

2004
Update



Indonesia

EPIDEMIOLOGICAL FACT SHEETS
ON HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS



Joint United Nations Programme on HIV/AIDS

UNAIDS

UNHCR • UNICEF • WFP • UNDP • UNFPA
UNODC • ILO • UNESCO • WHO • WORLD BANK



World Health
Organization

HIV/AIDS estimates

In 2003 and during the first quarter of 2004, 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 1999 and 2001 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 generalised 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 that 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 2003

These estimates include all people with HIV infection, whether or not they have developed symptoms of AIDS, alive at the end of 2003:

Adults and children	110,000		
Low estimate	53,000		
High estimate	180,000		
Adults (15-49)	110,000	Adult rate (%)	0.1
Low estimate	53,000	Low estimate	0.0
High estimate	180,000	High estimate	0.2
Children (0-15)			
Low estimate			
High estimate			
Women (15-49)	15,000		
Low estimate	7,100		
High estimate	24,000		

Estimated number of deaths due to AIDS

Estimated number of adults and children who died of AIDS during 2003:

Deaths in 2003	2,400
Low estimate	1,100
High estimate	4,100

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 17 at the end of 2003:

Current living orphans	
Low estimate	
High estimate	

Assessment of the epidemiological situation 2004

Indonesia is classified as a country with a concentrated HIV epidemic, primarily among its injecting drug users population.

By 31 December 2003, the cumulative number of AIDS cases and deaths were 1371 and 479, respectively. The male-to-female ratio among reported cases in 2003 was 4.7:1. Prior to 1999, most of the cases acquired infection through heterosexual route, but since 2000, reported cases infected through injecting drug use have sharply increased. In 2003, 48% of the reported AIDS cases acquired infection by heterosexual transmission and 34% by injecting drug use.

Until the end of 1998, data collected in Indonesia from all sources indicated that HIV sero-prevalence rates were below 0.1% even in the high risk heterosexual risk groups such as female sexual workers (FSW). Beginning 1999, prevalence rates ranging from 1-6% were found in several FSW sentinel sites. Among transvestites the prevalence has raised to the worrisome level of 21% from 6% in 1997. Although IDU populations were not included as a routine sentinel surveillance, several ad hoc sero-surveys throughout Indonesia, especially in Jakarta, detected sharply increasing HIV prevalence - 48% in Jakarta and in prison in Jakarta. 24% among IDUs in recent years. Approximately 750,000-1,000,000 blood donors have been screened annually for HIV and a marked increase was seen in 1999/2000, probably reflecting the large increase among IDU populations noted during the same time period.

The total number of people living with HIV AIDS is estimated at 110,000 as of December 2003. Of these, about 10,000-13,000 will need antiretroviral treatment. The government of Indonesia has planned to scale up antiretroviral programme and is mobilising resources for the same.

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 2003. 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.

Basic indicators

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

DEMOGRAPHIC DATA	YEAR	ESTIMATE	SOURCE
Total population (thousands)	2004	222,611	UN population division database
Female population aged 15-24 (thousands)	2004	21,239	UN population division database
Population aged 15-49 (thousands)	2004	123,372	UN population division database
Annual population growth rate (%)	1992-2002	1.4	UN population division database
% of population in urban areas	2003	44.9	UN population division database
Average annual growth rate of urban population	2000-2005	3.9	UN population division database
Crude birth rate (births per 1,000 pop.)	2004	20.2	UN population division database
Crude death rate (deaths per 1,000 pop.)	2004	7.2	UN population division database
Maternal mortality rate (per 100,000 live births)	2000	230	WHO (WHR2004)/UNICEF
Life expectancy at birth (years)	2002	66.4	World Health Report 2004, WHO
Total fertility rate	2002	2.4	World Health Report 2004, WHO
Infant mortality rate (per 1,000 live births)	2000	39	World Health Report 2004, WHO
Under 5 mortality rate (per 1,000 live births)	2000	50	World Health Report 2004, WHO

SOCIO-ECONOMIC DATA	YEAR	ESTIMATE	SOURCE
Gross national income, ppp, per capita (Int.\$)	2002	2,990	World Bank
Gross domestic product, per capita % growth	2001-2002	2.3	World Bank
Per capita total expenditure on health (Int.\$)	2001	77	World Health Report 2004, WHO
General government expenditure on health as % of total expenditure on health	2001	25.1	World Health Report 2004, WHO
Total adult illiteracy rate	2000	13.2	UNESCO
Adult male illiteracy rate	2000	8.2	UNESCO
Adult female illiteracy rate	2000	18.1	UNESCO
Gross primary school enrolment ratio, male	2000/2001	111	UNESCO
Gross primary school enrolment ratio, female	2000/2001	109	UNESCO
Gross secondary school enrolment ratio, male	2000/2001	58	UNESCO
Gross secondary school enrolment ratio, female	2000/2001	56	UNESCO

