

2006 Update



# South Africa

## EPIDEMIOLOGICAL FACT SHEETS ON HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS

December 2006



## HIV/AIDS estimates

The estimates and data provided in the following tables relate to 2005 unless stated otherwise. These estimates have been produced and compiled by UNAIDS/WHO. They have been shared with national AIDS programmes for review and comments, but are not necessarily the official estimates used by national governments. In order to calculate regional totals, older data or regional models were used to produce minimum estimates for these countries. The estimates are given in rounded numbers. However, unrounded numbers were used in the calculation of rates and regional totals, so there may be minor discrepancies between the regional/global totals and the sum of the country figures. The new estimates in this report are presented together with ranges, called 'plausibility bounds'. These bounds reflect the certainty associated with each of the estimates. The wider the bounds, the greater the uncertainty surrounding an estimate. The extent of uncertainty depends mainly on the type of epidemic, and the quality, coverage and consistency of a country's surveillance system. The general methodology and tools used to produce the country-specific estimates in the table have been described in a series of papers in *Sexually Transmitted Infections* 2006, 82 (Suppl x). The estimates produced by UNAIDS/WHO are based on methods and on parameters that are informed by advice given by the UNAIDS Reference Group on HIV/AIDS Estimates, Modelling and Projections.

### Estimated number of adults and children living with HIV/AIDS, end of 2003 and 2005

These estimates include all people with HIV infection, whether or not they have developed symptoms of AIDS.

	2003	2005
Adults (15+) and children	5 300 000	5 500 000
Low estimate	4 800 000	4 900 000
High estimate	5 800 000	6 100 000
Adults (15+)	5 100 000	5 300 000
Low estimate	4 600 000	4 800 000
High estimate	5 600 000	5 800 000
Children (0-14)	200 000	240 000
Low estimate	76 000	93 000
High estimate	450 000	500 000
Adult rate (15-49) (%)	18.6	18.8
Low estimate	16.6	16.8
High estimate	20.5	20.7
Women (15+)	2 900 000	3 100 000
Low estimate	2 600 000	2 800 000
High estimate	3 200 000	3 400 000

Source: 2006 Report on the global AIDS epidemic

Estimates 2005	Men	Women
Prevalence among 15-24 year olds	4.5	14.8
Low estimate	4	13.2
High estimate	4.9	16.3

Source: 2006 Report on the global AIDS epidemic

### HIV prevalence among young people

	2000	2001	2002	2003	2004	2005
Prevalence among 15-24 year olds						
Prevalence among 15-24 pregnant women						

Source: 2006 Report on the global AIDS epidemic

## Estimated number of deaths due to AIDS

Estimated number of adults and children who died of AIDS:

	2003	2005
Adults and children	290 000	320 000
Low estimate	230 000	270 000
High estimate	350 000	380 000

*Source: 2006 Report on the global AIDS epidemic*

## Estimated number of orphans due to AIDS

*Nb: only for generalized epidemics*

Estimated number of children who have lost their mother or father or both parents to AIDS and who were alive and under age 17 at the end of 2005:

Estimated number of orphans	2003	2005
Current living orphans	780 000	1 200 000
Low estimate	620 000	970 000
High estimate	950 000	1 400 000

*Source: 2006 Report on the global AIDS epidemic*

	2003	2005
Maternal orphans	550 000	850 000
Low estimate	440 000	700 000
High estimate	670 000	1000 000
Paternal orphans	400 000	630 000
Low estimate	320 000	520 000
High estimate	490 000	760 000
Dual orphans	220 000	370 000
Low estimate	170 000	310 000
High estimate	260 000	440 000

*Source: 2006 Report on the global AIDS epidemic*

	Year	Total
Education ratio		
External support for OVC		

*Source:*

## The 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, is the coordination and implementation mechanism for UNAIDS and WHO to compile and improve the quality of data needed for informed decision-making and planning at national, regional and global levels. 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 WHO Regional Offices, national AIDS programmes and a number of national and international 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 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 behaviour (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 2005. 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 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.

## Basic indicators

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

DEMOGRAPHIC DATA	YEAR	ESTIMATE	SOURCE
Total population (thousands)	2005	47 431	UN Population Division
Population aged 15-49 (thousands)	2005	25 203	UN Population Division
Female population aged 15-24 (thousands)	2005	4836	UN Population Division
Annual population growth rate (%)	1995-2004	1.2	UN Population Division
% of population in urban areas	2005	57.9	UN Population Division
Crude birth rate (births per 1000 pop.)	2005	22.9	UN Population Division
Crude death rate (deaths per 1000 pop.)	2005	18.9	UN Population Division
Maternal mortality rate (per 100 000 live births)	2000	230	World Health Report 2006, WHO
Life expectancy at birth (years)	2004	48	World Health Report 2006, WHO
Total fertility rate (per woman)	2004	2.8	World Health Report 2006, WHO
Infant mortality rate (per 1000 live births)	2004	54	UNICEF / WHO
Under 5 mortality rate (per 1000 live births)	2004	67	World Health Report 2006, WHO

