India

Epidemiological Fact Sheets

on HIV/AIDS
and Sexually
Transmitted
Infections

2002 Update

Joint United Nations Programme on HIV/AIDS
UNAIDS
UNICEF • UNDP • UNFPA • UNDCP
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2 - India

Estimated number of people living with HIV/AIDS

In 2001 and during the first quarter of 2002, UNAIDS and WHO worked closely with national governments and research institutions to recalculate current estimates on people living with HIV/AIDS. These calculations are based on the previously published estimates for 1997 and 1999 and recent trends in HIV/AIDS surveillance in various populations. A methodology developed in collaboration with an international group of experts was used to calculate the new estimates on prevalence and incidence of HIV and AIDS deaths, as well as the number of children infected through mother-to-child transmission of HIV. Different approaches were used to estimate HIV prevalence in countries with low-level, concentrated or generalized epidemics. The current estimates do not claim to be an exact count of infections. Rather, they use a methodology that has thus far proved accurate in producing estimates which give a good indication of the magnitude of the epidemic in individual countries. However, these estimates are constantly being revised as countries improve their surveillance systems and collect more information.

Adults in this report are defined as women and men aged 15 to 49. This age range covers people in their most sexually active years. While the risk of HIV infection obviously continues beyond the age of 50, the vast majority of those who engage in substantial risk behaviours are likely to be infected by this age. The 15 to 49 range was used as the denominator in calculating adult HIV prevalence.

Estimated number of adults and children living with HIV/AIDS, end of 2001

These estimates include all people with HIV infection, whether or not they have developed symptoms of AIDS, alive at the end of 2001:

Adults and children	**3,970,000**		
Adults (15-49)	**3,800,000**	**Adult rate (%)**	**0.8**
Women (15-49)	**1,500,000**		
Children (0-15)	**170,000**		

Estimated number of deaths due to AIDS

Estimated number of adults and children who died of AIDS during 2001:

Deaths in 2001

Estimated number of orphans

Estimated number of children who have lost their mother or father or both parents to AIDS and who were alive and under age 15 at the end of 2001:

Current living orphans

UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance

Global Surveillance of HIV/AIDS and sexually transmitted infections (STIs) is a joint effort of WHO and UNAIDS. The UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance, initiated in November 1996, guides respective activities. The primary objective of the Working Group is to strengthen national, regional and global structures and networks for improved monitoring and surveillance of HIV/AIDS and STIs. For this purpose, the Working Group collaborates closely with national AIDS programmes and a number of national and international experts and institutions. The goal of this collaboration is to compile the best information available and to improve the quality of data needed for informed decision-making and planning at national, regional, and global levels. The Epidemiological Fact Sheets are one of the products of this close and fruitful collaboration across the globe.

Within this framework, the Fact Sheets collate the most recent country-specific data on HIV/AIDS prevalence and incidence, together with information on behaviours (e.g. casual sex and condom use) which can spur or stem the transmission of HIV.

Not unexpectedly, information on all of the agreed-upon indicators was not available for many countries in 2001. However, these updated Fact Sheets do contain a wealth of information which allows identification of strengths in currently existing programmes and comparisons between countries and regions. The Fact Sheets may also be instrumental in identifying potential partners when planning and implementing improved surveillance systems.

The fact sheets can be only as good as information made available to the UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. Therefore, the Working Group would like to encourage all programme managers as well as national and international experts to communicate additional information to them whenever such information becomes available. The Working Group also welcomes any suggestions for additional indicators or information proven to be useful in national or international decision-making and planning.

Assessment of the epidemiological situation (2002)

The first case of AIDS in India was detected in 1986. Since then, HIV infections have been reported in all States and Union Territories. With a population of one billion--about half in the 15-49 year-old population--HIV epidemics in India will have a major impact on the overall spread of HIV in Asia and the Pacific, as well as globally.

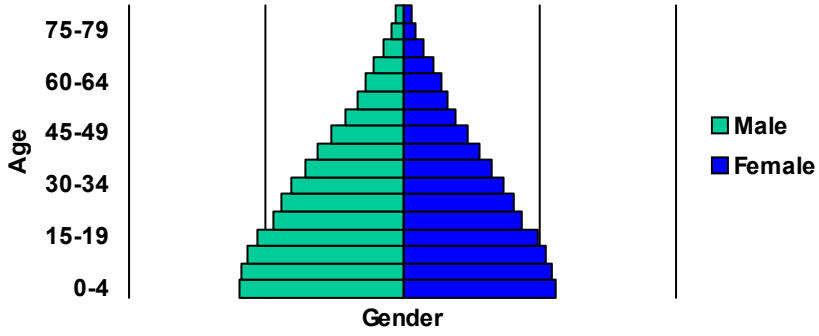
The spread of HIV within India is as diverse as the societal patterns between its different regions, states and metropolitan areas. The epidemics are focused very sharply in a few southern States, with most of India having extremely low rates of infection. An overwhelming majority of the total reported national AIDS cases--96%-- were reported by only 10 of the 31 states. The major impact is being felt in Maharashtra in the west, Tamil Nadu in the south with adjacent Pondicherry, and Manipur in the north-east. The epidemics vary between states, with heterosexually transmitted infections predominating in Maharashtra and Tamil Nadu, while infections concentrated among injecting drug users (IDU) and their partners predominate in Manipur. With a high prevalence of tuberculosis infection in India, the problem of tuberculosis related to HIV infection also poses a major public health challenge.

