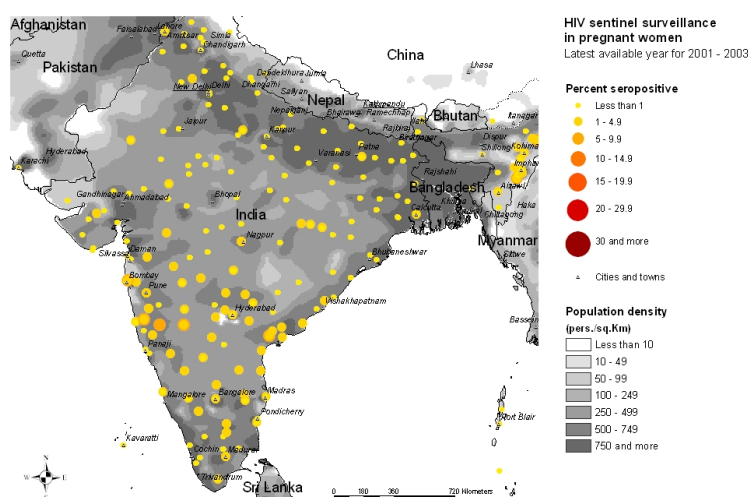


Estimated number of people needing antiretroviral therapy (0-49 years), 2005: 785 000
 Antiretroviral therapy target declared by country: 100 000 by the end of 2007



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



World Health
 Organization

1. Demographic and socioeconomic data

	Date	Estimate	Source
Total population (millions)	2004	1 081	United Nations
Population in urban areas (%)	2005	28.7	United Nations
Life expectancy at birth (years)	2003	62	WHO
Gross domestic product per capita (US\$)	2002	484	United Nations
Government budget spent on health care (%)	2002	4.4	WHO
Per capita expenditure on health (US\$)	2002	30	WHO
Human Development Index	2003	0.602	UNDP

^o = 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.

^{*} = People receiving antiretroviral therapy in the government programme free of charge (December 2005): 24 000. A total of 60 000 people were receiving treatment from public and private sources. Data for December 2005 were received after the global ^{*3} by 5^o progress report of December 2005 had gone to press.

^{**} National AIDS Control Organization. ^{***} People receiving counselling and testing in 2005: 970 000. ^{****} Behavioral Surveillance Surveys

2. HIV indicators

	Date	Estimate	Source
Adult prevalence of HIV/AIDS (15-49 years)	2003	0.4 - 1.3%	WHO/UNAIDS
Estimated number of people living with HIV/AIDS (0-49 years)	2003	2 200 000 - 7 600 000	WHO/UNAIDS
Reported number of people receiving antiretroviral therapy (0-49 years), 2005	Dec 2005	24 000*	NACO**
Estimated number of people needing antiretroviral therapy (0-49 years), 2005	Dec 2005	785 000	WHO/UNAIDS
HIV testing and counselling sites: number of sites	Dec 2005	833	NACO**
HIV testing and counselling sites: number of people tested at all sites	2001-2005	>2 million***	NACO**
Knowledge of HIV prevention methods (15-24 years)% - female ^o	2001	21	BSS****
Knowledge of HIV prevention methods (15-24 years)% - male ^o	2001	17	BSS****
Reported condom use at last higher risk sex (15-24 years)% - female ^{**}	2001	51	BSS****
Reported condom use at last higher risk sex (15-24 years)% - male ^{**}	2001	59	BSS****

3. Situation analysis

Epidemic level and trend and gender data

India's population surpassed 1 billion in 2001; 67% live in rural areas and 33% in urban areas. India is estimated to have the second largest population of people living with HIV/AIDS, next to South Africa. An estimated 5.13 million individuals currently live with HIV across all states in India. In areas that are more severely affected, the epidemic has started to challenge recent development achievements and to raise fundamental issues of human rights concerning people living with HIV/AIDS. The HIV/AIDS epidemic in India is heterogeneous; it seems to be following the type 4 pattern, where the epidemic shifts from the most vulnerable populations (such as sex workers, injecting drug users and men who have sex with men) to bridge populations (clients of sex workers, people with sexually transmitted infection and partners of drug users) and then to the general population. The shift usually occurs when the prevalence in the first group exceeds 5%, with a two- to three-year time lag between shifts from one group to another. The National AIDS Control Organization (NACO) estimated that the number of people infected with HIV in India increased from 3.86 million in 2000 to 5.13 million in 2004. As of 2004, about 39% of people living with HIV/AIDS were women and about 58% lived in rural areas where HIV/AIDS services are poor. By the end of November 2005, the total number of reported AIDS cases in India was 116 905, of which 34 177 were women. These data also indicate that about one third of reported AIDS cases are among people younger than 30 years. However, many more AIDS cases go unreported. Only 8097 total AIDS deaths have been reported as of December 2005. This is because many deaths due to AIDS-related causes go unreported because of stigma, discrimination and problems in claiming life insurance coverage. The spread of HIV is as diverse as the societal patterns between India's different regions, states and metropolitan areas. A total of 111 districts in 18 states are currently considered high prevalence districts. The transmission route is predominantly heterosexual (more than 85%), except in the northeastern states, where injecting drug use is the main route of HIV transmission. Injecting drug use has increased significantly during the past four years, with drug users switching from inhaling to over-the-counter injecting drugs. The other routes of transmission, by order of proportion, are perinatal, infected needles and syringes and unsafe blood and blood products.