SOCIO-ECONOMIC DATA	YEAR	ESTIMATE	SOURCE
Gross national income, ppp, per capita (Int.\$)	2004	10 960	World Bank
Per capita total expenditure on health (Int.\$)	2003	669	WHO
UN Human Development Index (ranking)	2005	120	UNDP Human Development Report 2005
General government expenditure on health as % of total expenditure on health	2003	38.6	WHO
Adult literacy rate (%)	2000-2004	82.4	UNESCO
Male literacy rate (%)	2000-2004	84.1	UNESCO
Female literacy rate (%)	2000-2004	80.9	UNESCO
Net primary school enrolment ratio, male (%)	1998-2004	89	World Bank
Net primary school enrolment ratio, female (%)	1998-2004	89	World Bank
Human Poverty Index (ranking)	2005	56	UNDP Human Development Report 2005

	2001	2002	2003	2004	2005
National funds spent by governments on HIV/AIDS from domestic sources (US\$)	79 518 414	117 546 538	212 964 035	353 923 892	

Source: UNGASS CR and SIDALAC

### Contact address

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

20, Avenue Appia

CH - 1211 Geneva 27

Switzerland

Fax: +41-22-791-4834

email: [hivstrategicinfo@who.int](mailto:hivstrategicinfo@who.int)

[estimates@unaids.org](mailto:estimates@unaids.org)

website: <http://www.who.int/hiv>

<http://www.unaids.org>

Extracts of the information contained in these fact sheets may be reviewed, reproduced or translated for research or private study but not for sale or for use in conjunction with commercial purposes. Any use of information in these fact sheets should be accompanied by the following acknowledgment "UNAIDS/WHO Epidemiological Fact Sheets on HIV/AIDS and Sexually Transmitted Infections, 2006 Update".

## 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.

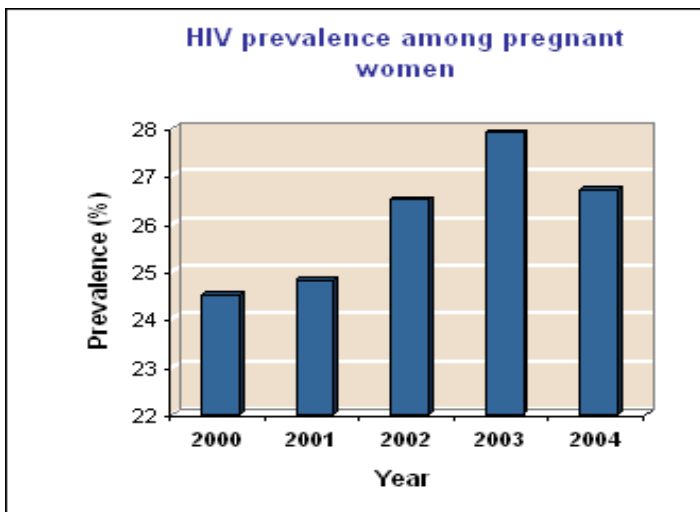
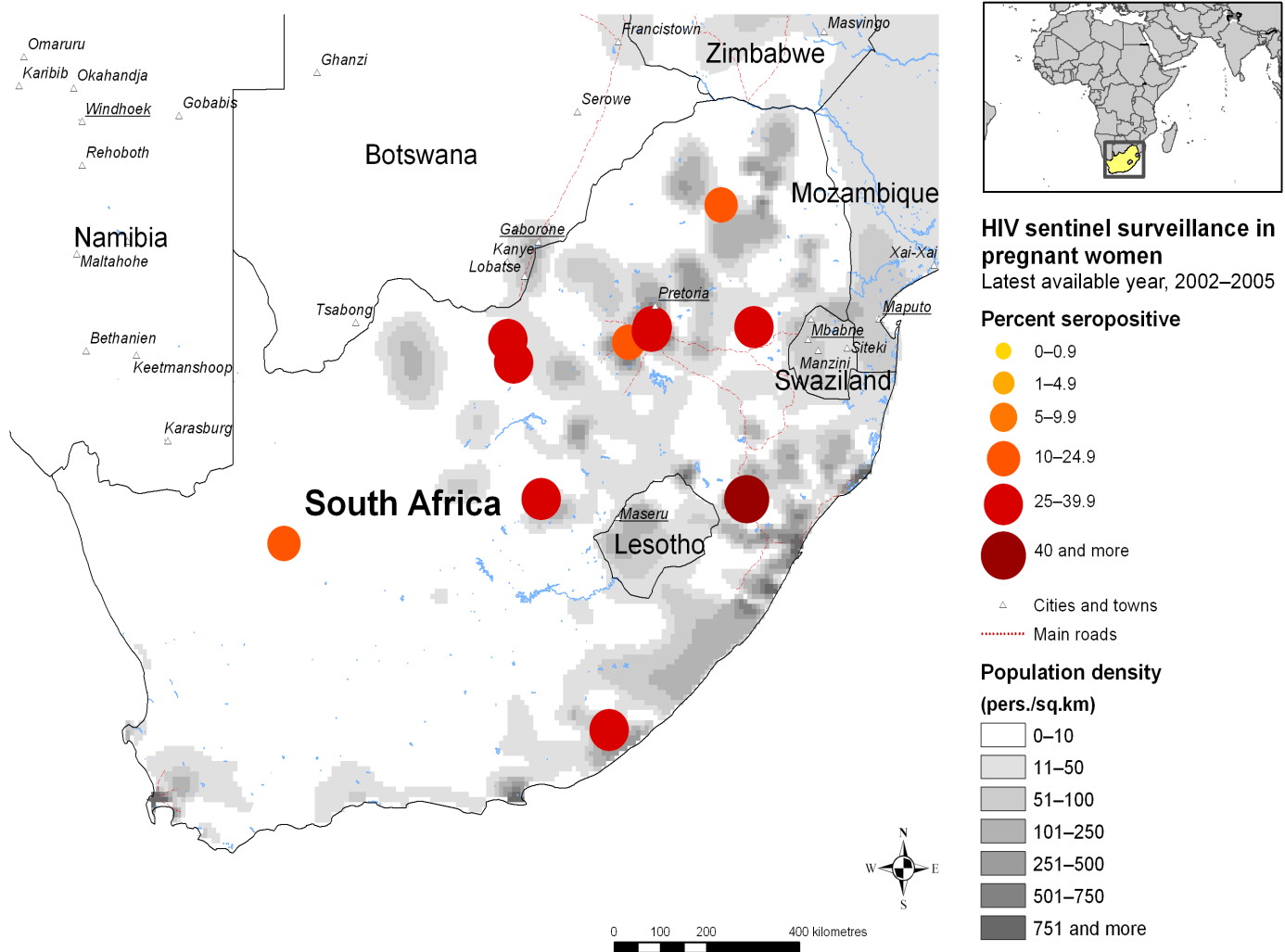
### HIV sentinel surveillance prevalence