Between 1994 and 1997, HIV prevalence among STI clinic attendees in Maharashtra state increased from 6% to 36%, and prevalence among IDUs in Manipur increased from 25% to 61%. However, there were insufficient numbers of sentinel surveillance sites to get an adequate picture of the overall HIV situation. In 1998, the number of HIV Sentinel Surveillance sites increased from 55 to 180: 83 STI, 89 ANC and 8 IDU. HIV prevalence data were collected twice in 1998, February – March and August – October. The 1998 HIV Sentinel Surveillance data from antenatal clinics in seven metropolitan cities showed HIV prevalence to be over 2% in Mumbai, more than 1% in Hyderabad and Bangalore, and below 1% in Calcutta, Ahmedabad and Delhi. HIV prevalence levels outside these major urban agglomerations were in general lower, and no infection was found in a number of rural HSS sites.

In late 1998, NACO convened a group of national and international experts to review the results of the first round of the expanded HSS to produce state-specific and national estimates on HIV/AIDS. The new calculations provide greater consistency in making a national estimate of HIV prevalence in India. The national prevalence estimate was increased for 2001 to 3.97 million.

Country Information

Population pyramid, 2001



Indicators	Year	Estimate	Source
Total Population (thousands)	2001	1,025,096	UNPOP
Population Aged 15-49 (thousands)	2001	533,580	UNPOP
Annual Population Growth	1995-2000	1.7	UNPOP
% of Urban Population	2000	28	UNPOP
Average Annual Growth Rate of Urban Population	1995-2000	2.8	UNPOP
GNI Per Capita (US$)	1999	440	World Bank
GNI Per Capita Average Annual Growth Rate	1999	4.9	World Bank
Per Capita Expenditure of Health	1995	20	World Bank
% of Government Budget Spent on Health Care	1998	5.6	WHO
Total Adult Literacy Rate	1997	55	UNESCO
Adult Male Literacy Rate	1997	67	UNESCO
Adult Female Literacy Rate	1997	43	UNESCO
Male Primary School Enrolment Ratio	1996	109.1	UNESCO
Female Primary School Enrolment Ratio	1996	89.7	UNESCO
Male Secondary School Enrolment Ratio	1996	58.8	UNESCO
Female Secondary School Enrolment Ratio	1996	39.3	UNESCO
Crude Birth Rate (births per 1,000 pop.)	1995-2000	26	UNPOP
Crude Death Rate (deaths per 1,000 pop.)	1995-2000	9	UNPOP
Maternal Mortality Rate (per 100,000 live births)	1995	440	WHO
Life Expectancy at Birth	1995-2000	62	UNPOP
Total Fertility Rate	1995-2000	3.3	UNPOP
Infant Mortality Rate (per 1,000 live births)	1995-2000	73	UNPOP
Under 5 Mortality Rate	1995-2000	86	UNPOP

For consistency reasons the data used in the above table are taken from official UN publications.

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HIV prevalence in different populations

This section contains information about HIV prevalence in different populations. The data reported in the tables below are mainly based on the HIV database maintained by the United States Bureau of the Census where data from different sources, including national reports, scientific publications and international conferences are compiled. To provide a simple overview of the current situation and trends over time, summary data are given by population group, geographical area (Major Urban Areas versus Outside Major Urban Areas), and year of survey. Studies conducted in the same year are aggregated and the median prevalence rates (in percentages) are given for each of the categories. The maximum and minimum prevalence rates observed, as well as the total number of surveys/sentinel sites, are provided with the median, to give an overview of the diversity of HIV-prevalence results in a given population within the country. Data by sentinel site or specific study from which the medians were calculated are printed at the end of this fact sheet.

The differentiation between the two geographical areas Major Urban Areas and Outside Major Urban Areas is not based on strict criteria, such as the number of inhabitants. For most countries, Major Urban Areas were considered to be the capital city and - where applicable - other metropolitan areas with similar socio-economic patterns. The term Outside Major Urban Areas considers that most sentinel sites are not located in strictly rural areas, even if they are located in somewhat rural districts.

■ HIV sentinel surveillance

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Pregnant women	Major Urban Areas	N-sites		2	2	3	2	3	3	4	4	3	4	7	7		
		Minimum		0	0	0	0	0	0	0	0	0	0	0.25	0		
		Median		0	0	0	0	0	0.7	1.05	0.48	1.14	0.85	2.5	2		
		Maximum		0	0	0	0	0.5	0.8	2.5	2.3	2.38	3	3.8	3.25		
	Outside Major Urban Areas	N-sites	1	1	3	4	10	5	4	3	6	4	5	75	87	3	
		Minimum	0.1	0.1	0	0	0	0.1	0	0.1	0	0.3	0.25	0	0	1	
		Median	0.1	0.1	0	0	0.35	0.7	0.2	0.8	0.45	0.5	1.25	0.25	0.25	2	
		Maximum	0.1	0.1	0	0.1	2.4	1	1.9	0.8	4.3	2.5	3.6	28.24	6.5	3.9	

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Sex workers	Major Urban Areas	N-sites	2	3	1	2	4	3	2	2	2	2	1	1			
		Minimum	0	0.1	13.2	0.2	0	0.7	1.4	1.6	1.2	11.3	11.9	5.3			
		Median	0.45	4.5	13.2	10.65	4.05	0.9	26.2	26.3	2.4	31.15	11.9	5.3			
		Maximum	0.9	8.8	13.2	21.1	33.9	26.6	51	51	3.6	51	11.9	5.3			
	Outside Major Urban Areas	N-sites	5	3	5	5	5	7	6	3				1	2	1	
		Minimum	0	0	0	0	0	0	1	1				4.76	11	3.4	
		Median	3.1	1.4	4.9	12.5	19	23.7	23.25	29				4.76	15.5	3.4	
		Maximum	12	5	8.5	24.2	31.6	36.5	46.8	34.9				4.76	20	3.4	

