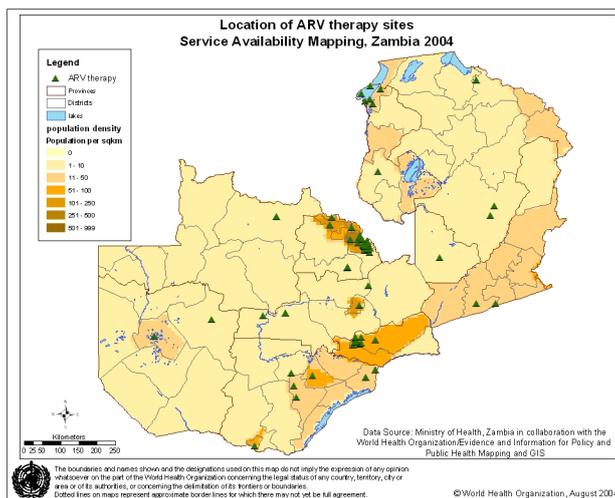


Estimated number of people needing antiretroviral therapy (0-49 years), 2005: 183 000
 Antiretroviral therapy target declared by country: 100 000 by the end of 2005



World Health Organization

Map Data Source:
 Ministry of Health, Zambia in collaboration
 with WHO Evidence and Information Policy
 Map production:
 Public Health Mapping & GIS
 Communicable Diseases (CDS)
 World Health Organization

1. Demographic and socioeconomic data

	Date	Estimate	Source
Total population (millions)	2004	10.9	United Nations
Population in urban areas (%)	2005	36.5	United Nations
Life expectancy at birth (years)	2003	39	WHO
Gross domestic product per capita (US\$)	2002	346	United Nations
Government budget spent on health care (%)	2002	11.3	WHO
Per capita expenditure on health (US\$)	2002	20	WHO
Human Development Index	2003	0.394	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 in 2004, adult prevalence of HIV/AIDS was 19%, and 1 000 000 people were living with HIV/AIDS. HIV/AIDS estimates are currently under review. WHO/UNAIDS will provide updated HIV/AIDS estimates in May 2006.
 ** The Central Board of Health of Zambia reported that 43 964 people were receiving ARV therapy through the public sector in November 2005. An additional 2000 people were estimated to be receiving ARV therapy through private facilities. *** Demographic And Health Surveys

2. HIV indicators

	Date	Estimate	Source
Adult prevalence of HIV/AIDS (15-49 years)	2003	13.5 - 20.0%*	WHO/UNAIDS
Estimated number of people living with HIV/AIDS (0-49 years)	2003	730 000 - 1 100 000*	WHO/UNAIDS
Reported number of people receiving antiretroviral therapy (0-49 years), 2005	Nov 2005	43 964**	Ministry of Health
Estimated number of people needing antiretroviral therapy (0-49 years), 2005	Dec 2005	183 000	WHO/UNAIDS
HIV testing and counselling sites: number of sites	Sep 2005	420	WHO
HIV testing and counselling sites: number of people tested at all sites		NA	
Knowledge of HIV prevention methods (15-24 years)% - female°	2001	31	DHS***
Knowledge of HIV prevention methods (15-24 years)% - male°	2001	33	DHS***
Reported condom use at last higher risk sex (15-24 years)% - female**	2001	33	DHS***
Reported condom use at last higher risk sex (15-24 years)% - male**	2001	42	DHS***

3. Situation analysis

Epidemic level and trend and gender data

Zambia's first AIDS case was reported in 1984. Today Zambia has a generalized HIV/AIDS epidemic that appears to be stabilizing. The Ministry of Health estimates that 1 000 000 adults and children were living with HIV/AIDS at the end of 2004. According to the Zambia Demographic Health Survey of 2002, the national HIV seroprevalence among adults 15-49 years old was about 16%. The mode of transmission is predominantly heterosexual. Mother-to-child transmission is also significant. Data show that AIDS cases peak among women 20-29 years old and among men 30-39 years old, suggesting significant transmission from older men to younger women. The HIV seroprevalence is significantly higher among women (18%) than men (13%) and much higher among the urban population (25-35%) than the rural population (8-16%). The epidemic is estimated to have left at least 600 000 children orphaned. HIV/AIDS morbidity and mortality also result in an estimated 50% of general hospital admissions and more than 70% of specialized medical hospital admissions.