Group	Area		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005		
Pregnant women	Major urban areas	N-Sites	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3			
		Minimum	0.1	0.1	0.3	0.6	1.6	1.7	4	6.3	5.2	7.1	8.7	8.6	12.4	13.1	15.4			
		Median	0.6	0.9	1.7	3	5.9	12	13.5	14.8	19.2	20.9	24.3	25.8	27.6	27.1	28			
		Maximum	1.6	2.2	2.7	9.3	13.5	23.8	19.7	26.9	32.5	32.5	36.2	33.5	36.5	37.5	40.7			
	Outside major urban areas	N-Sites	5	5	5	5	5	5	5	5	5	5	5	5	5	5	6	6		
		Minimum	0.2	0.1	0.7	1.1	1.8	4.9	6.2	8.2	9.9	10.1	11.2	14.5	15.1	16.7	17.6			
		Median	0.4	1.2	1.1	2.2	6.7	8.3	16.3	18.1	21.3	23	22.9	25.2	26.2	29.8	28.1			
		Maximum	1.1	6.5	3.1	4.3	12.8	16.2	23.8	22.6	30	27.9	29.7	30.1	28.8	32.6	33.1			
Sex workers	Major urban areas	N-Sites								2	1		1							
		Minimum									44.4	61.1		50.3						
		Median									47.3	61.1		50.3						
		Maximum									50.3	61.1		50.3						
	Outside major urban areas	N-Sites									1	4	2							
		Minimum										44.2	56	68.6						
		Median										44.2	68.1	70.4						
		Maximum										44.2	70	72.2						
Injecting drug users	STI patients	Major urban areas	N-Sites	1	1	1	1	1	1	1	1	3	1	1	1					
			Minimum	5.1	8.6	12.7	15.8	18.8	39.9	47.1	52.3	41	53.7	50	45					
			Median	5.6	9.4	15.3	18.7	21.7	39.9	47.1	52.3	41.8	53.7	64.3	45					
			Maximum	6.1	10.3	17.9	21.5	24.7	39.9	47.1	52.3	56.5	53.7	78	45					
		Outside major urban areas	N-Sites										1							
			Minimum										9.9							
			Median										9.9							
			Maximum										9.9							
Men having sex with men	Major urban areas	N-Sites																		
		Minimum																		
		Median																		
		Maximum																		
	Outside major urban areas	N-Sites																		
		Minimum																		
		Median																		
		Maximum																		

Group	Area		1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Men having sex with men	Outside major urban areas	Minimum																	
		Median																	
		Maximum																	
Tuberculosis patients	Major urban areas	N-Sites	1	1	1										1				
		Minimum	4.7	8.7	29.8										68.5				
		Median	4.7	8.7	29.8										68.5				
		Maximum	4.7	8.7	29.8										68.5				
	Outside major urban areas	N-Sites		2	1	2	1	2	1	1			1	1			1		
		Minimum		0.5	42	35	46	55	38	68			53.4	52			58		
		Median		14.7	42	39	46	56.5	38	68			53.4	52			58		
		Maximum		29	42	43	46	58	38	68			53.4	52			58		

## Maps & charts

Mapping the geographical distribution of HIV prevalence among different population groups may assist in interpreting both the national coverage of the HIV surveillance system as well in explaining differences in levels of prevalence. The UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance, in collaboration with the WHO Public Health Mapping and GIS Team, Communicable Diseases, is producing maps showing the location and HIV prevalence in relation to population density, major urban areas and communication routes. For generalized epidemics, these maps show the location of prevalence of antenatal surveillance sites. 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 are presented for those countries where sufficient data exist.