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Injecting drug users	Major Urban Areas	N-sites					1	1		1	1	1					
		Minimum					1.9	1.5		1.2	1.7	3.5					
		Median					1.9	1.5		1.2	1.7	3.5					
		Maximum					1.9	1.5		1.2	1.7	3.5					
	Outside Major Urban Areas	N-sites	1	1	1	1	1	2	2	3	6	2	2	5	7	1	
		Minimum	0	0	8.6	39.1	44.8	52.7	1.5	25.4	0	55.7	67.1	0.96	1.2	8	
		Median	0	0	8.6	39.1	44.8	59.95	43.28	39	25.45	64.5	72	70.3	29.5	8	
		Maximum	0	0	8.6	39.1	44.8	67.2	85.06	55	61.1	73.3	76.9	76.1	68.4	8	

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
STI patients, Males/both & females	Major Urban Areas	N-sites	3	3	3	7	7	8	10	3	3	4	9	5	6		
		Minimum	0	0.09	0.03	0	0.09	0.13	0.5	0.58	0.86	2.13	0	1.6	0.8		
		Median	1	2	2.5	3.2	5.3	4.65	8.7	3.78	5.7	15.955	5.5	32	6.35		
		Maximum	1.5	9.7	9.9	13.8	16.4	22.8	27.9	29	31.41	32.6	42	58.8	64.4		
	Outside Major Urban Areas	N-sites	6	6	6	6	9	8	6	22	24	16	6	61	71	3	
		Minimum	0	0	0.94	0.6	1.3	2.6	0	0	0	0	4.8	0	0	2	
		Median	0.15	0.71	1.47	2.14	2.76	5.155	3.92	4.75	4.65	5.75	15.6	2.857143	2.4	4.8	
		Maximum	0.8	1.4	3	4.8	6.63	13.75	6.2	20.5	21.7	19.3	22.4	50.25381	44.8	12	

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Men who have sex with men	Major Urban Areas	N-sites					1	1									
		Minimum					1.1	20.3									
		Median					1.1	20.3									
		Maximum					1.1	20.3									
	Outside Major Urban Areas	N-sites	1	2													
		Minimum	0	0													
		Median	0	0.2													
		Maximum	0	0.4													

■ Additional data

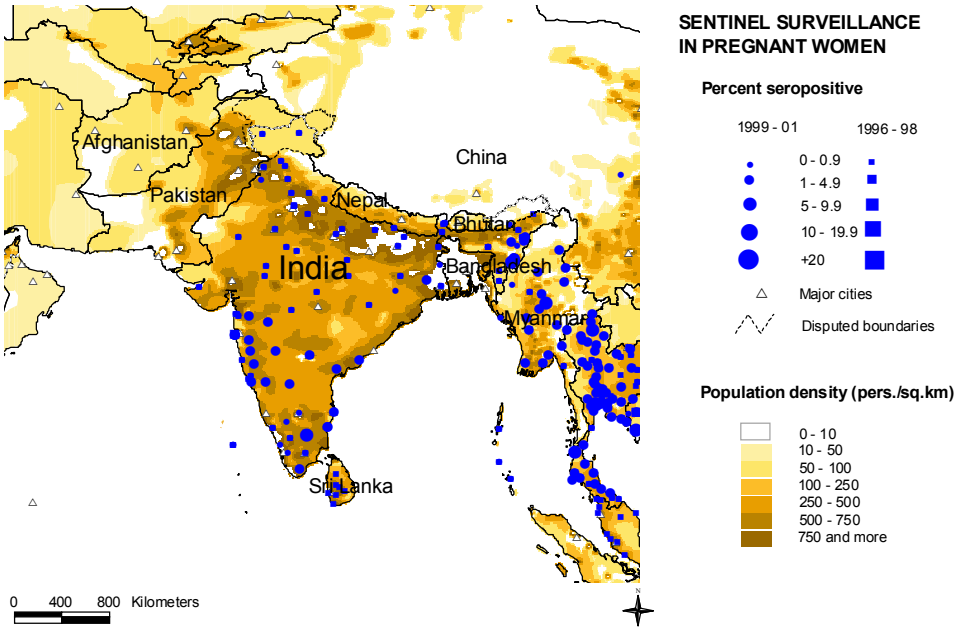
Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Blood donors																	

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Tuberculosis patients	Major Urban Areas	N-sites	1	1	3	2	3	4	2	2	2	3	3	1	1		
		Minimum	0	2.4	0	3.9	0.4	0	0	1	0.5	1.5	2.9	30	33		
		Median	0	2.4	2.3	3.95	7.1	4.6	5.3	6	5.6	3.2	3.4	30	33		
		Maximum	0	2.4	3.8	4	7.9	10.6	10.6	11	10.7	16.8	23	30	33		
	Outside Major Urban Areas	N-sites					1	4	4	3	3	5	4	3	5	4	
		Minimum					0	0.7	0.9	0	3.2	2.3	3.6	4.4	6	2.8	
		Median					0	1.4	1.15	3.2	4	5.2	13.8	21.4	11.2	13	
		Maximum					0	4.5	2.5	11.5	14.3	12.1	18.5	21.5	17.6	20.1	