Major vulnerable and affected groups

Vulnerable groups include injecting drug users, female sex workers, men who have sex with men, migrants and other mobile groups such as truck drivers who travel the major south-north highways. The epidemic, however, is increasingly spreading from vulnerable groups to the general population and from urban to rural areas. Factors contributing to this increase include increasing migration to high-prevalence areas in search of employment opportunities, high rates of sexually transmitted infections, low levels of awareness in rural areas, low condom use and rising levels of unsafe sex among young people, who comprise most of the group migrating for employment opportunities. India accounts for almost 1.4 million of the estimated 1.6 million young people living with HIV in the WHO South-East Asia Region. Another growing problem is orphans and vulnerable children and, although official figures are not available, UNAIDS estimates that more than 170 000 children under 15 years are living with HIV/AIDS.

Policy on HIV testing and treatment



The government has issued a comprehensive HIV testing policy indicating that no individual should undergo mandatory testing for HIV; that mandatory HIV testing should not be imposed as a precondition for employment or for providing health care during employment; that adequate voluntary testing facilities with pretest and post-test counselling should be made available throughout the country in a phased manner; and that each district should have at least one HIV testing centre with proper counselling facilities. Any person who wishes to know his or her HIV status should have access to all necessary facilities, and the results should be kept confidential. For HIV testing facilities in private-sector hospitals, clinics and diagnostic centres, the state governments should adopt legislative and other measures to ensure that these testing centres conform to the national policy and guidelines related to HIV testing. On 30 November 2003, the government announced a policy and programme commitment to provide antiretroviral therapy to 100 000 people living with HIV/AIDS by 2007, free of charge, with implementation starting on 1 April 2004. The main target subgroups of this programme are mothers living with HIV/AIDS who have participated in the programme for preventing mother-to-child transmission; seropositive children under 15 years; and people with AIDS who seek treatment at the designated hospitals.

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

Recommended first-line antiretroviral regimens for adults and adolescents include stavudine + lamivudine + nevirapine; zidovudine + lamivudine + nevirapine; stavudine + lamivudine + efavirenz; or zidovudine + lamivudine + efavirenz. The stavudine + lamivudine + nevirapine combination costs US\$ 146 per person per year from generic manufacturers in India.