The boundaries and names shown and the designations used on the map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted lines on maps represent approximate border lines for which there may not yet be full agreement. WHO 2006, all rights reserved.

## Reported HIV/AIDS cases

### Reported AIDS cases

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 Anti-Retroviral Therapy (ART).

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Males																	
Females																	
Total																	

### Reported HIV cases

A case of HIV infection is defined as an individual with HIV infection irrespective of clinical stage (including severe or stage 4 clinical disease) confirmed by laboratory criteria according to country definitions and requirements.

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Males											
Females											
Total											

*Source:*

Note: In some instances, the number in the total column is not the sum of the individual years due to differing reporting, estimation processes or available data.

## 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 STIs are the same, as are the target audiences for interventions. In addition, strong evidence supports several biological mechanisms through which STIs facilitate HIV transmission by increasing both HIV infectiousness and HIV susceptibility. Thus, detection and treatment of individuals with STIs is an important part of an HIV control strategy. In summary, if the incidence/prevalence of STIs is high in a country, then there is the possibility of high rates of sexual transmission of HIV. Monitoring trends in STIs provides valuable insight into the likelihood of the importance of sexual transmission of HIV within a country, and is part of second generation surveillance. These trends also assist in assessing the impact of behavioural interventions, such as delaying sexual debut, reducing the number of sex partners and promoting condom use. Clinical services offering STI care are an important access point for people at high risk for both STIs and HIV. Identifying people with STIs allows for not only the benefit of treating the STI, but for prevention education, HIV testing, identifying HIV-infected persons in need of care, and partner notification for STIs or HIV infection. Consequently, monitoring different components of STI prevention and control can also provide information on HIV prevention and control activities within a country.

### STI syndromatic reporting

#### Genital discharge

Reported cases	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Males											

*Source:*

#### Genital ulcers

Reported cases	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Males											
Females											
Total											

*Source:*

### STI etiological reporting

#### Chlamydia

Reported cases	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Males											
Females											
Total											

*Source:*

#### Gonorrhoea

Reported cases	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Males											
Females											
Total											

*Source:*

## Syphilis

Reported cases	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Males											
Females											
Total											

Source:

## Herpes simplex

Reported cases	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Males											
Females											
Total											

Source:

## Syphilis prevalence, women

Percent of blood samples taken from pregnant women aged 15-49 that test positive for syphilis - positive reaginic and treponema test-during routine screening at selected antenatal clinics.

## Syphilis prevalence, ANC women

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total											

## Prevalence of curable STIs among specific populations

### Prevalence of curable STIs among female sex workers

	Year	Area	Rate	Range
Chlamydia				
	1997-1999	Rural	16.4	

Source: Ramjee G. Sexually transmitted infections among sex workers in KwaZulu-Natal, South Africa. Sex Transm Dis 1998; 25 (7): 346-349.

	Year	Area	Rate	Range
Gonorrhoea				
	1997-1999	Rural	14.3	

Source: Ramjee G. Sexually transmitted infections among sex workers in KwaZulu-Natal, South Africa. Sex Transm Dis 1998; 25 (7): 346-349.

	Year	Area	Rate	Range
Syphilis				
	1997-1999	Rural	42.1	

Source: Ramjee G. Sexually transmitted infections among sex workers in KwaZulu-Natal, South Africa. Sex Transm Dis 1998; 25 (7): 346-349.

	Year	Area	Rate	Range
Trichomoniasis				
	1997-1999	Rural	41.3	

Source: Ramjee G. Sexually transmitted infections among sex workers in KwaZulu-Natal, South Africa. Sex Transm Dis 1998; 25 (7): 346-349.



## Prevalence of curable STIs among other specific populations

Specific populations according to the epidemic pattern of the country

	Year	Area	Rate	Range
Chlamydia				
<i>Source:</i>				

	Year	Area	Rate	Range
Gonorrhoea				
<i>Source:</i>				

	Year	Area	Rate	Range
Syphilis				
<i>Source:</i>				

	Year	Area	Rate	Range
Trichomoniasis				
<i>Source:</i>				

## 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 respond 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 (%)	1998	56.3	UNPOP
Percentage of contraceptive users using condoms			
% of births attended by skilled health personnel	1998	84	UNICEF
% of 1-yr-old children fully immunized - DPT	2004	93	WHO/UNICEF
% of 1-yr-old children fully immunized - Measles	2004	81	WHO/UNICEF
% of ANC clinics where HIV testing is available			

## Estimated number of adults (15+) in need of treatment

Total number of adults needing antiretroviral therapy

	2003	2005
Both sexes	660 000	790 000
Low estimate	550 000	680 000
High estimate	770 000	900 000

Source: WHO and UNAIDS, March 2006

## Estimated number of people receiving antiretroviral therapy

Total number of people receiving antiretroviral therapy at end of each year

	2003	2005
Males		
Females		
Both sexes	25 000	207 000

Source: Based on the most recent calculated ART need estimates by WHO and UNAIDS, as of March 2006.

