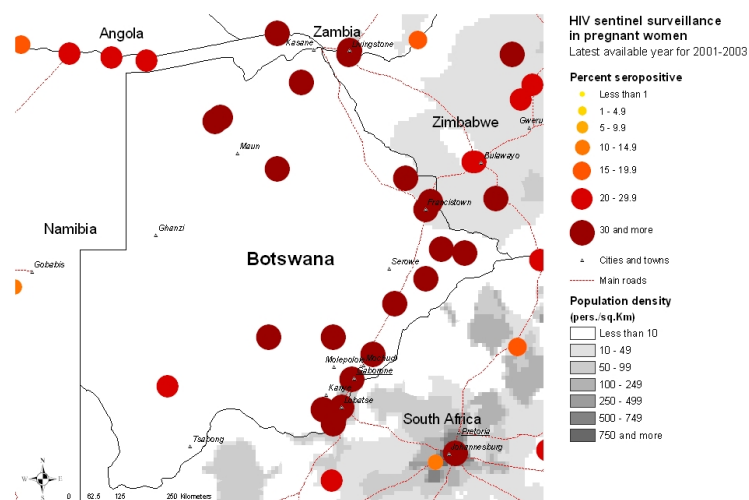


Estimated number of people needing antiretroviral therapy (0-49 years), 2005: 84 000\*\*  
 Antiretroviral therapy target declared by country: 55 000 by the end of 2005

84 000\*\*



World Health Organization

Map Data Source:  
 WHO/UNAIDS Epidemiological Fact Sheets  
 and the United States Census Bureau  
 Map production:  
 Public Health Mapping & GIS  
 Communicable Diseases (CDS)  
 World Health Organization

## 1. Demographic and socioeconomic data

	Date	Estimate	Source
Total population (millions)	2004	1.8	United Nations
Population in urban areas (%)	2005	52.517	United Nations
Life expectancy at birth (years)	2002	40.4	WHO
Gross domestic product per capita (US\$)	2002	2857	United Nations
Government budget spent on health care (%)	2002	7.5	WHO
Per capita expenditure on health (US\$)	2002	171	WHO
Human Development Index	2003	0.565	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 estimates indicate that the adult prevalence of HIV/AIDS in 2005 was 33.4%. HIV/AIDS estimates are currently under review. WHO/UNAIDS will provide updated HIV/AIDS estimates in May 2006.

\*\* The national estimate of the number of people requiring antiretroviral therapy in Botswana is 110 000 people. \*\*\* Botswana AIDS Impact Survey.

## 2. HIV indicators

	Date	Estimate	Source
Adult prevalence of HIV/AIDS (15-49 years)	2003	35.5 - 39.1%*	WHO/UNAIDS
Estimated number of people living with HIV/AIDS (0-49 years)	2003	330 000 - 380 000	WHO/UNAIDS
Reported number of people receiving antiretroviral therapy (0-49 years), 2005	Oct 2005	55 829	WHO/UNAIDS
Estimated number of people needing antiretroviral therapy (0-49 years), 2005	Dec 2005	84 000**	WHO/UNAIDS
HIV testing and counselling sites: number of sites	Sep 2005	16	National AIDS Coordinating Agency
HIV testing and counselling sites: number of people tested at all sites		NA	
Knowledge of HIV prevention methods (15-24 years)% - female°	2001	40	BAIS***
Knowledge of HIV prevention methods (15-24 years)% - male°	2001	33	BAIS***
Reported condom use at last higher risk sex (15-24 years)% - female**	2000	75	BAIS***
Reported condom use at last higher risk sex (15-24 years)% - male**	2000	88	BAIS***

## 3. Situation analysis

### Epidemic level and trend and gender data

The first case of HIV/AIDS in Botswana was diagnosed in 1985. Today Botswana faces one of the most severe HIV epidemics in the world. At the end of 2003, an estimated 350 000 adults and children were living with HIV/AIDS in Botswana, with an estimated average adult prevalence of 37.3%. In 2003, the median HIV prevalence among antenatal clinic attendees tested in 22 health districts was 37% (range 26-52%). The HIV prevalence among antenatal clinic attendees increased rapidly from 18% in 1992 to 38% in 2000 and started to decline in 2001. In 2005, based on the antenatal care sentinel survey, the prevalence among antenatal care attendees was estimated at 33%. Major urban areas in Botswana include Gaborone, Francistown and Selebi-Phikwe. The HIV prevalence increased from 15% in 1992 to 45% in 2003 in Gaborone and from 24% in 1992 to 46% in 2003 in Francistown. In 2003, Selebi-Phikwe district reported the highest prevalence in the country, reaching 52%. The 2005 sentinel surveillance has shown lower HIV prevalence rates in all sites, but Selebi-Phikwe, with an antenatal care HIV prevalence of 46.5%, is still the highest in the country. Key determining factors driving the HIV/AIDS epidemic include stigma and denial, the vulnerability of women, the incidence of unprotected sex, poverty and demographic mobility.