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 or
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, 2004 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*

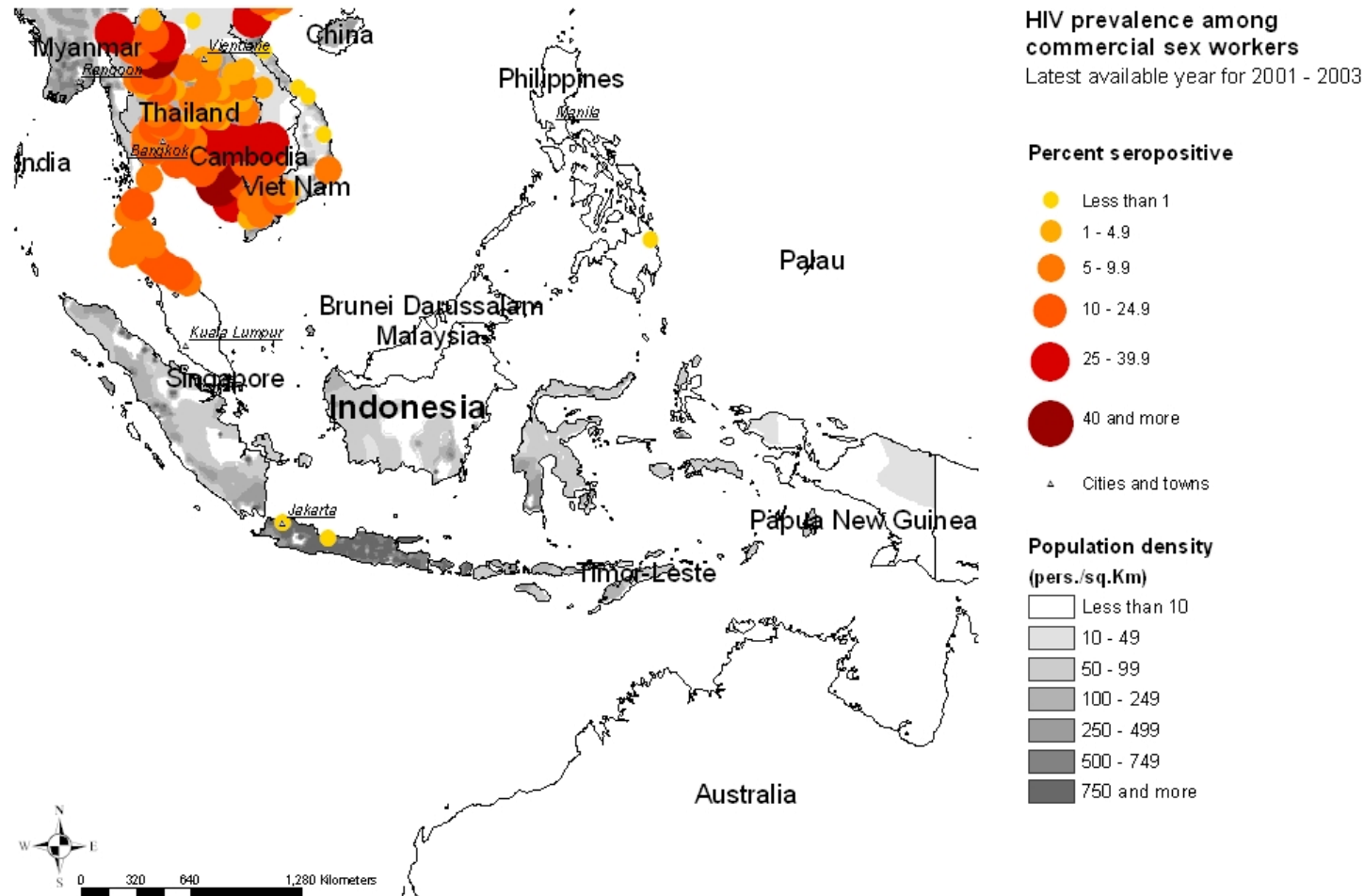
Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	
Pregnant women	Major urban areas	N-Sites													1.00					
		Minimum													0					
		Median													0					
		Maximum													0					
	Outside major urban areas	N-Sites	1.00						1.00	1.00	1.00	1.00								
		Minimum	0						0	0	0	0								
		Median	0						0	0	0	0								
		Maximum	0						0	0	0	0								
Sex workers	Major urban areas	N-Sites				2.00	2.00	2.00	3.00	3.00	3.00	2.00	2.00	3.00	1.00				1.00	
		Minimum				0	0	0	0	0	0	0	0.10	0.17	0	0			0	
		Median				0	0	0	0	0	0	0	0.20	0.18	0	0			0	
		Maximum				0	0	0	0	0	0	0.18	0.30	0.18	0.17	0			0	
	Outside major urban areas	N-Sites				8.00	10.00	15.00	24.00	28.00	38.00	29.00	26.00	25.00	20.00	7.00	1.00			
		Minimum				0	0	0	0	0	0	0	0	0	0	1.40	0.50			
		Median				0	0	0	0	0	0	0	0.02	0	0	5.38	0.50			
		Maximum				0	0	0	0.28	0.25	2.65	1.92	2.39	1.03	2.73	26.50	0.50			
Injecting drug users	Outside major urban areas	N-Sites			1.00										1.00	1.00				
		Minimum			0										14.00	16.00				
		Median			0										14.00	16.00				
		Maximum			0										14.00	16.00				
STI patients	Major urban areas	N-Sites					1.00													
		Minimum					1.27													
		Median					1.27													
		Maximum					1.27													
	Outside major urban areas	N-Sites								1.00						2.00				
		Minimum								0					0					
		Median								0					1.45					
		Maximum								0					2.90					
Men having sex with men	Outside major urban areas	N-Sites			1.00	1.00														
		Minimum			0	0														
		Median			0	0														
		Maximum			0	0														
Tuberculosis patients																				