Coverage	2003	2005
Both sexes	3%	23%

Source: WHO and UNAIDS, March 2006

Comments: See also the paediatrics estimates section on the next page, as the ART need among children should also be taken into account for estimating ART coverage.

## Services providing antiretroviral therapy

Reported number of sites that are providing antiretroviral therapy

	2003	2005
Public		
Private		
Total		183

Source: (total 2005) Annex 3: Progress on Global Access to HIV Antiretroviral Therapy, A Report on "3 by 5" and Beyond. Geneva, WHO and UNAIDS, March 2006.

Comments:

## Paediatrics estimates, 2005

	Total	Source
Children living with HIV		
Low estimate		
High estimate		
Children in need of ART	67 000	
Low estimate	34 000	
High estimate	100 000	<i>WHO and UNAIDS, March 2006</i>
Children receiving ART		
Children in need of cotrimoxazole	240 000	
Low estimate	120 000	
High estimate	360 000	<i>WHO and UNAIDS, March 2006</i>
Children receiving cotrimoxazole		

*Comments:*

## Coverage of HIV testing and counselling

Number of public, private and NGO sites providing testing and counselling services.

	Year	Area	Total number of sites
Public sector			
Private sector			
NGOs			
Total			

*Source:*

## Number of people counselled and tested over time

Number of people who have been tested and counselled in the country.

	2003	2004	2005
Males			
Females			
Both sexes			

*Source:*

## 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 Evaluation, 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

Prevention indicator: Percentage of young people 15-24 who both correctly identify two ways of preventing the sexual transmission of HIV and who reject three misconceptions about HIV transmission.

	Total	Urban	Rural	Year
Males				
Females				

*Source:*

### Reported condom use at last higher risk sex (young people 15-24)

Prevention indicator: Proportion of young people reporting the use of a condom during sex with a non-regular partner.

	Total	Urban	Rural	Year
Males				
Females				

*Source:*

### Age-mixing in sexual partnerships among young women

The proportion of young women who have sex in the last 12 months with a partner who is 10 or more years older than themselves.

	Total	Urban	Rural	Year
Females				

*Source:*

## Reported non regular sexual partnerships

Prevention indicator: Proportion of young people 15-24 having at least one sex partner other than a regular partner in the last 12 months.

Year	Males	Females

*Source:*

## Ever used a condom

Percentage of people who ever used a condom.

	Age	Total	Urban	Rural	Year
Males					
Females					

*Source:*

## Adolescent pregnancy

Percentage of teenagers 15-19 who are mothers or pregnant with their first child.

	Year	Percentage

*Source:*

## Age at first sexual experience

Percentage of 15-19 year olds who have had sex before age 15.

	Year	Males	Females

*Source:*

## Prevention indicators

### Prevention of mother-to-child transmission (PMTCT) nationwide

Infection of HIV from an HIV-positive mother to her child during pregnancy, labour, delivery of breastfeeding is called mother-to-child transmission (MTCT). An estimated 530 000 (410 000 - 660 000) children were newly infected in 2006, mainly through mother-to-child transmission. The vast majority of these infections are preventable, yet coverage levels are remarkably low in most resource-limited countries.

#### Prevention mother-to-child transmission

	Total	Year	Comment
Antenatal care coverage (%), 1997--2005*	92	2005	
Number of pregnant women counselled on PMTCT services	513 401	2005	
Estimated number of HIV-infected pregnant women	250 000	2005	
Number of HIV-infected pregnant women who received ARVs for PMTCT	75 077	2005	
% of HIV-infected pregnant women who received ARVs for PMTCT	30	2005	

\* Data refer to the most recent year available during the period specified.

Source: UNAIDS/Unicef/WHO. *Children and AIDS: A stocktaking report, Actions and progress during the first year of "Unite for Children, Unite against AIDS". New York, 2007.*

### Prevention indicators among injecting drugs users

Availability of harm reduction services	Number of centers	Number of people attending services	Estimation of coverage	Year
Needle exchange programs				
Opioid substitute therapy				

Source:

	Estimated number of IDUs aged 15-65	IDU prevalence(%)	Year
Needle exchange programs			

Source:

### Screening of blood transfusions nationwide

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.

	Percentage
Percentage of blood units transfused in the last 12 months that have been adequately screened for HIV according to national or WHO guidelines.	100%

## Sources

Data presented in this Epidemiological Fact Sheet come from several 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.