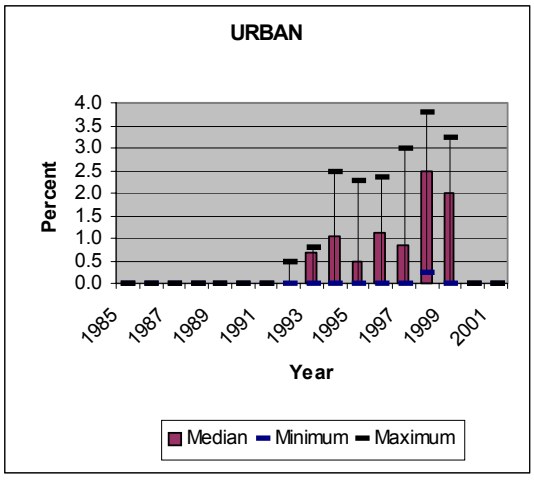
Maps of HIV sentinel sites

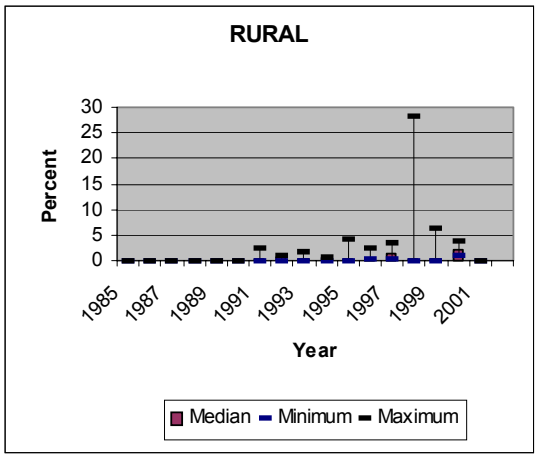
Mapping the geographical distribution of HIV sentinel sites for different population groups may assist in interpreting both the national coverage of the HIV surveillance system as well in explaining differences in levels and trends of prevalence. The UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance, in collaboration with the WHO Public Health Mapping Team, Communicable Diseases, is producing maps showing the location and HIV prevalence of HIV sentinel sites in relation to population density, major urban areas and communication routes.

Trends in antenatal sentinel surveillance for higher prevalence countries, or in prevalence among selected populations for countries with concentrated epidemics, are a new addition. These will be presented for those countries where sufficient data exist.



Trends in HIV prevalence among antenatal clinic attendees





Median prevalence and ranges are shown in areas with more than one sentinel site.

Reported AIDS cases

AIDS cases by year of reporting

1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
0	0	0	0	0	0	0	0	0	0	0	57	45	140	252	523	1091	888	2108	1148		

2001	Total	Unk
	8438	2186

Date of last report: 31-Aug-1999

Following WHO and UNAIDS recommendations, AIDS case reporting is carried out in most countries. Data from individual AIDS cases are aggregated at the national level and sent to WHO. However, case reports come from surveillance systems of varying quality. Reporting rates vary substantially from country to country and low reporting rates are common in developing countries due to weaknesses in the health care and epidemiological systems. In addition, countries use different AIDS case definitions. A main disadvantage of AIDS case reporting is that it only provides information on transmission patterns and levels of infection approximately 5-10 years in the past, limiting its usefulness for monitoring recent HIV infections.

Despite these caveats, AIDS case reporting remains an important advocacy tool and is useful in estimating the burden of HIV-related morbidity as well as for short-term planning of health care services. AIDS case reports also provide information on the demographic and geographic characteristics of the affected population and on the relative importance of the various exposure risks. In some situations, AIDS reports can be used to estimate earlier HIV infection patterns using back-calculation. AIDS case reports and AIDS deaths have been dramatically reduced in industrialized countries with the introduction of HAART (Highly Active Anti-Retroviral Therapy).

AIDS cases by mode of transmission

Hetero: Heterosexual contacts.
Homo/Bi: Homosexual contacts between men.
IDU: Injecting drug use. This transmission category also includes cases in which other high-risk behaviours were reported, in addition to injection of drugs.
Blood: Blood and blood products.
Perinatal: Vertical transmission during pregnancy, birth or breastfeeding.
NS: Not specified/unknown.

Sex	Trans. Group	<97	1997	1998	1999	2000	2001	Unkn.	Total	%
All	All									
	Hetero									
	Homo/Bi									
	IDU									
	Blood									
	Perinatal									
	Other knowr									
	Unknown									
Male	All									
	Hetero									
	Homo/Bi									
	IDU									
	Blood									
	Perinatal									
	Other knowr									
	Unknown									
Femal	All									
	Hetero									
	Homo/Bi									
	IDU									
	Blood									
	Perinatal									
	Other knowr									
	Unknown									
NS	All									
	Hetero									
	Homo/Bi									
	IDU									
	Blood									
	Perinatal									
	Other knowr									
	Unknown									

AIDS cases by age and sex

Sex	Age	<97	1997	1998	1999	2000	2001	Unkn.	Total	%
All	All									
	0-4									
	5-9									
	10-14									
	15-19									
	20-24									
	25-29									
	30-34									
	35-39									
	40-44									
	45-49									
	50-54									
	55-59									
	60+									
	NS									
Male	All									
	0-4									
	5-9									
	10-14									
	15-19									
	20-24									
	25-29									
	30-34									
	35-39									
	40-44									
	45-49									
	50-54									
	55-59									
	60+									
	NS									
Female	All									
	0-4									
	5-9									
	10-14									
	15-19									
	20-24									
	25-29									
	30-34									
	35-39									
	40-44									
	45-49									
	50-54									
	55-59									
	60+									
	NS									
NS	All									
	0-4									
	5-9									
	10-14									
	15-19									
	20-24									
	25-29									
	30-34									
	35-39									
	40-44									
	45-49									
	50-54									
	55-59									
	60+									
	NS									

Curable Sexually Transmitted Infections (STIs)

The predominant mode of transmission of both HIV and other STIs is sexual intercourse. Measures for preventing sexual transmission of HIV and STI are the same, as are the target audiences for interventions. In addition, strong evidence supports several biological mechanisms through which STI facilitate HIV transmission by increasing both HIV infectiousness and HIV susceptibility. Also significant is the observation of a sharp decline in the concentration of HIV in genital secretions when the infection is treated. Monitoring trends in STI can provide valuable information on the sexual transmission of HIV as well as the impact of behavioural interventions, such as promotion of condom use.

Clinical services offering STI care are an important access point for people at high risk for both AIDS and STIs, not only for diagnosis and treatment but also for information and education. Therefore, control and prevention of STIs have been recognized as a major strategy in the prevention of HIV infection and ultimately AIDS. One of the cornerstones of STI control is adequate management of patiens with symptomatic STIs. Ths includes diagnosis, treatment and individual health education and counselling on disease prevention and partner notification. Consequently, monitoring different components of STI control can also provide information on HIV prevention within a country.