*Detailed data by site can be found in the Annex.

Maps & charts

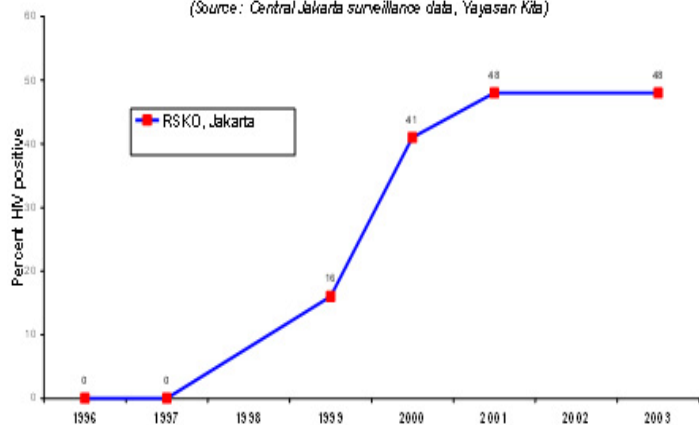
Mapping the geographical distribution of HIV prevalence among different population groups may assist in interpreting both the national coverage of the HIV surveillance system as well in explaining differences in levels of prevalence. The UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance, in collaboration with the WHO Public Health Mapping 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.



HIV is shooting up among IDUs.

(Source: Central Jakarta surveillance data, Yayasan Kita)



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 2004, all rights reserved.

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).

1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
0	0	0	0	0	0	0	0	3	2	3	5	12	10	17	15	20	31	34	75
1999	2000	2001	2002	2003	Total	UNK	Date of last report												
57	166	185			635		11/5/2001												

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 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 syndromes

Reported cases	1996	1997	1998	1999	2000	2001	2002	2003	Incidence 2003
----------------	------	------	------	------	------	------	------	------	----------------

Comments:

Source:

Syphilis prevalence, women

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

Year	Area	Rate	Range
1997-1999	Not specified	0.8	

Comments:

Source: AusAID. Indonesia HIV/AIDS and STD Prevention and Care Project. Prevalence of sexually transmitted infections in selected populations in Indonesia.

Estimated prevalence of curable STIs among female sex workers

- Chlamydia

Year	Area	Rate	Range
2000-2001	Urban	23	22.2-39.6
1997-1999	Not specified	23.9	3.7-47.3

Comments:

Source: Indonesian National AIDS Commission. HIV/AIDS and other Sexually Transmitted Infections in Indonesia. Challenges and opportunities for action 2001.