Major vulnerable and affected groups

Women are one of the major vulnerable groups. According to the Zambia Demographic Health Survey of 2002, women account for 54% of all people living with HIV/AIDS. HIV infection is high among both men and women 15-49 years old, the most economically productive age. The HIV prevalence among females 14-19 years old is six times that of males in the same age group. Women 20-29 years old are also vulnerable, as are orphans and other vulnerable children. Other vulnerable groups are military personnel, sex workers, truckers, fisheries workers and fishmongers.

Policy on HIV testing and treatment

Zambia has developed policies and guidelines for both testing and treatment of HIV/AIDS. The HIV testing policy requires full pretest counselling. It also requires that diagnostic testing and counselling be offered to people living with HIV/AIDS as part of a comprehensive HIV/AIDS care package. The government is considering putting in place a policy of opt-out HIV testing. In 1987, an emergency plan on safe blood supply was launched. All district, provincial and central referral hospitals have blood transfusion facilities. All blood products used in these health institutions are required to be screened for HIV. In 2002, the government decided to make antiretroviral therapy widely available to everyone needing treatment and allocated US\$ 3 million to purchase antiretroviral drugs for 10 000 people, to be provided through the public health service. Treatment was initially provided in the public sector at a subsidized rate. In June 2005, the government declared that the entire antiretroviral therapy service package would be provided free of charge in the public sector. A comprehensive implementation plan for 2004-2005 to roll out access to treatment across the country was developed, and treatment guidelines have been updated in line with international standards. At the end of 2005, the Ministry of Health and cooperating partners began evaluating the achievements, outputs, challenges and lessons learned in the implementation of the antiretroviral therapy implementation plan for 2004-2005, with technical support from WHO. The findings from the evaluation will form the basis of the implementation plan to be developed for 2006-2008. This plan is expected to be available by April 2006. Meanwhile, a transition plan has been developed and disseminated to all service delivery sites.

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

The main first-line antiretroviral drug regimen is stavudine + lamivudine + nevirapine in accordance with WHO recommendations, with a fixed-dose combination being widely used. The regimen comprising zidovudine + lamivudine + nevirapine is also a recognized first-line regimen but less commonly used. The average cost of the main first-line drug regimen is about US\$ 160 per person per year.

Assessment of overall health sector response and capacity

The government has demonstrated a high level of political commitment to address HIV/AIDS. Several national support structures have been put in place. As early as 1986, Zambia created the National AIDS Surveillance Committee and the National AIDS Prevention and Control Programme. In 1987, a short-term emergency plan was established to deal with the safety of blood supply. Two medium-term plans were subsequently implemented. In December 2002, the National HIV/AIDS/STI/TB Council (NAC) was established to coordinate the national multisectoral response, one component of which is the health sector response. The NAC includes representation from government, nongovernmental organizations, religious and traditional leaders, mass media, youth and the private sector and integrates the participation of multilateral and bilateral agencies. The National HIV/AIDS/STI/TB Intervention Strategic Plan 2002-2005 was developed with the following priority interventions: promoting behaviour change, reducing mother-to-child transmission, ensuring safe blood transfusion, providing care, treatment and support to people living and affected by HIV/AIDS, improving care and support for orphans and vulnerable children and strengthening multisectoral coordination of interventions. A high-level Cabinet Committee on HIV/AIDS has also been established to provide policy direction and regularly report to the Cabinet on HIV/AIDS issues. Zambia has developed various policies, planning frameworks, guidelines and protocols to guide the national response. A national implementation plan for scaling up antiretroviral therapy in Zambia in 2004-2005 was developed with the objective of expanding access to treatment in the country. The plan for 2006-2008 is being developed. In addition, Zambia has been scaling up the health sector response to HIV/AIDS through several initiatives, including the Poverty Reduction Strategy Programme, the Highly Indebted Poor Country Initiative, the Zambia Social Investment Fund, the Zambia National Response to HIV/AIDS Project (funded through the World Bank Multi-Country HIV/AIDS Program for Africa) and grants from the Global Fund to Fight AIDS, Tuberculosis and Malaria. This response includes expanding voluntary counselling and testing, providing antiretroviral therapy, developing home-based care, managing opportunistic infections, strengthening laboratory capacity, ensuring blood safety, managing sexually transmitted infections and encouraging behaviour change. The government is also addressing the human resources needed by introducing retention schemes based on incentives for doctors and rural health workers and conducting training of health workers using the WHO Integrated Management of Adult and Adolescent Illness (IMAI) approach. Communities of people living with HIV/AIDS, nongovernmental organizations, faith-based organizations and the private sector also contribute to the national response to HIV/AIDS and implement various activities around the country.