- Annex 3: Progress on Global Access to HIV Antiretroviral Therapy, A Report on "3 by 5" and Beyond. Geneva, WHO and UNAIDS, March 2006.
- 2006 Report on the global AIDS epidemic
- Based on the most recent calculated ART need estimates by WHO and UNAIDS, as of March 2006.
- Coverage Survey
- United Nations Population Division
- UNAIDS/Unicef/WHO. Children and AIDS: A stocktaking report, Actions and progress during the first year of "Unite for Children, Unite against AIDS". New York, 2007.
- UNDP Human Development Report 2005
- United Nations Educational, Scientific and Cultural Organization
- UNGASS CR
- UNGASS CR and SIDALAC
- UNICEF Global Database on Skilled Attendant at Delivery. The United Nations Children's Fund. (<http://www.childinfo.org/areas/deliverycare/countrydata.php>)
- UNICEF / WHO
- World Contraceptive Use 2005 database. Population Division, Department of Economic and Social Affairs, United Nations.
- UNPOP Dept. Of Economic and Social Affairs
- World Health Organization
- World Health Organization, 3 by 5
- WHO and UNAIDS, March 2006
- WHO/UNICEF estimates of national coverage for year 2004 (as of September 2005). ([http://www.who.int/immunization\\_monitoring/routine/immunization\\_coverage/en/index4.html](http://www.who.int/immunization_monitoring/routine/immunization_coverage/en/index4.html))
- World Bank
- World Health Report 2006, WHO
- Ramjee G. Sexually transmitted infections among sex workers in KwaZulu-Natal, South Africa. *Sex Transm Dis* 1998; 25 (7): 346-349.
- Becker, W. B. 1986 HTLV-3 Infection in the RSA South African Medical Journal, Oct. 11, suppl no. 11, pp. 26-27.
- Couper, I. D., S. B. Vumase 1996 HIV in Northern KwaZulu-Natal South African Medical Journal, vol. 86, no. 2, p. 179.
- Chen, C. Y., S. A. Morse, J. Love, et al. 1998 Effect of HIV on Emergence of Genital Herpes Simplex Virus-2 (HSV) among Male STD Clinic Patients in South Africa 38th Intersci Conf Antimicrob Agents Chemother., San Diego, CA, 1998, Sept. 24-27, Abst. no. H-30, Abstract in National Library of Medicine: Internet Grateful Med. v2.6.3. AIDS/202710774.
- Connolly, C., A. Reid, G. Davies, et al. 1999 Relapse and Mortality among HIV-Infected and Uninfected Patients with Tuberculosis Successfully Treated with Twice Weekly ... *AIDS*, vol. 13, no. 12, pp. 1543-1547.
- Campbell, L. H. Hausler 2000 A Base Line Assessment of HIV Counselling, Testing and TB Services in Preparation for Introduction of TB Preventive Therapy ... XIII International AIDS Conference, Durban, South Africa, 7/9-14, Abstract WePeC4416.
- Martin, D. J., J. G. M. Sim, G. J. Sole, et al. 1995 CD4+ Lymphocyte Count in African Patients Co-Infected with HIV and Tuberculosis *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*, vol. 8, no. 4, pp. 386-391.
- Makubalo, L. E. 1998 Eighth Annual National HIV Sero-Prevalence Survey of Women Attending Antenatal Clinics in South Africa 1997 Department of Health, Health Systems Research and Epidemiology, June, report.
- Marais, D. J., E. Vardas, G. Ramjee, et al. 2000 The Impact of Human Immunodeficiency Virus Type 1 Status on Human Papillomavirus (HPV) Prevalence and HPV Antibodies in ... *Journal of Infectious Diseases*, vol. 182, no. 4, pp. 1239-1242.
- Moodley, P., D. Wilkinson, P. D. J. Sturm, et al. 2001 Association between HIV-1 Infection, the Aetiology of Genital Ulcer Disease and Response to Syndromic Management Presented at International Congress of Sexually Transmitted Infections, ISSTD/IUSTI, Berlin, Germany, 24-27 June 2001, Abstract in *International Journal of STD & AIDS*, vol. 12, suppl. 2, pp. 106-107.
- Regional Virus Laboratory 1989 Department of Virology, Faculty of Medicine, University of Natal Paper Unpublished.
- RSA Department of National Health and Population Development 1991 AIDS in South Africa: Status on World AIDS Day 1991 *Epidemiological Comments*, vol. 18, no. 11, pp. 229-249.
- RSA Department of National Health and Population Development 1991 First National HIV Survey of Women Attending Antenatal Clinics, South Africa, October/November 1990 *Epidemiological Comments*, vol. 18, no. 2, pp. 35-44.
- RSA Department of National Health and Population Development 1994 Fourth National HIV Survey of Women Attending Antenatal Clinics, South Africa, October/ November 1993 *Epidemiological Comments*, vol. 21, no. 4, pp. 68-78.
- Ramjee, G., S. S. Abdool Karim, A. W. Sturm 1998 Sexually Transmitted Infections among Sex Workers in KwaZulu-Natal, South Africa *Sexually Transmitted Diseases*, vol. 25, pp. 346-349.