Assessment of overall health sector response and capacity

The NACO is responsible for coordinating the overall response to HIV/AIDS, including that of the health sector, supported by the state AIDS control societies at the state level. The National AIDS Control Programme, launched in 1987, is now in its second phase of implementation (1999-2006). Its objective is to reduce the transmission of HIV through a decentralized and comprehensive programme of generating awareness, changing behaviour, targeting vulnerable groups and conducting research. Specifically, the Programme has established targets of providing 80% coverage of vulnerable groups through targeted interventions, 90% coverage of schools and colleges through education programmes, 80% awareness among the general population in rural areas, reducing HIV transmission through blood to less than 1% and establishing at least one voluntary counselling and testing centre in every district. A package of integrated voluntary counselling and testing, prevention of mother-to-child transmission, services for treating sexually transmitted infections and care and treatment of opportunistic infections will ultimately be provided at primary health care level in the third phase of the national AIDS control programme (2006-2011). In 2002, the government's National AIDS Control Policy and National Blood Policy established the main goals of the country's HIV/AIDS interventions: controlling sexually transmitted diseases; promoting condom use; providing testing, counselling, care and support for people with HIV/AIDS; conducting surveillance; minimizing harm for injecting drug users; providing safe blood and blood products; and supporting research and product development. The policy documents also reiterate the government's commitment to decentralizing HIV/AIDS control activity, to strengthening programme management at all levels and to enhancing collaboration with national, bilateral and multilateral partners. A systematic sentinel surveillance system has been operating since 1994, with 750 sentinel surveillance sites at the end of 2005. Prevention activities within the health sector are increasingly supported through the National AIDS Control Programme as well as through other sectors and within the projects funded by bilateral donors. The armed forces have established their own prevention and care organization and have an ongoing information, education and communication programme as well as training for their health personnel. The Railways also have expanded their prevention of mother-to-child transmission services, sexually transmitted infection clinics and voluntary counselling and testing facilities, with plans to establish 9 sexually transmitted infection clinics and 32 voluntary counselling and testing centres in each of their 9 zones with support from NACO and to provide free antiretroviral therapy to their staff and dependants. In December 2003, the Government of India committed to expanding access to treatment for people living with HIV/AIDS. Although India has a sizeable pool of physicians and other health professionals and well-developed public health service infrastructure, the Ministry of Health has acknowledged the need for additional trained personnel and laboratory and diagnostic facilities for effectively scaling up prevention and treatment. In addition, care and treatment services are largely offered through private practitioners and facilities. Training in HIV care is included in all medical and nursing education curricula, and national guidelines on antiretroviral therapy have been developed. A comprehensive national training package is being developed with input from WHO. It will include a revision of the NACO curriculum for the tertiary level, adaptation of WHO generic modules for the secondary level (district and primary care), a revised NACO counsellor curriculum and working with major partners in developing the curriculum and tools for patient education and treatment literacy. These are all part of what will be a NACO/National Training Package for tertiary, district and primary levels of an HIV continuum of prevention, care and treatment. India also has the advantage of an established domestic base for generic drug manufacturing.

Critical issues and major challenges

Key issues include expanding coverage of antiretroviral therapy and services for preventing mother-to-child transmission; ensuring the quality, safety and correct prescription of antiretroviral therapy across the public and private sectors; strengthening systems to procure medicines and diagnostics, supplying them to treatment centres and effectively managing these at the facility level; increasing access to and the quality of counselling and testing services; ensuring high-quality support and counselling for treatment adherence; and issues related to HIV drug resistance and providing second-line antiretroviral therapy. Additional health care workers need to be trained to deliver high-quality care, support and treatment services at a decentralized level. Equally important is engaging private-sector providers in scaling up access to antiretroviral therapy and strengthening the integration of services with other prevention, care and support interventions as well as public health programmes, such as programmes for reproductive and child health, sexually transmitted infections and tuberculosis. National systems for monitoring and evaluation and for surveillance of HIV drug resistance need to be strengthened. Vulnerable populations must be empowered to increase their access to antiretroviral therapy, especially women. Stigma and discrimination remain powerful impediments.