- Gonorrhoea

Year	Area	Rate	Range
2000-2001	Urban	29.7	19.6-30.9
1997-1999	Not specified	30.9	0.5-57.6

Comments:

Source: Indonesian National AIDS Commission. HIV/AIDS and other Sexually Transmitted Infections in Indonesia. Challenges and opportunities for action 2001.

Estimated prevalence of curable STIs among female sex workers (continued)

- Syphilis

Year	Area	Rate	Range
2000-2001	Not specified	29.7	19.6-39.7
1997-1999	Not specified	12.15	11.4-12.9

Comments:

Source: Indonesian National AIDS Commission. HIV/AIDS and other Sexually Transmitted Infections in Indonesia. Challenges and opportunities for action 2001.

- Trichomoniasis

Year	Area	Rate	Range
1997-1999	Unknown	5.6	4.9-6.3

Comments:

Source: FDÜ^^äÖÖËV@/OcaäÜVÖBÖÖÜAc ä" hse • [&ää] Ä^ç ^^) Äca ä@a* ä} ^Ä; a&ä^• Ää äÜVÖ• Ää [] * Ä^cA [\ \^; • EÜ^cÄV; ää • (ÄQ~
 GE€fl i k i , í GÄGÄQä [] ^• ääP QÖÖÖÜ/ää äÜVÖÄI^ç^) ä) Ää ä/Oca^ÄI; b &dÄE • ÖÖEÄI^çca^) &ÄÄ -ÄÜVÖÄ Ä^Ä&c^äÄ [] ~ äää) • Ä
 Qä [] ^• ääZ\ ç Ä^Ä^cÄ [\ \^; • EÜVÖä ä äää) ä^; EÄ ää; äää ä/O ca Ä^cä äää) ä^; Ää äÜä • c d ää ää) ää [] * Ää ä
 ää) ä^; • EJJJE

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 (%)	1997	57.4	UNICEF/UNPOP
Percentage of contraceptive users using condoms			
% of births attended by skilled health personnel	2000	55.8	WHO
% of 1-yr-old children fully immunized - DPT	2002	75	WHO/UNICEF
% of 1-yr-old children fully immunized - Measles	2001	76	WHO/UNICEF
% of ANC clinics where HIV testing is available			

Number of adults (15-49) with advanced HIV infection receiving ARV therapy as of June 2004

Adults on treatment

Number: 1,500

Source: WHO

Estimated number of adults (15-49) in need of treatment in 2003

Adults needing treatment

Number: 7,100

Source: WHO/UNAIDS

Coverage of HIV testing and counselling

Number of public and NGO services providing testing and counselling services.

Year	Area	N=
2004	All	25

Comments:

Source: Ministry of Health

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.

Year	Male	Female
2000		7

Comments:

Source: MICS

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.

Year	Male	Female

Comments: For this indicator only data will be shown if they were collected after 1998.

Source:

Age-mixing in sexual partnerships among young women

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

Year	Area	Age group	Male	Female	All

Comments:

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	Male	Female

Comments:

Source:

Knowledge and behaviour (continued)Ever used a condom

Percentage of people who ever used a condom.

Year	Area	Age group	Male	Female	All
------	------	-----------	------	--------	-----

Comments:

Source:

Adolescent pregnancy

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

Year	Percentage
------	------------

Comments:

Source:

Age at first sexual experience

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

Year	Male	Female
------	------	--------

Comments:

Source:

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:

Source:

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:

Source:

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:

Source:

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.

CDC & EH Indonesian Ministry of Health 1999 HIV/AIDS, STDs and Related Risk Behaviour in Indonesia Report of a Consensus Workshop, Golden Hotel, Jakarta, 9/27-28, draft report.

Dong, K., F. Zubier, J. Judanarso, et al. 1999 Risk Behaviors and Prevalence of STDs and HIV Infection among Female Commercial Sex Workers in Jakarta, Indonesia 5th International Congress on AIDS in Asia and the Pacific, Kuala Lumpur, Malaysia, 10/20-27, Abstract PMCD164.

Davies, S. C., S. Partohudoyo, G. Neilsen, et al. 1999 Diagnosis of STDs in Maternal and Child Community Health Clinics in Bali, Indonesia 5th International Congress on AIDS in Asia and the Pacific, Kuala Lumpur, Malaysia, 10/20-27, Session MCD23-06.

Davies, S. C., B. Otto, B. Madjid, et al. 2001 STDs in Male Dermatovenereology Patients in Two Cities of Indonesia 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. 74.