### Major vulnerable and affected groups

The principal mode of transmission is heterosexual. People 15-19 and 20-24 years old still exhibit high HIV infection rates despite recent evidence of declining HIV prevalence rates in these age groups. HIV prevalence at all sites increased from 16% in 1992 to 23% in 2003 among those 15-19 years old and from 20% in 1992 to 39% in 2003 among those 20-24 years old. In 2005 the prevalence fell to 18% for 15- to 19-year-olds and 31% for 20- to 24-year-olds. Overall, HIV prevalence declined substantially among women 15-19 and 20-24 years of age from 2001 to 2005. The highest age-specific prevalence in the 2005 HIV sentinel survey was among women aged 30-35 years, at 49%. The Botswana AIDS Impact Survey 2 had similar findings, including for voluntary counselling and testing, where the prevalence in this age group is over 40% and highest. HIV prevalence rates peaked among the 25- to 29-year-old antenatal clinic attendees at 50.4% in 2000 and declined slightly to 49.7% in 2003 and to 44.5% by 2005. Military personnel are considered to be increasingly vulnerable to sexually transmitted infections, including HIV/AIDS.

### Policy on HIV testing and treatment

A routine offer of HIV testing was introduced in hospitals in 2004. National guidelines for voluntary counselling and testing have been developed. Botswana was one of the first countries in Africa to establish a national antiretroviral therapy programme. The implementation of antiretroviral therapy started in 2002 and expanded to 32 sites in 2005. Treatment is provided free of charge in the public sector, which has positively influenced the demand for voluntary counselling and testing. National treatment guidelines have been developed in accordance with international standards.

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

The starting regimen for adult men and women with no reasonable risk of pregnancy and children older than five years is zidovudine + lamivudine + efavirenz. The starting regimen for pregnant women or women likely to become pregnant and for children younger than five years is zidovudine + lamivudine + nevirapine. The government is funding the procurement of antiretroviral drugs. Antiretroviral therapy is provided free of charge in the public sector.

#### Assessment of overall health sector response and capacity

The Government of Botswana has demonstrated a very high level of political commitment to addressing the HIV/AIDS epidemic and has adopted a compelling, long-term vision to have no new HIV infections by 2016. Botswana is among the 19 African countries that have established a National AIDS Council chaired by the head of state to take responsibility for a multisectoral response to AIDS. The National AIDS Coordinating Agency provides technical support to the National AIDS Council and coordinates the national multisectoral response. Activities are guided by a National AIDS Policy and the National Strategic Framework for HIV/AIDS for 2003-2009, which was developed to foster an expanded multisectoral response. Strong political commitment has led to the integration of HIV/AIDS into national development planning and budgeting (National Development Plan 9). Botswana began providing antiretroviral therapy in 2002 in Gaborone. A national Emergency Operational Plan for Scaling Up Antiretroviral Therapy in 2004-2005 was developed to guide the roll-out of treatment in the public sector. Botswana has a good health system with wide coverage. Training programmes in antiretroviral therapy have been developed and implemented, including for physicians, nurses, pharmacists and counsellors. In addition, guidelines for training health workers to deliver critical HIV/AIDS services are being developed within the framework of the WHO Integrated Management of Adult and Adolescent Illness (IMAI) approach. A social mobilization campaign designed to increase public awareness of the availability and outcomes of antiretroviral therapy has increased the involvement of people living with HIV/AIDS in promoting a supportive environment and has helped to reduce stigma and discrimination. By September 2004, Botswana had already achieved the WHO "3 by 5" target of 30 000 people receiving treatment by the end of 2005 (based on 50% of the WHO/UNAIDS estimated need in 2003). Botswana's success provides a fine example of how antiretroviral therapy can be provided on a large scale in resource-constrained settings.