Reported STI syndromes

Syndrome	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	Total	Unk
Urethral discharge														
Genital Ulcer														
Vaginal discharge														
Lower Abdominal Pain														
Neonatal conjunctivitis														

Date of last report:

Incidence of urethral discharge, men

Year	Area	Age Group	Rate	N=

Comments:
Sources:

Syphilis prevalence, women

Percent of blood samples taken from women aged 15-24 that test positive for syphilis during routine screening at selected antenatal clinics.

Year	Area	Age Group	Rate	N=

Comments:
Sources:

Estimated size of populations at increased risk of HIV infection

	Year	Area	High estimate	Low estimate
Number of female sex workers				
Number of injecting drug users				
Number of men who have sex with men				

Comments:
Sources:

Health service and care indicators

HIV prevention strategies depend on the twin efforts of care and support for those living with HIV or AIDS, and targeted prevention for all people at risk or vulnerable to the infection. It is difficult to capture such a large range of activities with one or just a few indicators. However, a set of well-established health care indicators may help to identify general strengths and weaknesses of health systems. Specific indicators, such as access to testing and blood screening for HIV, help to measure the capacity of health services to repsond to HIV/AIDS - related issues.

Access to health care

Indicators	Year	Estimate	Source
% of population with access to health services - total:			
% of population with access to health services - urban:			
% of population with access to health services - rural:			
Contraceptive prevalence rate (%):	1999	48.2	UNICEF/UNPOP
Percentage of contraceptive users using condoms:			
% of births attended by skilled health personnel:	1999	42.3	WHO
% of 1-yr-old children fully immunized - DPT:	2000	93.9	WHO/UNICEF
% of 1-yr-old children fully imunized - Measles:	2000	88.5	WHO/UNICEF
% of ANC clinics where HIV testing is available:			
% of PLWHA who have access to ARV:			

Number of people living with HIV/AIDS (PLWHA) receiving highly active antiretroviral therapy (HAART)

	1995	1996	1997	1998	1999	2000	2001	Total	Unk
People initiating HAART therapy									

Coverage of HIV Voluntary Counselling and Testing (VCT)

Number of functioning VCT sites per 100,000 population aged 15-49.

Year	Area	N=	Rate

Comments:
Sources:

Knowledge and behaviour

In most countries the HIV epidemic is driven by behaviours (e.g.: multiple sexual partners, injecting drug use) that expose individuals to the risk of infection. Information on knowledge and on the level and intensity of risk behaviour related to HIV/AIDS is essential in identifying populations most at risk for HIV infection and in better understanding the dynamics of the epidemic. It is also critical information in assessing changes over time as a result of prevention efforts. One of the main goals of the 2nd generation HIV surveillance systems is the promotion of a standard set of indicators defined in the National Guide (Source: National AIDS Programmes, A Guide to Monitoring and Evaluatoin, UNAIDS/00.17) and regular behavioural surveys in order to monitor trends in behaviours and to target interventions.

The indicators on knowledge and misconceptions are an important prerequisite for prevention programmes to focus on increasing people's knowledge about sexual transmission, and, to overcome the misconceptions that act as a disincentive to behaviour change. Indicators on sexual behaviour and the promotion of safer sexual behaviour are at the core of AIDS programmes, particularly with young people who are not yet sexually active or are embarking on their sexual lives, and who are more amenable to behavioural change than adults. Finally, higher risk male-male sex reports on unprotected anal intercourse, the highest risk behaviour for HIV among men who have sex with men.

Knowledge of HIV prevention methods

Proportion of people citing correctly at least two acceptable ways of protection from HIV infection.

Year	Area	Age Group	Male	Female	All

Comments:
Sources:

Misconception about AIDS (no incorrect beliefs)

Proportion of people who correctly reject the two most common local misconceptions about AIDS transmission or prevention, and who know that a healthy looking person can transmit AIDS

Year	Area	Age Group	Male	Female	All
2001	All	15-49		20.0	

Comments:
Sources: BSS

Median age at first sexual experience

The age by which one half of young men or young women aged 15-24 have had penetrative sex (median age) of all young people surveyed.

Year	Area	Age Group	Male	Female	All

Comments:
Sources:

Higher risk sex in the last year (adults)

Proportion of adult respondents who have had sex with a non-regular (non-marital, non-cohabiting) partner in the last 12 months, of all adult respondents reporting sexual activity in the last 12 months.

Year	Area	Age Group	Male	Female	All

Comments:
Sources:

Young people having multiple partners in last year (youth)

Proportion of respondents who have had sex with more than one partner in the last 12 months.

Year	Area	Age Group	Male	Female	All

Comments:
Sources:

Knowledge and behaviour

Condom use in last higher risk sex (adults)

The percentage of adult respondents who say they used a condom the last time they had sex with a non-regular (non-marital, non-cohabiting) partner, of those who have had sex with such a partner in the last 12 months.

Year	Area	Age Group	Male	Female	All

Comments:
Sources:

Young people using a condom during premarital sex (youth)

Proportion of young single people who used a condom at last sex.

Year	Area	Age Group	Male	Female	All

Comments:
Sources:

Commercial sex in the last year

Proportion of men reporting sex with a sex worker in the last 12 months.

Year	Area	Age Group	Rate	All

Comments:
Sources:

Reported condom use in commercial sex

Proportion of men reporting condom use the last time they had sex with a sex worker, of those who report having had sex with a sex worker in the last 12 months.

Year	Area	Age Group	Rate	All

Comments:
Sources:

Higher risk male-male sex in the last year

The percentage of men who have had anal sex with more than one male partner in the last 6 months, of all men surveyed who have had sex with a male partner.

Year	Area	Age Group	Rate	All

Comments:
Sources:

Injecting drug users sharing equipment at last injection nationwide

Percentage of injecting drug users active in the last month who report sharing injecting equipment the last time they injected drugs.