Critical issues and major challenges

The lack of trained human resources is one of the most significant challenges to scaling up the health sector response to HIV/AIDS in Zambia. The high prevalence of HIV-related illness in Zambia has seriously overburdened the health care system at all levels, accentuating the burden on a thinly stretched workforce whose numbers are also diminishing due to HIV/AIDS. The situation is further exacerbated by the emigration of skilled health workers to other countries. Health infrastructure needs to be strengthened, including laboratory services. Health infrastructure is particularly constrained in rural, remote areas. Systems for drug procurement and supply management need to be strengthened. In addition, the current restructuring of the Central Board of Health has adversely affected staff productivity. There are also concerns regarding the continuing availability of adequate funding to sustain the government's programme of providing antiretroviral therapy services free of user charges in the public sector. Information regarding transmission of HIV is limited in rural areas. Much stigma is still associated with HIV/AIDS, limiting the number of people who seek HIV testing and care.

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

- WHO estimates that between US\$ 157.3 million and US\$ 161.6 million was required to support scaling up treatment to reach the WHO "3 by 5" target of 70 000 people by the end of 2005.
- The Global Fund granted Zambia US\$ 92.8 million over five years in Round 1 for a comprehensive prevention, treatment and care proposal. As of October 2005, a total of US\$ 47.1 million had been disbursed. Zambia also submitted a successful Round 4 proposal to the Global Fund with a five-year funding request of US\$ 253.6 million, focused on scaling up access to antiretroviral therapy. As of October 2005, a total of US\$ 13 million had been disbursed to begin implementing activities.
- Zambia is a beneficiary of the United States President's Emergency Plan for AIDS Relief. Under the Emergency Plan, Zambia received nearly US\$ 81.8 million in fiscal year 2004 to support a comprehensive HIV/AIDS prevention, treatment and care programme. In fiscal year 2005, the United States committed an additional US\$ 132.9 million to support Zambia's fight against HIV/AIDS.
- The World Bank granted Zambia US\$ 42 million under the second Multi-Country HIV/AIDS Program for Africa. The grant includes an antiretroviral therapy component in the context of mother-to-child transmission (MTCT-Plus) through which both mothers and fathers will have access to treatment.
- Other sources of support include the United Kingdom Department for International Development, the Canadian International Development Agency, the Danish International Development Agency, the European Commission, the Japan International Cooperation Agency, the United States Centers for Disease Control and Prevention, nongovernmental organizations and United Nations agencies.

5. Treatment and prevention coverage

- In 2003, WHO/UNAIDS estimated that Zambia's total treatment need was 140 000 people, and the WHO "3 by 5" treatment target was calculated as 70 000 people (based on 50% of estimated need). In 2005, WHO/UNAIDS estimated that Zambia's treatment need had risen to 183 000 people. The government declared a national treatment target of 100 000 people by the end of 2005, with the ultimate goal of providing universal access to treatment to everyone in need. In 2004, the government committed to providing antiretroviral therapy free of charge in the public sector and, in June 2005, declared that the entire antiretroviral therapy service package would be provided free of charge in the public sector.
- The government's national antiretroviral therapy programme began in 2002 with two pilot sites at the University Teaching Hospital and Ndola Central Hospital. As of March 2005, 54 government and mission health facilities in Zambia were offering antiretroviral therapy in the country. In September 2005, there were close to 110 sites providing antiretroviral therapy across the country. By the end of 2009, it is proposed that all hospitals and health centres in Zambia will be providing antiretroviral therapy.
- As of September 2004, an estimated 13 636 people were accessing antiretroviral therapy in Zambia; 13 555 through the public sector and an additional 81 people at a designated MTCT-Plus site. At the end of 2004, the Central Board of Health reported that 15 328 Zambians were receiving antiretroviral therapy, most through the public sector. By November 2005, 43 964 people were receiving antiretroviral therapy in Zambia in the public sector, with at least an estimated additional 2000 accessing treatment through private-sector sources. Some private companies, such as the Konkola Copper Mines, also provide antiretroviral therapy to their employees at a subsidized rate.
- National estimates project antiretroviral therapy coverage for 4000 people through the MTCT-Plus project funded by the World Bank Multi-Country HIV/AIDS Program for Africa and for 20 000 people with funds from the Global Fund Round 1 grant. The Global Fund Round 4 proposal includes the provision of antiretroviral therapy for 25 000 people in the first year and 105 000 people by the fifth year of implementation.
- At the end of 2003, 106 sites were providing voluntary counselling and testing services in the country, covering 70 of 76 districts. At the end of 2004, 220 sites were providing HIV testing and counselling services. By September 2005, this number had risen to 420 sites across the country.