#### Critical issues and major challenges

The lack of trained human resources is the most significant challenge as Botswana continues to scale up the provision of antiretroviral therapy. Issues affecting staffing levels include a government freeze on creating new posts to prevent future budget deficits. Antiretroviral therapy services need to be rapidly decentralized beyond the district and primary hospital level to include initiation of treatment at the clinic level in order to ensure further scale up towards achieving universal access to services. Coordination among initiatives of various partners and stakeholders needs to be strengthened, including partnerships with the private sector. The initiative to involve private practitioners to follow up stable patients that is being piloted in Gaborone, Francistown and Selebi-Phikwe should be expanded. Other major challenges to scaling up antiretroviral therapy include policy-related issues such as whether nurses should be authorized to initiate treatment, ensuring fairness and equity in providing antiretroviral therapy services and reducing sociocultural effects and stigma. Testing and counselling services need to be expanded further as an entry point to post-test prevention, care and treatment services. Nongovernmental organizations and community-based organizations engaged in the national response face the challenge of scarcity of available funding and limited capacity.

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

- The national antiretroviral therapy programme is funded by the government in collaboration with the African Comprehensive HIV/AIDS Partnerships (ACHAP) and a few other development partners. ACHAP is funded by the Bill & Melinda Gates Foundation with a US\$ 50 million contribution over a five-year period, to be matched by pharmaceutical manufacturer Merck & Co., Inc. and The Merck Company Foundation, whose contributions will include antiretroviral medicines.
- Botswana is a beneficiary of the United States President's Emergency Plan for AIDS Relief. Under the Emergency Plan, Botswana received nearly US\$ 24.4 million in 2004 to support a comprehensive HIV/AIDS prevention, treatment and care programme. In 2005, the United States committed close to US\$ 51 million to support Botswana's efforts to combat HIV/AIDS.
- Botswana submitted a successful Round 2 proposal to the Global Fund to Fight AIDS, Tuberculosis and Malaria for US\$ 18.6 million focused on training, strengthening treatment, care and support activities, scaling up prevention programmes and reducing stigma and discrimination. As of December 2005, US\$ 9 million has been disbursed.
- Support is also provided by United Nations agencies, nongovernmental organizations, charitable organizations and foundations.

## 5. Treatment and prevention coverage

- The national estimate of the number of people requiring antiretroviral therapy in Botswana is 110 000 people. The national Emergency Operational Plan for Scaling Up Antiretroviral Therapy in 2004-2005 declared a treatment target of 55 000 people by 2005, based on this estimate of treatment need.
- In 2003, WHO/UNAIDS estimated Botswana's total treatment need to be 60 000 people, and the WHO "3 by 5" treatment target was calculated as 30 000 for the end of 2005 (based on 50% of estimated need). In 2005, WHO/UNAIDS estimated that Botswana's treatment need had risen to 84 000 people.
- With 42 000 people receiving antiretroviral therapy in March 2005, Botswana had already surpassed the WHO "3 by 5" treatment target. By October 2005, 55 829 people were reported to be receiving treatment in Botswana, achieving the national treatment target.
- Antiretroviral therapy programmes were first implemented in January 2002 at the Princess Marina Referral Hospital in Gaborone. The number of people receiving treatment rose gradually during the first two years of implementation and much more rapidly in 2004. In 2003, 12 facilities were offering antiretroviral therapy in Botswana. As of October 2005, 32 public sites are providing antiretroviral therapy, with at least one site in each of the 24 health districts.
- About 85% of patients treated receive treatment free of charge in the public sector, and about 15% receive treatment through the private sector. An increasing number of private companies have workplace programmes for people living with HIV/AIDS, including the Botswana Power Corporation and Barclays Bank. In March 2005, the Botswana Defence Force medical corps began providing antiretroviral therapy to soldiers free of charge in three sites. More than 1200 children receive treatment at a clinical centre for children with HIV/AIDS supported by the Botswana-Baylor partnership.
- The Government of Botswana has provided voluntary HIV testing during pregnancy as well as treatment for preventing transmission from the mother to the child since 2001. A routine offer of HIV testing was introduced in hospitals in 2004. Sixteen voluntary counselling and testing centres have been established countrywide in collaboration with BOTUSA (a collaboration between the government and the United States Centers for Disease Control and Prevention). Since 2003, all 24 health districts have provided testing and counselling services for preventing mother-to-child transmission.