- RSA Department of Health 2000 1999 National HIV Sero-Prevalence Survey of Women Attending Public Antenatal Clinics in South Africa Health Systems Research & Epidemiology, Department of Health, Republic of South Africa, Summary report.
- Rustomjee, R., S. Abdool Karim, A. Kharsany 2000 A Randomised Control Trial of Azitromycin Versus Doxycycline/Ciprofloxacin in the Treatment of Sexually Transmitted Chlamydia ... XIII International AIDS Conference, Durban, South Africa, 7/9-14, Abstract WePeC4334.
- Ramjee, G., E. Gouws, Z. Stein 2000 HIV Prevalence among Truck Drivers in Kwazulu-Natal. South Africa Implications for the Explosive Nature of the South ... XIII International AIDS Conference, Durban, South Africa, 7/9-14, Poster TuPpD1194.
- RSA Department of Health 2001 2000 National HIV and Syphilis Sero-Prevalence Survey of Women Attending Public Antenatal Clinics in South Africa Department of Health, Republic of South Africa, report.
- RSA Department of Health 2002 2001 National HIV and Syphilis Sero-Prevalence Survey of Women Attending Public Antenatal Clinics in South Africa Department of Health, Republic of South Africa, Summary report.
- RSA Department of Health 2003 National HIV and Syphilis Antenatal Sero-Prevalence Survey in South Africa: 2002 Department of Health, Republic of South Africa, summary report.
- Sher, R. 1989 HIV Infection in South Africa, 1982-1988: A Review South African Medical Journal, vol. 76, p. 314-318.
- Schoub, B. D., A. N. Smith, S. Johnson, et al. 1990 Consideration on the Further Expansion of the AIDS Epidemic in South Africa - 1990 South African Medical Journal, vol. 77, pp. 613-618.
- Smith, A. 2000 HIV/AIDS in KwaZulu-Natal and South Africa AIDS Analysis Africa, vol. 11, no. 1, pp. 5-9.
- Tshibangu, N. N. 1993 HIV Infection in Bophuthatswana: Epidemiological Surveillance 1987-1989 South African Medical Journal, vol. 83, pp. 36-39.
- Van Dam, J., R. Ballard, G. Neilssen, et al. 2000 STD and HIV Infection in Carletonville, South Africa: A Community-Based Survey XIII International AIDS Conference, Durban, South Africa, 7/9-14, Poster WePeC4391.
- Wilkinson, D. and G. R. Davies 1997 The Increasing Burden of Tuberculosis in Rural South Africa - Impact of the HIV Epidemic South African Medical Journal, vol. 87, no. 4, pp. 447-450.
- Williams, B. G., C. MacPhail, C. Campbell, et al. 2000 The Carletonville-Mothusimpilo Project: Limiting Transmission of HIV Through Community-Based Interventions South African Journal of Science, vol. 96, pp. 351-359.
- Bergemann, A., A. S. Karstaedt 1996 The Spectrum of Meningitis in a Population with High Prevalence of HIV Disease Q J Med, vol. 89, pp. 499-504.
- Coetzee, D., K. Hilderbrand, A. Boule, et al. 2003 The Rationale for Integrating HIV and TB Management at Primary Care Level Presented at the 2nd International AIDS Society Conference on HIV Pathogenesis and Treatment, Paris, France, 7/13-16, Abstract 893, Abstract in the Antiviral Therapy, vol. 8, suppl. 1, p. S436.
- Floyd, K., R. A. Reid, D. Wilkinson, et al. 1999 Admission Trends in a Rural South African Hospital during the Early Years of the HIV Epidemic Journal of the American Medical Association, vol. 282, no. 11, pp. 1087-1091.
- Kharsany, A. B. M., Y. Mahabeer, C. Connolly, et al. 2000 Changing Aetiology of Genital Ulcer Disease (GUD) in STD Clinic Attenders with a Rising HIV Prevalence XIII International AIDS Conference, Durban, South Africa, 7/9-14, Abstract ThOrC728.
- Morar, N. S., G. Ramjee, S. S. Abdool Karim 1998 Safe Sex Practices among Sex Workers at Risk of HIV Infection 12th World AIDS Conference, Geneva, 6/28 - 7/3, Poster 33287.
- Moodley, P., D. Wilkinson, C. Connolly, et al. 2001 Male Urethritis: Impact of HIV Co-Infection and Response to Syndromic Management Presented at International Congress of Sexually Transmitted Infections, ISSTD/IUSTI, Berlin, Germany, 24-27 June 2001, Abstract in International Journal of STD & AIDS, vol. 12, suppl. 2, p. 106.
- O'Farrell, N., I. Windsor, P. Becker 1990 Risk Factors for HIV-1 Amongst STD Clinic Attenders in Durban, South Africa VI International Conference on AIDS, San Francisco, 6/20-24, Poster F.C.604.
- RSA Department of National Health and Population Development 1992 Second National Survey of Women Attending Antenatal Clinics, South Africa, October/November 1991 Epidemiological Comments, vol. 19 no. 5, pp. 80-92.
- RSA Dept. of National Health and Population Development 1993 Third National HIV Survey of Women Attending Antenatal Clinics, South Africa, October/November 1992 Epidemiological Comments, vol. 20, no. 3, pp. 35-50.
- RSA Department of National Health 1994 NIV Sentinel Surveillance Epidemiological Comments, vol. 21, no. 11, pp. 230-231.
- RSA Department of Health 1995 Fifth National HIV Survey in Women Attending Antenatal Clinics of the Public Health Services in South Africa, Oct./Nov. 1994 Epidemiological Comments, vol. 22, no. 5, pp. 90-100.
- RSA Department of Health 1996 Sixth National Survey of Women Attending Antenatal Clinics of the Public Health Services in the Republic of South Africa, ... Epidemiological Comments, vol. 23, no. 1, pp. 3-16.
- RSA Department of Health 1997 Seventh National HIV Survey of Women Attending Antenatal Clinics of the Public Health Services in the Republic of South ... Epidemiological Comments, vol. 23, no. 2, pp. 4-16.
- RSA Department of Health 1999 1998 National Antenatal HIV Sero-Prevalence Survey in South Africa Health Systems Research and Epidemiology, Department of Health, Republic of South Africa, final report.
- Rustomjee, R., J. Levin, C. Gray, et al. 2002 Differences in Immune-Reconstitution Following Tuberculosis Therapy in HIV Positive & HIV Negative Individuals XIV International AIDS Conference, Barcelona, Spain, 7/7-12, Abstract ThPeC7569.
- RSA Department of Health 2004 National HIV and Syphilis Antenatal Sero-Prevalence Survey in South Africa: 2003 Department of Health, Republic of South Africa, summary report.
- Rees, H., M. E. Bekinska, K. Dickson-Tetteh, et al. 2000 Commercial Sex Workers in Johannesburg: Risk Behaviour and HIV Status South African Journal of Science, vol. 96, pp. 283-284.
- RSA Department of Health 2005 National HIV and Syphilis Antenatal Sero-Prevalence Survey in South Africa: 2004 Department of Health, Republic of South Africa, Summary report.
- Talijaard, D., B. Williams, C. Campbell, et al. 2002 The Response of a South African Mining Community to the Epidemic of HIV XIV International AIDS Conference, Barcelona, Spain, 7/7-12, Abstract ThPeD7715.
- Williams, B., C. Campbell, D. Gilgen, et al. 2000 Assessing the Risk HIV/AIDS in the Carletonville Gold Mining Area XIII International AIDS Conference, Durban, South Africa, 7/9-14, Poster MoPpC1026.