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

- WHO estimates that between US\$ 289.9 million and US\$ 307.2 million was required to support scaling up antiretroviral therapy to reach the WHO "3 by 5" treatment target of 355 000 people by the end of 2005.
- National budgetary allocations for HIV/AIDS programmes have increased over the years. The five-year budget of the National AIDS Control Programme increased from US\$ 100 million for the first phase (1992-1997) to US\$ 300 million in the second phase (1999-2006). The government proposes to increase the allocation of funds for HIV/AIDS programmes by 30% per year for the next five years.
- The Global Fund to Fight AIDS, Tuberculosis and Malaria approved a grant of US\$ 26.1 million over two years in Round 2 with a focus on preventing mother-to-child transmission, implementing a comprehensive care package for mothers living with HIV/AIDS and their infants and partners and enhancing access to antiretroviral therapy through public-private partnerships.
- India submitted a successful Round 3 proposal to the Global Fund to address HIV and tuberculosis coinfection, with a total five-year funding request of US\$ 14.8 million and two-year approved grant funding of US\$ 2.6 million.
- India also submitted a successful Round 4 proposal to the Global Fund for US\$ 140.8 million over five years. US\$ 4.1 million has been granted to the Population Foundation of India for two years and another US\$ 21.6 million to the Economic Affairs Division. Together, they focus on a large-scale, phased initiative on antiretroviral therapy access closely linked to expanded prevention and support and on increasing the engagement of the private sector and the civil society sector, including people living with HIV/AIDS. Component 1 (Population Foundation) supports strengthening the capacity of nongovernmental organizations and networks of people living with HIV/AIDS in six high-prevalence States (Maharashtra, Tamil Nadu, Karnataka, Andhra Pradesh, Nagaland and Manipur), including establishment of treatment and counselling centres and comprehensive care and support centres. Component 2 addresses scaling up antiretroviral therapy services in six high-prevalence states and Delhi, with a declared target of 51 000 people receiving antiretroviral therapy in the first two years through 120 centres, CD4 technology for 50 centres and training of health care workers. Over five years, the proposal's target is 137 000 people living with HIV/AIDS receiving antiretroviral therapy.
- Multilateral partners such as the World Bank, UNDP, UNAIDS and UNICEF also provide support to India for activities related to HIV/AIDS. In 1999, the World Bank granted a loan of US\$ 191 million for implementing the second phase of the National AIDS Control Programme. India is now in the process of developing a National AIDS Control Programme Phase III proposal for World Bank funding.
- Key bilateral sources of funding for activities related to HIV/AIDS include the United Kingdom Department for International Development, the United States Agency for International Development, the Australian Agency for International Development, the William J. Clinton Foundation and the Bill & Melinda Gates Foundation. The United Kingdom Department for International Development supports a programme of targeted interventions in Andhra Pradesh, Gujarat, Kerala and Orissa and a sexual health project in West Bengal (recently renewed to a total of US\$ 150 million). The United Kingdom Department for International Development has recently added the states of Bihar and Uttar Pradesh for intervention and capacity-building. The Bill & Melinda Gates Foundation funds the Avahan programme (US\$ 200 million over five years), which focuses on the six high-prevalence states, targeting sex workers and injecting drug users and mobile populations along highways. The United States Agency for International Development has renewed its Tamil Nadu AIDS Prevention and Control programme for US\$ 19 million to 2007 (information, education and communication; health awareness; and sexually transmitted infections) through the Chennai group of Voluntary Health Services, an international nongovernmental organization. The United States Agency for International Development also provides US\$ 40 million for the Maharashtra programme of prevention and care activities of AVERT, an international nongovernmental organization. The United States Centers for Disease Control and Prevention is supporting the states of Tamil Nadu and Andhra Pradesh in strengthening antiretroviral therapy centres, health systems, decentralization of HIV services and training of health care providers. The William J. Clinton Foundation is training private practitioners on managing HIV and opportunistic infections. The Foundation has pledged to help NACO train up to 150 000 doctors over the next few years as well as strengthening the treatment agenda with major stakeholders. The Canadian International Development Agency funds the states of Rajasthan and Karnataka through the India-Canada Collaborative HIV/AIDS Project in targeted and prevention interventions and health systems strengthening, especially care, support and treatment.
- In March 2005, India was designated as the 16th country to receive financial support under the United States President's Emergency Plan for AIDS Relief.

5. Treatment and prevention coverage

- In 2003, WHO/UNAIDS estimated India's total treatment need to be 710 000 people, and the WHO "3 by 5" treatment target was calculated as 355 000 people by the end of 2005 (based on 50% of estimated need). In 2005, WHO/UNAIDS estimated that India's total treatment need had risen to 785 000 people.
- In November 2003, India declared a national target of providing antiretroviral therapy free of charge through the public sector to 100 000 people by 2007. Implementation of the programme began in April 2004. By the end of April 2005, the government reported that 7333 people were receiving free antiretroviral therapy through the public sector.
- Overall, 60 000 people are estimated to be receiving antiretroviral therapy as of December 2005, including people enrolled through private facilities. NACO reports a total of 24 000 people (December 2005) receiving free antiretroviral therapy from 60 government centres and about 10 000 from the intersectoral partners such as Employees State Insurance Scheme, Railways and Defences.
- Some treatment is provided through the private not-for-profit and the corporate sectors. The Employees State Insurance Scheme in the public sector and the Central Government Health Scheme also provide antiretroviral therapy services to employees.
- The Round 2 grant from the Global Fund plans to provide antiretroviral therapy to nearly 4500 women and their partners and children. The objective of the Global Fund Round 4 proposal is to provide 137 000 adults and children with antiretroviral therapy through public services by the end of 2009.

6. Implementation partners involved in scaling up treatment and prevention

Leadership and management

NACO, placed within the Ministry of Health and Family Welfare, coordinates all prevention, care and treatment activities related to HIV/AIDS. It is supported by the state AIDS control societies. Various ministries and departments, private-sector organizations and nongovernmental organizations implement HIV/AIDS programmes in collaboration with the NACO. WHO and UNAIDS support the development of national plans, the "three ones" policy (one national strategic framework for HIV/AIDS; one national AIDS coordinating authority; and one national monitoring and evaluation mechanism) and coordination in general. The government has established a National Council on AIDS headed by the Prime Minister and including ministers from all relevant ministries as well as representatives from civil society.