Year	Area	Age Group	Rate	All

Comments:
Sources:

Prevention Indicators

Male and female condoms are the only technology available that can prevent sexual transmission of HIV and other STIs. Persons exposing themselves to the risk of sexual transmission of HIV should have consistent access to high quality condoms. AIDS Programs implement activities to increase both availability of and access to condoms. These activities should be monitored and have resources directed to problem areas. The indicator below highlights the availability of condoms. However, even if condoms are widely available, this does not mean that individuals can or do access them.

Condom availability nationwide

Total number of condoms available for distribution nationwide during the preceding 12 months, divided by the total population aged 15-49.

Year	N	Rate

Comments:
Sources:

Prevention of mother-to-child transmission (MTCT) nationwide

Percentage of women who were counselled during antenatal care for their most recent pregnancy, accepted an offer of testing and received their test results, of all women who were pregnant at any time in the preceding two years.

Year	N	Rate

Comments:
Sources:

Blood safety programs aim to ensure that the majority of blood units are screened for HIV and other infectious agents. This indicator gives an idea of the overall percentage of blood units that have been screened to high enough standards that they can confidently be declared free of HIV.

Screening of blood transfusions nationwide

Percentage of blood units transfused in the last 12 months that have been adequately screened for HIV according to national or WHO guidelines.

Year	N	Rate

Comments:
Sources:

Sources

Data presented in this Epidemiological Fact Sheet come from several different sources, including global, regional and country reports, published documents and articles, posters and presentations at international conferences, and estimates produced by UNAIDS, WHO and other United Nations agencies. This section contains a list of the more relevant sources used for the preparation of the Fact Sheet. Where available, it also lists selected national Web sites where additional information on HIV/AIDS and STI are presented and regularly updated. However, UNAIDS and WHO do not warrant that the information in these sites is complete and correct and shall not be liable whatsoever for any damages incurred as a result of their use.

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Annex: HIV Surveillance by site

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Pregnant women	Major Urban Areas	Calcutta		0.00	0.00	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.50	0.80	0.00		
		Delhi									0.00		0.00				
		Madras		0.00	0.00	0.00											
		Mumbai						0.50	0.70	1.10	2.30	1.14	1.20				
		Mumbai (L.T. Medical College)												2.80	2.75		
		Mumbai (J.J. Hosp. & Gov. Medical College)												2.50	3.25		
		Mumbai (KEM Hosp.)												2.80	2.25		
		Mumbai(Nair)												3.80	2.00		
		New Delhi				0.00	0.00	0.00	0.00								
		New Delhi (Mangolpuri)												0.25	0.25		
		New Delhi (Safdarjung)												0.30	0.25		
	Outside Major Urban Areas	(ANC I)					1.50										
		(ANC II)					2.40										
		Ahmedabad district				0.00	0.00										
		Aizwal												0.96	0.00		
		Akola												1.50	0.25		
		Aligarh												0.20	0.00		
		Amritsar												0.00	0.50		
		Aurangabad												0.00	1.50		
		Bangalore					0.00		0.00						0.25		
		Baroda												0.00	0.80		
		Bellary													1.67		
		Bishnupur												0.80	2.25		
		Car Nicobar												0.00	0.50		
		Chandigarh												0.50	0.75		
		Chennai												0.79	1.25		
		Chindwara												0.00	0.00		
		Churachandpur					0.50							3.50	5.25		
		Coimbatore								0.10	0.40	0.30	1.25	0.50	0.00		
		Daman												0.30	0.00		
		Dimapur													2.00		
		Diu												0.00	0.00		
		Durgapur												0.25	0.25		
		Faridkot													0.25		
		Gangtok												0.30	0.25		
		Garo Hills												0.00	0.49		
		Gorakhpur												0.00	0.00		
		Guntur												2.80	4.00		
		Haldwani												0.00	0.00		
		Hamirpur												0.20	0.49		
		Hubli												1.80	2.00		
		Hyderabad (Inst. of Prev. Medicine)												2.50	1.90		
		Hyderabad (Nizam Inst. of Med. Sci.)												28.24	0.50		
		Imphal					1.00	1.00									
		Imphal (RIMS)												2.70	2.25		
		Imphal (Sentinel surv. site)												0.80	1.50		
		Itanagar												0.40	0.00		
		Jagdalpur												0.94	0.50		
		Jaipur										0.30		0.00	0.00		
		Jaipur district							0.00								
		Jamnagar												0.00	0.00		
		Jodhpur												0.00	0.25		
		Jorhat												0.00	0.00		
		Kakinada												2.00	2.00		
		Kangra												0.50	0.00		
		Kanpur												0.25	0.00		
		Karnal												0.00	0.00		
		Kavaratti									0.00			0.00	0.00		
		Kohima									0.50				0.75		
		Kolhapur												5.00	3.00		
		Kota												0.00	0.50		
		Kottayam												0.00	0.00		
		Leh												0.00	0.00		
		Lucknow												0.30	0.00		
		Lungei												0.00	0.00		
		Madurai			0.00		0.20	0.30						1.00	0.75		
		Maharashtra State								0.80							
		Mandsaur												0.00	0.50		
		Manipur State								0.80	0.50	0.70	1.32			3.90	
		Mapura											0.35	1.73	0.50		
		Minicoy												1.33	0.00		
		Mokoko Chung												0.70	0.76		
		Murshidabad													0.00		
		Mysore													0.25		
		Nagaland State														2.00	
		Namakkal												3.25	6.50		
		Nancowry												0.00	0.00		
		Nasik												2.50	1.75		
		Nayagaon												0.00	0.00		
		Nazibad												0.00	0.00		
		Pakyong												0.00	0.00		
		Pasighat											0.25				

