention and care for vulnerable groups. As of December 2005, US\$ 7.8 million has been disbursed. Ghana also submitted a successful proposal to the Global Fund in Round 5 for a total of US\$ 97 million over five years, focusing on strengthening the health system to scale up services related to HIV/AIDS, including voluntary counselling and testing, preventing mother-to-child transmission and providing services for managing sexually transmitted infections.
- Ghana is encouraging pooling resources to provide basket funding for HIV/AIDS that combines government and donor finances to support the national response. An example is the new National Strategic Framework on HIV/AIDS (2006-2010) for US\$ 57.5 million, which will combine resources from the World Bank, the United Kingdom Department for International Development, the Danish International Development Agency and the Government of Ghana.

## 5. Treatment and prevention coverage

- In 2003, WHO estimated Ghana's total antiretroviral therapy need to be 52 000 people, and the WHO "3 by 5" treatment target was calculated at 26 000 by the end of 2005 (based on 50% of estimated need). The government has declared a national antiretroviral therapy target of 30 000 people by the end of 2005. In 2005, WHO/UNAIDS estimated that Ghana's total treatment need had risen to 61 000 people.
- An estimated 40% of HIV/AIDS services are currently delivered by the government, 30% by nongovernmental partners and 30% by the private sector.
- The provision of antiretroviral therapy in the public sector began in 2003. Currently four pilot sites are providing antiretroviral therapy. Two are teaching sites (Korle-Bu Teaching Hospital and Komfo Anokye Teaching Hospital), which together cater to almost 75% of the people currently receiving antiretroviral therapy, and two are Family Health International sites (St. Martins Hospital and the Atua Government Hospital). Treatment is also being provided at three private facilities in Accra (Holy Trinity Hospital, Akai House and Nyaho Clinic).
- Treatment is provided at the four pilot sites using funding from the Global Fund Round 1 grant, which makes provision for treatment to be provided to up to 2000 people. An additional 11 treatment sites are planned to be opened with support from the World Bank Treatment Acceleration Project funds, aiming to provide access to antiretroviral therapy to 600 people within the three-year project period.
- As of October 2004, an estimated 1600 people were receiving antiretroviral therapy in the four pilot sites. By the end of 2004, 2028 people were receiving antiretroviral therapy. By September 2005, this had increased to 3584 people receiving antiretroviral therapy.
- The number of sites providing services for voluntary counselling and testing increased from 14 at the end of 2003 to 113 by September 2005, when 53% of districts had at least one facility providing voluntary counselling and testing services. Services for preventing mother-to-child transmission are also available in 53% of districts.
- The Global Fund Round 5 proposal plans to provide antiretroviral therapy to 35 000 people by 2010, adding up to 21 new sites. It also aims to increase the number and percentage of people 14-69 years old accessing voluntary counselling and testing services from 7% to 30% of the population by 2010 and to reduce the rate of transmission from mother-to-child from 30% to 15% by 2010.

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

#### Leadership and management

The Ministry of Health and the Ghana AIDS Commission provide leadership in developing national plans, coordinating national response and managing financing. Within the health sector, the Ministry of Health and the Ghana Health Service manage implementation, and the National AIDS Control Programme is responsible for developing and supervising clinical policy. The multisectoral National Strategic Framework on HIV/AIDS (2001-2005) guides the national response and alignment of partners. WHO provides support to the Ministry of Health and the Ghana AIDS Commission in national efforts to build human resources capacity. The Public Enterprise Foundation and PharmAccess International are the implementing partners for the World Bank Treatment Acceleration Project.

#### Service delivery

The Ministry of Health and the Ghana Health Service provide leadership in HIV/AIDS service delivery. They also provide leadership in developing normative guidelines and managing the procurement and supply management of drugs and related supplies. Organizations including WHO, Family Health International and UNICEF provide support. Family Health International, nongovernmental organizations and WHO are providing support to build human resource capacity. IDA ARV Procurement Services BV (a not-for-profit organization that promotes access to quality-assured and quality-controlled antiretroviral medicines) supports drug procurement activities. The private sector and civil society, especially nongovernmental organizations, are increasingly involved in prevention activities and in providing care and support services. A limited number of private hospitals, clinics and laboratories provide voluntary counselling and testing services managed by nongovernmental organizations such as the Christian Health Association of Ghana.

#### Community mobilization

The Ghana AIDS Commission, the Ministry of Local Government and Rural Development, WHO, other United Nations agencies, nongovernmental organizations and the central government all contribute to psychosocial support activities and building the capacity of people living with HIV/AIDS. The United Kingdom Department for International Development supports the social marketing of condoms and capacity-building efforts. More than 2500 community-based organizations and nongovernmental organizations are implementing HIV/AIDS interventions in Ghana.

#### Strategic information

The Ghana AIDS Commission provides leadership in issues of monitoring and evaluation. The Ministry of Local Government and Rural Development, WHO, nongovernmental organizations and universities work alongside the government in developing monitoring systems, information and research systems and systems for tracking the people receiving antiretroviral therapy. The United States Agency for International Development supports monitoring and evaluation activities as well as efforts related to prevention, care and support and institutional development. The Ghana Health Service conducts second-generation surveillance of HIV/AIDS and sexually transmitted infections with financial support from the United Kingdom Department for International Development and technical support from WHO.

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

WHO's response so far

- Conducting a situation analysis to assess opportunities and challenges for scaling up antiretroviral therapy and areas for WHO support
- Supporting the development of a proposal and implementation plan for the World Bank Treatment Acceleration Project with a focus on scaling up antiretroviral therapy
- Supporting the development of national guidelines and protocols for antiretroviral therapy, opportunistic infections, sexually transmitted infections, preventing mother-to-child transmission, voluntary counselling and testing and nutrition and infant feeding
- Supporting the development of a national human resources plan
- Adapting WHO Integrated Management of Adult and Adolescent Illness (IMAI) guidelines and training modules on HIV/AIDS care
- Supporting the development of procurement and supply management mechanisms
- Providing support to strengthen the surveillance system for HIV/AIDS and sexually transmitted infections
- Providing support for developing a funding proposal for Round 5 of the Global Fund
- Establishing an HIV/AIDS country team in the WHO Country Office to support the government and other partners in scaling up antiretroviral therapy

Key areas for WHO support in the future

- Providing support to finalize the National Strategic Framework on HIV/AIDS (2006-2010)
- Providing support to finalize the national HIV/AIDS policy and national implementation plan for scaling up antiretroviral therapy
- Supporting the accreditation of centres providing antiretroviral therapy
- Developing quality assurance mechanisms for drug procurement
- Supporting the development of a national training plan for scaling up antiretroviral therapy at the district level and the training of health workers using the WHO Integrated Management of Adult and Adolescent Illness approach
- Developing a national communication strategy to reduce stigma and to mobilize community-based groups for treatment
- Harmonizing and integrating the monitoring and evaluation system of the World Bank Treatment Acceleration Project into the national monitoring and evaluation framework
- Developing guidelines for monitoring resistance to antiretroviral drugs as part of the international global surveillance system developed by WHO
- Providing support for implementation of the Global Fund Round 5 grant
- Supporting the implementation of the WHO/OPEC Fund Project on Integrating "3 by 5" in Health Systems in Africa, including for health sector strategic planning and programming, surveillance of drug resistance, and drug procurement and management of supplies

Staffing input for scaling up HIV treatment and prevention

- Current WHO Country Office staff responsible for HIV/AIDS and sexually transmitted infections include an international HIV/AIDS Country Officer and a National Programme Officer for HIV/AIDS. An international staff member under the World Bank Treatment Acceleration Project is currently being recruited.