Ford, K., D. N. Wirawan, B. Reed, et al. 1998 AIDS/STD Knowledge, Preventive Practices, Condom Use and STD Prevalence among Female Sex Workers in Bali, Indonesia 12th World AIDS Conference, Geneva, 6/28 - 7/3, Poster 23523.

Indonesia AIDS Control Programme 1992 Update September 30, unpublished report.

Indonesia National AIDS Program 2000 Update UNAIDS Epidemiological Fact Sheet UNAIDS.

Joesoef, M. R., H. Sumampouw, M. Linnan, et al. 1996 Douching and Sexually Transmitted Diseases in Pregnant Women in Surabaya, Indonesia American Journal of Obstetrics and Gynecology, vol. 174, no. 1, pp. 115-119.

Li, P. C., E. K. Yeoh 1992 Current Epidemiological Trends of HIV Infection in Asia AIDS Clinical Review, pp. 1-23.

Pattiradjawane, F. M., P. F. Matulesy, J. Lohy, et al. 2001 Risk Behaviour Study on Sexually Transmitted Infections (STIs) among Commercial Sex Workers (CSWs) in Jakarta, Indonesia 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. 187.

Rao, C. K. 1991 Progress Reports on HIV Surveillance in Indonesia World Health Organization, GPA.

Silfanus, F. J. 2001 Current Situation of HIV/AIDS in Indonesia Presented at Monitoring the AIDS Pandemic (MAP) Symposium, Network Consultative Meeting, 9/30-10/2, Melbourne, Australia.

Sugihantono, A., M. B. Slidell, A. Syaifudin, et al. 2001 Prevalence of Syphilis and HIV among Commercial Sex Workers in Two Communities in Central Java, Indonesia 6th International Congress on AIDS in Asia and the Pacific, Melbourne, Australia, 10/5-10, Abstract Su0782.

Utomo, B., Irwanto, A. Manaf 1997 STD/HIV Trends and Behavior Changes in Indonesia Presented at the UNAIDS Regional Workshop on "Evidence of Behavioural Change in the Context of HIV Decline in Thailand," 19 - 22 May, Bangkok, Thailand.

Vranckx, R., A. Alisjahbana, W. Deville, et al. 1988 Anti-HIV Prevalence in Indonesia IV International Conference on AIDS, Stockholm, 6/15-16, Abstract 5526.

World Health Organization 2001 Test Results of Addicts at Yayasan Harapan Permata Hati Kita Addiction Treatment & Recovery Center, Bogor, West Java ... World Health Organization Country reports.

Zulkarnain, M. A. Nasution, A. S. Siregar, et al. 1995 Serologic Test of HIV with Elisa Method Toward Sexually Transmitted Disease Patients in Private Clinics in Medan, North Sumatera IUVDT World STD/AIDS Congress, Singapore, 3/19-23, Free Paper 9.

Websites: HIV/AIDS In Indonesia: <http://www1.rad.net.id/aids/>

Ministry of Health: <http://www.depkes.go.id>

Annex: HIV surveillance by site

Group	Area	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003		
Pregnant women	Major urban areas																	0		
	Outside major urban areas	0							0	0	0									
Sex workers	Major urban areas	Bali			0								0.17	0	0					
		Jakarta			0									0				0		
		Registered (1), Jakarta				0	0	0	0	0	0.18	0.10	0.18							
		Registered (2), Jakarta									0									
		Registered, Bali Province				0	0	0				0.30								
		Unregistered, Bali Province								0										
		Unregistered, Jakarta							0	0	0				0.17					
		Outside major urban areas	Aceh, Aceh Province												0	0	0			
			Batam (1), Batam																	1.40
			Batam (2), Batam																	2.05
	Central Java, Central Java Province					0														
	Irian Jaya Province														0.16					
	Karimun (1), Karimun																		8.00	
	Karimun (2), Karimun																		3.50	
	North Sulawesi, North Sulawesi Prov					0									0	0	0			
	North Sumatra, North Sumatra Provin					0														
	Registered (1), Maluku Province						0	0	0	0	0	2.65	1.92	0.75						
	Registered (1), Riau Province									0.05	0.25	0.45	0.38	0.48	1.03					
	Registered (1), West Java Province						0	0	0	0	0	0.12	0.01	0.30						
	Registered (2), Maluku Province											0								
	Registered (2), Riau Province										0	0.32	0							
	Registered (2), West Java Province											0	0.24							
	Registered, Aceh Province												0							
	Registered, Bengkulu Province										0	0	0							
	Registered, Central Java Province						0	0	0	0	0	0	0							
	Registered, Central Kalimantan Prov									0	0	0								
	Registered, Central Sulawesi Provin						0	0	0	0	0	0	0							
	Registered, East Java Province						0	0	0	0	0.02	0.02								
	Registered, East Kalimantan Provinc										0									
	Registered, East Nusa Tenggara Prov						0		0	0	0	0								
Registered, Irian Jaya Province								0	0	0	0.21	0.42	0.38							
Registered, Jambi Province							0	0	0		0									
Registered, Lampung Province							0	0	0											
Registered, North Sulawesi Province							0	0	0											
Registered, North Sumatra Province							0	0	0	0	0.09	0.20	0.18							
Registered, South Kalimantan Provin								0												