## Websites

- [www.aids.africa.com](http://www.aids.africa.com)  
[www.uct.ac.za/depts/mmi/index.html](http://www.uct.ac.za/depts/mmi/index.html)  
[www.mrc.ac.za/aids/intro.html](http://www.mrc.ac.za/aids/intro.html)

## Annex: HIV surveillance prevalence by site

Group	Area	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Pregnant women	Major urban areas	Eastern Cape Province	0.4	0.6	1	1.9	4.6	6	8.2	12.6	15.9	18	20.2	21.7	23.6	27.1	28	
		Gauteng Province	0.7	1.1	2.5	4.1	7.3	12	18.7	17.1	22.5	23.9	28.4	29.8	31.6			
		KwaZulu-Natal Province	1.6	2.2	2.7	9.3	13.5	21	19.7	26.9	32.5	32.5	36.2	33.5	36.5	37.5	40.7	
		Western Cape Province	0.1	0.1	0.3	0.6	1.6	1.7	4	6.3	5.2	7.1	8.7	8.6	12.4	13.1	15.4	
	Outside major urban areas	Free State Province	0.6	1.5	3.1	4.3	9.9	11	17.9	19.6	22.8	27.9	27.9	30.1	28.8	30.1	29.5	
		Gauteng Province														29.6	33.1	
		Limpopo Province														17.5	19.3	
		Mpumalanga Province	0.4	1.2	2.2	2.4	12.8	16.2	16.3	22.6	30	27.3	29.7	29.2	28.6	32.6	30.8	
		North West Province														29.9	26.7	
		North-West Province	1.1	6.5	0.9	2.2	6.7	8.3	23.8	18.1	21.3	23	22.9	25.2	26.2			
		Northern Cape Province	0.2	0.1	0.7	1.1	1.8	5.3	6.2	8.6	9.9	10.1	11.2	15.9	15.1	16.7	17.6	
	Northern Province	0.3	0.5	1.1	1.8	3	4.9	7.5	8.2	11.5	11.4	13.2	14.5	15.6				
	Sex workers	Major urban areas	Esselen Street Clinic								44.4							
KwaZulu-Natal Province										50.3	61.1		50.3					
Outside major urban areas		Carletonville									69	68.6						
		Carletonville district									70							
		Five sites									44.2							
		Khutsong										67.2	72.2					
		Six sites										56						
Injecting drug users																		
STI patients	Major urban areas	Durban (1)						39.9	47.1	52.3	56.5	53.7	64.3	45				
		Durban (2)									41.8							
		Esselen Street Clinic									41							
	Johannesburg	5.6	9.4	15.3	18.7	21.7												
	Outside major urban areas	Bophuthatswana Republic																
Cape Town									9.9									
Men having sex with men	Major urban areas	Durban (1)																
		Johannesburg																
	Natal Province																	
Outside major urban areas	Cape Town																	
Tuberculosis patients	Major urban areas	Johannesburg																
		King George V Hospital																
		KwaZulu region	4.7	8.7														
		KwaZulu-Natal Province													68.5			
		Rietfontein Hospital			29.8													

Group	Area	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	
Tuberculosis patients	Outside major urban areas	Ciskei region		0.5														
		Hlabisa district				35		58		68		53.4						
		Hlabisa Hospital		29	42	43	46	55										
		Khayelitsha														58		
		Port Shepstone											52					
		Soweto							38									