		Patna												0.00	0.25		
		Ponda												0.74	1.00		
		Pondicherry														1.00	
		Pondicherry (JIPMER)													1.50		
		Pondicherry (Maternity Hospital)												0.50	0.25		
		Port Blair												0.00	0.00		
		Pune									4.30	2.50	3.60	2.25	2.75		
		Ranchi												0.00	0.00		
		Ratlam												0.00	0.00		
		Ratnagiri												0.50	0.75		
		Raxaul												0.00	0.00		
		Rewa												0.00	0.25		
		Rothak district			0.00	0.00	0.00		0.40								
		Rourkela													0.25		
		Salem												1.00	0.00		
		Satara												2.30	3.75		
		Shahdol												0.00	0.25		
		Shillong												0.25	0.00		
		Sholapur												1.00	1.50		
		Siliguri												0.62	0.25		
		Silvassa												0.00	0.00		
		Srinagar												0.00	0.00		
		Tamil Nadu State						0.70									
		Thodupuzha													0.00		
		Thoubal												0.75	2.25		
		Thrissaur													0.37		
		Tirunelveli													1.25		
		Tirupati				0.10	1.00	0.80	1.90								
		Tripura State									0.00						
		Tuensang												0.70	4.87		
		Vellore (CMCH)	0.10	0.10	0.00	0.00	0.00	0.10									

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Sex workers	Major Urban Areas	Calcutta					0.50	0.70	1.40	1.60	1.20	11.30	11.90	5.30			
		Delhi	0.00	0.10		0.20											
		Madras		4.50			7.60										
		Mumbai	0.90	8.80	13.20	21.10	33.90	26.60	51.00	51.00		51.00					
	Outside Major Urban Areas	Agra												4.76	11.00		
		Baina													20.00		
		Bhiwadi						33.70									
		Madurai	3.10	1.40	4.90	24.20											
		Pondicherry														3.40	
		Pune	0.50		6.00	21.20	31.60	36.50	46.80	34.90							
		Pune district						23.70									
		Rajkot district			1.80												
		Ratlam							1.00	1.00							
		Sangli district	12.00														
		Surat						18.50									
		Surat district							18.50								
		Tirupati					25.90										
		Ujjain	0.00	0.00	0.00	0.00	0.00	0.00	1.90								
		Vasodagame				4.00	14.00	15.30	28.00	29.00							
		Vellore region	3.70	5.00	8.50	12.50	19.00	25.00	35.00								

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Injecting drug users	Major Urban Areas	Calcutta					1.90	1.50		1.20	1.70	3.50					
	Outside Major Urban Areas	Aizwal												0.96	1.60		
		Bangalore													1.20		
		Bishnupur												70.73	41.40		
		Churachandpur								25.40	47.80	55.70	67.10	76.10	68.40		
		Dimapur						52.70			32.00			13.27	7.60		
		Imphal							85.06		61.10	73.30	76.90	70.30	48.80		
		Jampui									0.00						
		Manipur State	0.00	0.00	8.60	39.10	44.80	67.20		55.00							
		Nagaland State								39.00	3.90					8.00	
		Tamil Nadu State							1.50		18.90				29.50		

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
STI patients, Males/both & females	Major Urban Areas	B/ Calcutta	0.00	0.09	0.03	0.00	0.09	0.13	0.50	0.58	0.86	2.13	5.50		2.39		
		B/ Madras	1.50	2.00	2.50					3.78	5.70	5.21	9.60	8.00	3.60		
		B/ Madras (Standley Med. College)							3.70								
		B/ New Delhi												1.60	0.80		
		B/ New Delhi (Lok Naik Jayaprakash Naraian Hosp.)						3.20									
		B/ New Delhi (Mauland Azad Hospital)							2.40								
		B/ New Delhi (Safdarjung)						0.90	0.80								
		B/Mumbai						13.30				26.70	31.20	58.80			
		B/Mumbai (B.Y.L. Nair Hosp.)							20.90								
		B/Mumbai (Gaurabai)													64.40		
		B/Mumbai (J.J. Hospital)										32.60		34.80	40.00		
		B/Mumbai (K.E.M. Hosp.)							27.90								
		B/Mumbai (KEM Hosp)				3.20	8.60										
		B/Mumbai (Micro, K.E.M.)							23.70								
		B/Mumbai (Pt. of HIV sent. surv. Jan.-Aug.)							13.70								
		B/Mumbai (Sir J.J. Hosp.)							24.90								