Group	Area	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003		
Sex workers	Outside major urban areas	Registered, South Sulawesi Province								0	0.43									
		Registered, South Sumatra Province						0	0	0	0.17	0								
		Registered, West Kalimantan Provinc					0	0	0	0	0.04	0								
		Registered, Yogyakarta Province							0	0	0	0								
		Riau, Riau Province				0														
		Site 1, Bengkulu Province												0	0	0				
		Site 1, East Nusa Tenggara Province												0	0	0				
		Site 1, Irian Jaya Province														0				
		Site 1, West Java Province													0	0				
		Site 1, West Nusa Tenggara Province												0	0	0				
		Site 1, Yogyakarta Province												2.30	0	0				
		Site 2, Bengkulu Province												0	0	0				
		Site 2, East Java Province												0.80	0	0.20				
		Site 2, East Nusa Tenggara Province												0	0	0				
		Site 2, Irian Jaya Province														1.00				
		Site 2, Riau Province													0.70	0				
		Site 2, South Sulawesi Province												0	0.48					
		Site 2, West Nusa Tenggara Province												0	0	0				
		Site 2, Yogyakarta Province												1.50	0	0				
		Site 3, Irian Jaya Province												0.84		2.73				
		Site 3, Riau Province												0.04	0.67	1.00				
		Site 4, Riau Province												2.39	0.50	1.90				
		Sorong (1), Sorong																	5.38	
		Sorong (2), Sorong																	6.69	
		South Sumatra, South Sumatra Provin					0								0	0.29	0.04			
		Southeast Sulawesi, Southeast Sulaw										0.36	0	0	0	0				
		Tegal district																	0.50	
		Unregistered (1), Riau Province								0.28	0.18	0.12	0	0.54						
		Unregistered (2), Riau Province									0	0	0							
		Unregistered, Aceh Province									0	0								
		Unregistered, Central Java Province					0	0	0	0	0	0.37	0	0.30						
		Unregistered, Central Kalimantan Pr										0								
		Unregistered, Central Sulawesi Prov								0										
		Unregistered, East Java Province					0	0	0	0	0	0								
Unregistered, East Kalimantan Provi										0										
Unregistered, East Nusa Tenggara Pr										0	0									
Unregistered, Irian Jaya Province										0	0	0	0							
Unregistered, Jambi Province										0										
Unregistered, Lampung Province										0										
Unregistered, North Sulawesi Provin										0										

Group	Area	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003		
Sex workers	Outside major urban areas	Unregistered, North Sumatra Province					0	0	0	0	0		0.14							
		Unregistered, South Kalimantan Prov							0	0	0									
		Unregistered, South Sulawesi Provin									0									
		Unregistered, West Java Province						0	0	0		0								
		Unregistered, West Kalimantan Provi					0			0										
		Unregistered, West Nusa Tenggara Pr									0									
		Unregistered, West Sumatra Province									0									
		Unregistered, Yogyakarta Province								0	0	0	0							
		West Java, West Java Province				0														
		West Kalimantan, West Kalimantan Pr				0														
		West Sumatra, West Sumatra Province												0	0					
Yogyakarta, Yogyakarta Province				0																
Injecting drug users	Outside major urban areas	Not specified		0																
		Yayasan Harapan Permati Hati Kita,												14.00	16.00					
STI patients	Major urban areas	Bali Province				1.27														
	Outside major urban areas	Denpasar												0						
		Makassar												2.90						
Men having sex with men	Outside major urban areas	13 Provinces		0																
		Not specified			0															
Tuberculosis patients																				