6. Implementation partners involved in scaling up treatment and prevention**Leadership and management**

The NAC coordinates the national multisectoral response to HIV/AIDS. The Ministry of Health provides leadership in planning and resource mobilization and sets health policy related to HIV/AIDS. The Central Board of Health implements the health sector response to HIV/AIDS. The NAC has established national technical working groups, which include the Implementation of Care and Treatment Technical Working Group. This is composed of technical experts in care and treatment from various stakeholder organizations, including the public, nongovernmental organizations, faith-based organizations and the private sector, and provides technical guidance to the national coordinating bodies, including the NAC and the Central Board of Health. WHO provided support for developing a national operational plan for scaling up antiretroviral therapy. UNDP, the United Kingdom Department for International Development, the United States Centers for Disease Control and Prevention, the European Union and other bilateral partners support the strengthening of the health system.

Service delivery

The Central Board of Health is the lead agency in delivering HIV/AIDS prevention, care and treatment services, including the provision of antiretroviral therapy. It supervises and provides technical support to a network of government health facilities and district health services. Numerous private practitioners also provide antiretroviral therapy. The Churches Health Association of Zambia coordinates the programmes of faith-based hospitals. WHO provides normative support for developing tools and guidelines (such as guidelines on antiretroviral therapy; HIV testing and counselling; and laboratory services). The School of Medicine of the University of Zambia and other national training institutions take the lead in training health workers. WHO and the United States Centers for Disease Control and Prevention support capacity-building activities. JHPIEGO, an affiliate of Johns Hopkins University, provides support for developing training materials. The Zambian Medical Stores is responsible for drug procurement and management of stocks. UNICEF supports drug procurement and capacity-building for drug supply management. WHO and UNICEF also support activities for preventing mother-to-child transmission. The Government of Japan has provided support for strengthening laboratory infrastructure and has recently committed to funding an assistance package for two disadvantaged districts. The package will include medical equipment, training for district health workers, nongovernmental organizations and support groups for people living with HIV/AIDS, as well as operational research and monitoring and evaluation. The United States Agency for International Development provides support for expanding HIV/AIDS services in five provinces, in collaboration with Family Health International, Management Sciences for Health and the International HIV/AIDS Alliance.

Community mobilization

The Ministry of Information and the Central Board of Health provide leadership in programme communication, supported by the NAC, the Churches Health Association of Zambia, UNDP, WHO and UNICEF. Zambia was among the first countries in Africa to implement home-based care. Faith-based organizations provide leadership in implementing home-based care programmes. Other activities undertaken by nongovernmental organizations and community-based organizations include voluntary counselling and testing and psychosocial support. The Zambia AIDS Network is an umbrella organization of national nongovernmental organizations that implement programmes for people living with HIV/AIDS. The Network of Zambian People Living with HIV/AIDS has branches in all districts. The International HIV/AIDS Alliance provides technical support to community groups in supporting delivery of antiretroviral therapy and strengthening community- and home-based care programmes. The World Food Programme provides nutritional support to people living with HIV/AIDS. The Zambia Business Coalition on HIV/AIDS leads the private sector response to addressing HIV/AIDS issues in the workplace. Several nongovernmental organizations contribute to the Cross Border Initiative, which provides prevention and care services for sex workers, truckers and young people living in border and transit areas.