	B/Mumbai (Sir JJ Hosp)				13.80	16.40	22.80								
	B/Mumbai(Balasse Rd. Clin)				0.20	0.20	1.20	3.20							
	B/New Delhi				0.10	0.09									
	Delhi (Army hosp. & base hospital)											0.08			
	Delhi (Cantonment Board Gen Hosp.)											0.00			
	Delhi (Khichripur)											0.00			
	Delhi (Mehrauli)											0.00			
	M/ Mumbai									31.41					
	M/Madras				3.30	5.30	6.10								
	M/Mumbai	1.00	9.70	9.90					29.00						
	M/Mumbai (Municipal STD clinic)												32.00		
	M/Mumbai (Public STD clinic)											42.00			
	Madras				5.00	12.40	13.00								
	Mumbai (LTMG Hosp.)											17.10		9.10	
Outside Major Urban Areas	B/ Madurai								6.52	8.60	10.00	22.40	23.20		
	B/ Madurai (Microbiology & Virology Ins., Madurai Med. College)	0.29	1.04	1.34	2.49	6.63	6.11	4.85							
	B/ Madurai (STD Dept., Gov. Rajaji Hosp.)	0.10	0.34	0.94	2.42	2.76	4.15	5.80							
	B/ Pune												2.80		
	B/ Tirupati	0.00	0.82	1.17	1.86	1.70	13.75	6.20	5.75				9.60		
	B/Agartala													0.81	
	B/Agra												1.60	0.40	
	B/Ahmedabad								4.00	5.90	6.30		3.20	0.40	
	B/Aizawl													0.76	
	B/Aizwal									1.30			1.49		
	B/Allappuzha													3.23	
	B/Amritsar												0.00	1.60	
	B/Aurangabad								3.80	6.70	14.70		13.48	20.00	
	B/Bangalore								7.30	7.70			8.40	16.78	
	B/Bankura												0.80	0.40	
	B/Baroda								11.60	9.30	10.20	19.40			
	B/Behrampur													4.80	
	B/Belgaum												40.32	27.34	
	B/Bellary												21.01	14.06	
	B/Bhopal									0.00			0.00	0.40	
	B/Bhubaneswar												2.86	0.00	
	B/Bilaspur												0.00	0.00	
	B/Burdwan												0.00	0.44	
	B/Car Nicobar								0.00	0.00	0.00				
	B/Chandigarh							0.00	0.00	0.50	2.60				
	B/Chandigarh (Gen Hosp. Sec. 16)												0.47	1.98	
	B/Chandigarh (PGI Chan. Clinic)												0.00	1.56	
	B/Chandrapur												4.80	7.20	
	B/Churachandpur												2.00	13.20	
	B/Coochbihar													2.59	
	B/Cuttack									1.00				2.00	
	B/Dibrugrah												0.40	0.00	
	B/Gangtok								0.00				0.00	0.00	
	B/Gaya												0.40	0.00	
	B/Gonda												3.26	0.80	
	B/Gulburga												6.00	5.60	
	B/Guwahati												3.80	2.44	
	B/Gwalior												1.22	0.00	
	B/Hubli								20.50	16.90			20.80	23.81	
	B/Hyderabad					1.30	2.60		4.70	4.40			34.77	27.60	
	B/Imphal								4.80	3.90	8.20	4.80	6.28	10.80	
	B/Indore												4.30	2.40	
	B/Jaipur								1.40		1.10		6.00	3.20	
	B/Jammu												1.84	1.16	
	B/Jamnagar								7.50	4.90	1.40				
	B/Jodhpur									7.20	5.70	5.40			
	B/Kavaratti													0.00	
	B/Kohima									3.00			11.11	4.40	
	B/Kozhikode												3.20	4.30	
	B/Kwichriat												0.00	0.00	
	B/Latur												16.00	15.20	
	B/Lucknow												1.20	2.40	
	B/Madurai													10.40	
	B/Mangalore													15.54	
	B/Manipal								1.70						
	B/Manipur st.														12.00
	B/Margao												16.00	5.05	
	B/Mysore												12.80	8.40	
	B/Nagaland st.														4.80
	B/Nagpur								6.80	3.30	5.80	11.80	16.00	20.00	
	B/Nahan												0.40	0.80	
	B/Naharlagun												0.00	0.00	
	B/Pasighat												0.00	0.00	
	B/Patiala												0.00	2.44	
	B/Patna													0.80	
	B/Pondicherry								4.60	5.00	5.30		7.20		2.00
	B/Pondicherry (JIPMER)													9.60	
	B/Pondicherry (State AIDS cell)													2.00	
	B/Port Blair								1.30	0.00	0.00		1.27	0.40	

		B/Pune	0.20	1.40	3.00	4.80									6.80		
		B/Puri													0.40		
		B/Raipur												3.96	0.00		
		B/Ranchi												1.35	0.40		
		B/Raxaul													3.56		
		B/Raxual												1.61			
		B/Rohtak												2.56	5.26		
		B/Sangli												50.25	44.80		
		B/Shillong									0.00			0.00	0.00		
		B/Simla								0.00	0.30	0.00		0.39	0.39		
		B/Surat								13.90	19.40	19.30	20.60	1.79	13.04		
		B/Tiruchirapally												16.30	34.80		
		B/Tirupati									6.30				30.00		
		B/Trivandrum												3.88	1.97		
		B/Udaipur												4.40	3.20		
		B/Varanasi												1.60	2.00		
		B/Vasodagame								12.60	21.70	16.40		22.83	21.89		
		B/Visakhapatnam								7.80				21.60	29.51		
		M/ Madurai					4.20										
		M/ Pune					4.20										
		M/ Pune (Sasson Hosp.)						9.00									
		M/ Vellore	0.80	0.60	1.60	1.80	2.40	4.20	2.99								
		Pune (Sasson Hosp.)					4.50	9.50									
		Vellore	0.00	0.00	2.58	0.60	1.61	3.04	1.52								

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Men having sex with men	Major Urban Areas	Madras					1.10										
		Mumbai						20.30									
	Outside Major Urban Areas	Goa		0.40													
		Madhya Pradesh		0.00													
		Manipur State	0.00														

Additional data

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Blood donors																	

Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Tuberculosis patients	Major Urban Areas	Calcutta						0.00	0.00	1.00	0.50	3.20	3.40				
		Madras	0.00		0.00		0.40	0.80				1.50	2.90				
		Mumbai (Sir J.J. Hosp.& Grant Medical College)		2.40	2.30	3.90	7.90	10.60	10.60	11.00	10.70	16.80	23.00	30.00	33.00		
		Mumbai (Sir J.J. Hosp.)			3.80	4.00	7.10	8.40									
	Outside Major Urban Areas	Bhubneshawar district							0.00								
		Imphal								3.20				14.80			
		Jodhpur										15.70	21.40	11.20			
		Kerala State							3.20								
		Manipur State							11.50	4.00	6.20	11.90					
		Nagpur									5.20				20.10		
		Perundurai												6.00	2.80		
		Perunduri									3.20						
		Pondicherry					0.70	0.90									
		Pune						2.50		14.30	12.10	18.50	21.50				
		Tambaram						1.00						17.60	16.40		
		Tamil Nadu State					0.80										
		Tamil Nadu State				0.00					2.30	3.60	4.40	7.00	9.60		
		Vellore						1.30									
		Vellore (DTC)					4.50										
		Vellore (GTBS)					2.00										