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

#### Leadership and management

The National AIDS Council coordinates the multisectoral response to HIV/AIDS. The secretariat of the National AIDS Council is the National AIDS Coordinating Agency. The National AIDS Council has representatives from 17 sectors, including civil society, the private sector and the public sector. Other coordinating mechanisms include the National HIV/AIDS Partnership Forum, chaired by the National AIDS Coordinating Agency; and the HIV/AIDS Donor Coordination Forum, chaired by the Ministry of Finance and Development Planning. The government has also established HIV/AIDS sectoral committees in all ministries aimed at mainstreaming HIV/AIDS into sector plans and programmes. The Ministry of Local Government coordinates the district response. The AIDS Department of the Ministry of Health plays the role of health sector leadership, formulating policy, planning, developing programmes, providing technical support and implementing activities in selected areas. WHO supports the AIDS Department in coordinating and harmonizing the work of all stakeholders.

#### Service delivery

The National AIDS Council and the National AIDS Coordinating Agency provide leadership in delivering HIV/AIDS services. The ACHAP has been responsible for coordinating and financially supporting the antiretroviral therapy programme since inception. It has provided critical human resources and facilitated and supported the establishment of a number of treatment sites. It has also supported the development of information, education and communication activities for antiretroviral therapy, a system for tracking people receiving treatment and monitoring of the programme. It has also provided support for logistics, medicines and other supplies. Other major partners supporting the antiretroviral therapy programme in Botswana include the United States President's Emergency Plan for AIDS Relief and the United States Centers for Disease Control and Prevention, which provide support for testing, preventing mother-to-child transmission, antiretroviral therapy and palliative care. The Baylor Center of Excellence is promoting comprehensive HIV/AIDS family care and support. The Botswana-Baylor partnership provides support for antiretroviral therapy for children and women and family care in general. The Botswana-Harvard Partnership provides assistance in laboratory services and training. BOTUSA is contributing to HIV testing and counselling activities. WHO is supporting activities related to planning for human resources for scaling up treatment and Integrated Management of Adult and Adolescent Illness (IMAI).

#### Community mobilization

Over the years, civil society involvement in HIV/AIDS in Botswana has focused on prevention and on basic care for people infected or affected by HIV/AIDS. Community home-based care services are available through district health teams coordinated by the AIDS/STD Unit in the Ministry of Health. As of July 2004, the AIDS/STD Unit had trained more than 500 community home-based care volunteers. Several nongovernmental organizations operate in Botswana together with faith-based organizations. The most common community-based organizations involved in HIV/AIDS work are church organizations and women's groups. Village health committees are also reported to be very active in HIV/AIDS in many areas. The Botswana Network of AIDS Service Organizations includes over 130 nongovernmental organizations that provide support to people living with HIV/AIDS. The Botswana Network of People Living with HIV/AIDS and the Botswana Christian AIDS Integration Programme play an important role in mobilizing communities.

#### Strategic information

The Ministry of Health provides leadership and coordination in monitoring and evaluation, surveillance, tracking people receiving antiretroviral therapy, operational research and information management activities. Supporting agencies include the Ministry of Local Government, the Botswana-Harvard Partnership and WHO.

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

WHO's response so far

- Conducting a scoping mission in March 2004 to identify opportunities and challenges for scaling up antiretroviral therapy and areas for WHO support
- Providing support for the development of the national operational plan for scaling up antiretroviral therapy
- Providing support for assessing the human resource situation and developing a national plan for building human resource capacity
- Providing support for developing guidelines for training health workers within the framework of the WHO Integrated Management of Adult and Adolescent Illness (IMAI) strategy
- Providing support for strengthening drug procurement and supply management
- Providing support for the strengthening of the monitoring and evaluation system in accordance with scaling up antiretroviral therapy
- Providing support to document Botswana's programme for rolling out antiretroviral therapy
- 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

- Supporting the Ministry of Health in building human resource capacity
- Providing normative guidance to support the scale-up of prevention and testing and counselling services
- Supporting the review and update of regulations and policies on the role of nurses and midwives in delivering antiretroviral therapy
- Supporting the review and update of policies and legislation on issues related to TRIPS (Agreement on Trade-related Aspects of Intellectual Property Rights) and generic antiretroviral drugs
- Supporting the development of treatment literacy to ensure community involvement
- Supporting the strengthening of national health information systems for the HIV/AIDS programme
- Supporting the development of systems for surveillance of drug resistance
- Supporting the strengthening of links between prevention and treatment scale-up in accordance with universal access
- Supporting the acceleration of prevention efforts in the health sector in accordance with the initiative of the WHO Regional Office for Africa to support the Year for Acceleration of HIV Prevention in the African Region in 2006
- Supporting strategic planning, monitoring and evaluation of the health sector response to HIV/AIDS

Staffing input for scaling up HIV treatment and prevention

- Current WHO Country Office staff responsible for HIV/AIDS and sexually transmitted infections include one international HIV/AIDS Country Officer.