Strategic information

The Central Board of Health coordinates efforts in surveillance, monitoring and evaluation of the HIV/AIDS epidemic and response, supported by the NAC. A drug resistance surveillance system is being established with the support of the Global Fund Round 4 grant. Other key institutions supporting management of strategic information include the University Teaching Hospital, the Tropical Diseases Research Centre, the Zambian AIDS Network and faith-based organizations. WHO, UNAIDS and the United States Centers for Disease Control and Prevention provide technical guidance.

7. Staffing input for scaling up HIV treatment and prevention

WHO's response so far

- Conducting a WHO scoping mission in October 2003 to assess the situation of antiretroviral therapy implementation and to identify opportunities for rapidly scaling up antiretroviral therapy programmes and areas for WHO support
- Providing technical assistance to the Central Board of Health, the NAC and other partners in developing a comprehensive national plan for scaling up antiretroviral therapy
- Supporting the Central Board of Health and the NAC in advocating with bilateral and multilateral partners for their increased involvement in scaling up antiretroviral therapy
- Adapting the WHO Integrated Management of Adult and Adolescent Illness (IMAI) guidelines for HIV care, developing training materials and training health workers
- Providing technical assistance in developing a national plan for building human resource capacity
- Providing technical assistance in approaches to increasing the use of antiretroviral therapy and addressing issues of equity of access to treatment
- Providing technical assistance for streamlining the procurement of and managing the supply of antiretroviral drugs and diagnostics in partnership with JSI Deliver, UNICEF and other partners
- Providing technical assistance in developing strategic partnerships between the district health system and communities for scaling up antiretroviral therapy, in partnership with the Japan International Cooperation Agency and other cooperating partners such as the Zambia Prevention, Care and Treatment Partnership, the Catholic Relief Services and the Centre for Infectious Disease Research in Zambia (projects funded by the United States President's Emergency Plan for AIDS Relief)
- Providing technical assistance for the establishment of a harmonized information reporting system on antiretroviral therapy scale-up that covers patient management, patient monitoring and programme management
- Providing technical assistance for the establishment of a pharmacovigilance system including monitoring of adverse drugs effect and drug resistance
- Providing technical assistance to the Country Coordinating Mechanism for developing a funding proposals to the Global Fund and to accelerate the disbursement and implementation of the Round 1 and Round 4 grants
- As part of the WHO/OPEC Fund Multi-country Initiative on HIV/AIDS, supporting the strengthening of community- and home-based care for people living with HIV/AIDS in five districts (Kasama, Mansa, Chipata, Mazabuka and Mongu) and supporting institutional capacity-building at the central and district levels to coordinate and monitor activities
- 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 continued technical and administrative support to the national antiretroviral therapy programme, including supporting a review of the national implementation plan for 2004-2005 and developing the plan for 2006-2008
- Providing technical assistance to the government in reviewing policies and normative documents on HIV/AIDS prevention, treatment and care for the different levels of the health care system (primary, secondary and tertiary)
- Providing technical assistance for strengthening collaboration with faith-based organizations providing HIV/AIDS care and treatment services
- Providing technical assistance to further strengthen procurement and supply management of antiretroviral drugs and diagnostics, including technical guidance related to local production of antiretroviral drugs
- Providing technical assistance for strengthening support groups of people living with HIV/AIDS working with health staff at antiretroviral therapy sites for prevention, education, home-based care and treatment support
- Collaborating with the World Food Programme to ensure adequate food aid and nutritional support for people receiving antiretroviral therapy
- Providing technical assistance to the United Nations Theme Group on HIV/AIDS in Zambia for the development, implementation, monitoring and evaluation of the Joint United Nations HIV/AIDS Implementation Support Plan for 2006 in line with recommendations of the report of the Global Task Team on Improving AIDS Coordination among Multilateral Institutions and International Donors
- Providing technical assistance in prevention, education and communication strategy development programmes in line with the National AIDS Strategic Framework; priorities for prevention and education expressed by government to the United Nations; and the WHO's Regional Office for Africa's initiative to support the Year for Acceleration of HIV Prevention in the African Region in 2006
- Providing technical support for the conduct of three operational research studies for strengthening antiretroviral therapy services
- Providing support for implementation of the WHO/Italian Initiative for HIV/AIDS in sub-Saharan Africa

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 and one National Programme Officer for HIV/AIDS. Additional staffing needs identified include three National Programme Officers to be seconded to the Central Board of Health to support scale-up activities.