Service delivery

NACO provides leadership in delivering HIV/AIDS services, including antiretroviral therapy, voluntary counselling and testing, preventing mother-to-child transmission, treatment for sexually transmitted and opportunistic infections, procurement and supply chain management, developing guidelines, training of health workers and laboratories and diagnostics. The state AIDS control societies support implementation at the state level. WHO provides support for developing technical guidelines facilitating the capacity-building of health workers, including training, strengthening state AIDS control societies, decentralizing HIV services, monitoring and evaluating antiretroviral therapy provision and programmes and the procurement and supply management of drugs. UNICEF provides support for preventing mother-to-child transmission. The Australian Agency for International Development supports prevention and care projects for injecting drug users. The Bill & Melinda Gates Foundation supports prevention activities and treatment of sexually transmitted infections for, among others, mobile populations along the major highways. The William J. Clinton Foundation provides support for training health workers and negotiating drug prices. The United Kingdom Department for International Development and the United States Centers for Disease Control and Prevention also provide support for HIV prevention and care. The Confederation of Indian Industries provides support to develop workplace interventions and to strengthen public-private partnerships.

Community mobilization

More than 800 nongovernmental organizations are involved in prevention, care and support interventions across India. The Population Foundation of India has established a consortium of nongovernmental organizations to manage major subgrants to community-level nongovernmental organizations. People living with HIV/AIDS are also extensively involved in national prevention and treatment programmes. The Indian Network for People Living with HIV/AIDS informs policy and provides care and support to people living and affected by the disease. They refer people for antiretroviral therapy, provide support and peer counselling to people receiving antiretroviral therapy, help to maintain high rates of adherence, provide psychosocial support to the families of people living with HIV/AIDS and address issues related to stigma and discrimination. The private sector works in partnership with the public health system and nongovernmental organizations to support workplace interventions.

Strategic information

NACO coordinates monitoring and evaluation of HIV/AIDS programmes, supported by WHO, the United States Centers for Disease Control and Prevention and the Indian Council for Medical Research. NACO conducts annual surveillance rounds with technical support from WHO in HIV and TB/HIV. NACO has developed monitoring tools for scaling up antiretroviral therapy in consultation with various stakeholders, including United Nations and bilateral agencies. The tools have been field-tested and are being used by implementing institutions. NACO is also developing a HIV drug resistance surveillance and monitoring plan with technical assistance from WHO and together with the Indian Council for Medical Research.

7. Staffing input for scaling up HIV treatment and prevention

WHO's response so far

- Conducting a WHO scoping mission in December 2003 in collaboration with UNICEF, UNAIDS and national partners to identify opportunities and challenges for scaling up antiretroviral therapy and to identify areas for WHO support
- Providing technical assistance to review and update national antiretroviral therapy guidelines and national programme implementation guidelines for scaling up antiretroviral therapy
- Providing technical assistance in developing training curricula for health workers on antiretroviral therapy, including tertiary and district or community packages
- Providing technical assistance in developing the counselling curriculum for counsellors staffing voluntary counselling and testing centres
- Supporting the strengthening of entry points to antiretroviral therapy, especially voluntary counselling and testing services and training of counsellors in antiretroviral therapy programmes in selected sites
- Providing technical assistance to NACO in procuring antiretroviral drugs and CD4 counters to launch the national antiretroviral therapy programme
- Providing technical assistance in state support through a network of WHO-funded state antiretroviral therapy consultants, initially in high-prevalence states and now expanding to medium- and low-prevalence states
- Providing technical assistance in developing a monitoring and evaluation framework together with other partner agencies
- Providing technical assistance for developing and disseminating tools for monitoring antiretroviral therapy provision and the training of key personnel at the national and state levels
- Providing technical assistance to the NACO in developing the Round 4 proposal for the Global Fund
- Providing technical assistance for implementing the Global Fund grants from Rounds 2, 3 and 4
- Providing technical assistance to policy planning for phase III of the National AIDS Control Programme
- 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 technical assistance for building the capacity of the health sector to deliver antiretroviral therapy at a decentralized level to the districts and subdistricts
- Providing technical assistance in updating guidelines and developing the national comprehensive training curriculum for health care workers
- Providing technical support for enhancing high-quality prevention services within the health sector and linking prevention to treatment services
- Providing technical assistance to NACO, states and districts to strengthen strategic information systems, programme monitoring and evaluation
- Providing support for surveillance and monitoring of drug resistance
- Providing technical assistance in developing communication strategies for scaling up antiretroviral therapy
- Strengthening the country team with additional staff, including at the state level

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, one National Programme Officer for HIV/AIDS and one international Technical Officer.
- Additional staffing needs identified include two international Medical Officers for monitoring and evaluation, a Technical Officer for prevention and additional National Programme Officers.