2004
Update

TREAT 3 million by 5 2005

Panama

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

Pan American Health Organization
Regional Office of the World Health Organization

unicef

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	16,000		
Low estimate	7,700		
High estimate	26,000		
Adults (15-49)	15,000	Adult rate (%)	0.9
Low estimate	7,500	Low estimate	0.5
High estimate	25,000	High estimate	1.5
Children (0-15)			
Low estimate			
High estimate			
Women (15-49)	6,200		
Low estimate	3,100		
High estimate	10,000		

Estimated number of deaths due to AIDS

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

Deaths in 2003	<500
Low estimate	
High estimate	<1,000

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

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.

Assessment of the epidemiological situation 2004

In order to monitor HIV prevalence, Panama has conducted sentinel surveillance and seroprevalence studies continuously over the year in several groups. Thus, the system performs routine screening of pregnant women in antenatal care, female sexual workers in brothels and other fixed sites, and blood donors. Data are availabel for pregnant women since 1993; HIV prevalence in this population has remained constantly below 1% from various sites in the country. Data from sex wokers is also available since 1992. Until recently HIV infection was below 1% (1992-2002) however, the most recent data from the muticentric study showed a marked increase to 1.9%. Finally, data from blood donors are available since 1986. HIV prevalence in this group has remained around 0.1% (1986-2000).

The latest available data among prisioners were collected in 1993 through seroprevalence studies. HIV prevalence for the period 1989-1993 was between 5.4,and 13.6% among men and 3.6% and 1.9% among women.

Recently a multicentric study was conducted in Panama and other Central America countries. This study found HIV prevalence of 10.6% among among men having sex with men (MSM) in Panama City (2001-2002). Data from female sex workers ranges from 4.7% among those who are mobile to 1.4% among those working in brothels and other fixed sites. Prevalence of syphilis was 4.8% on average, ranging from 10.4% among mobile female sex workers to 3.7% among those in brothels or fixed sites. Information gathered on men who have sex with men through convenience samples showed prevalences of HIV and syphilis of 10.6% and 4.7% respectively. Stratified data showed a higher figure among homosexual (12.7%) than bisexual men (5.5%).

The surveillance system in Panama collects AIDS, HIV, STI cases and deaths through a passive reporting system. The system for HIV and AIDS case has national coverage, and is computerized for all regions. Most AIDS cases have been reported in men for all age groups. Although men continue to be more affected than women, the number of cases among female has increased four to five times compared with the first ten years of the epidemic. Sexual transmission is the most frequently reported way of transmission. There are a considerable number of cases of unknown category which may be related to men-to-men transmission.

Surveillance of sexually transmitted infectons (STIs) is based on routine reports from clinical and etiological (confirmed by laboratory) diagnosis. One out of 200 women covered under prenatal care test positive for syphilis. In some instances, resistance to antibiotics is performed. Special surveillance for Neisseria gonorrhea was conducted at the clinics of the Higiéne Social until 1998. Congenital syphilis is under special surveillance. Prevalence rate of syphilis ranges from 0.1 to 0.6 per 1,000 live births in Panama (1999-2002).

Panama has conducted several studies related to knowledge, attitudes and practices (KAP) and the multicentric study which includes a behavioral component for female sex workers. Results showed that sex relations start at an early age (mean at 16 years of age). Nine out of ten have heard about HIV. Knowledge varied according to the place of work, those working clandestine were the least informed. Almost half were married or in a stable relationship. Also, 50% reported to have a condom at hand when they need it.

The Instituto Conmemorativo Gorgas de Estudios de Salud is the reference laboratory. The 14 health regions and national hospital have laboratory services. There is a diagnostic algorithm for the laboratories, and the use of rapid test and Elisa (3rd and 4th generation) is regulated by the Central Laboratory of Reference. The country has capacity to perform CD4/CD8, viral load, viral characterization and ARV resistance.

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	3,177	UN population division database
Female population aged 15-24 (thousands)	2004	281	UN population division database
Population aged 15-49 (thousands)	2004	1,691	UN population division database
Annual population growth rate (%)	1992-2002	2	UN population division database
% of population in urban areas	2003	57	UN population division database
Average annual growth rate of urban population	2000-2005	2.4	UN population division database
Crude birth rate (births per 1,000 pop.)	2004	22.3	UN population division database
Crude death rate (deaths per 1,000 pop.)	2004	5	UN population division database
Maternal mortality rate (per 100,000 live births)	2000	160	WHO (WHR2004)/UNICEF
Life expectancy at birth (years)	2002	75.4	World Health Report 2004, WHO
Total fertility rate	2002	2.7	World Health Report 2004, WHO
Infant mortality rate (per 1,000 live births)	2000	19	World Health Report 2004, WHO
Under 5 mortality rate (per 1,000 live births)	2000	25	World Health Report 2004, WHO

SOCIO-ECONOMIC DATA	YEAR	ESTIMATE	SOURCE
Gross national income, ppp, per capita (Int.$)	2002	5,870	World Bank
Gross domestic product, per capita % growth	2001-2002	-0.7	World Bank
Per capita total expenditure on health (Int.$)	2001	458	World Health Report 2004, WHO
General government expenditure on health as % of total expenditure on health	2001	69	World Health Report 2004, WHO
Total adult illiteracy rate	2000	8.1	UNESCO
Adult male illiteracy rate	2000	7.5	UNESCO
Adult female illiteracy rate	2000	8.8	UNESCO
Gross primary school enrolment ratio, male	2000/2001	113	UNESCO
Gross primary school enrolment ratio, female	2000/2001	110	UNESCO
Gross secondary school enrolment ratio, male	2000/2001	67	UNESCO
Gross secondary school enrolment ratio, female	2000/2001	71	UNESCO

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http://www.unaids.org

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*

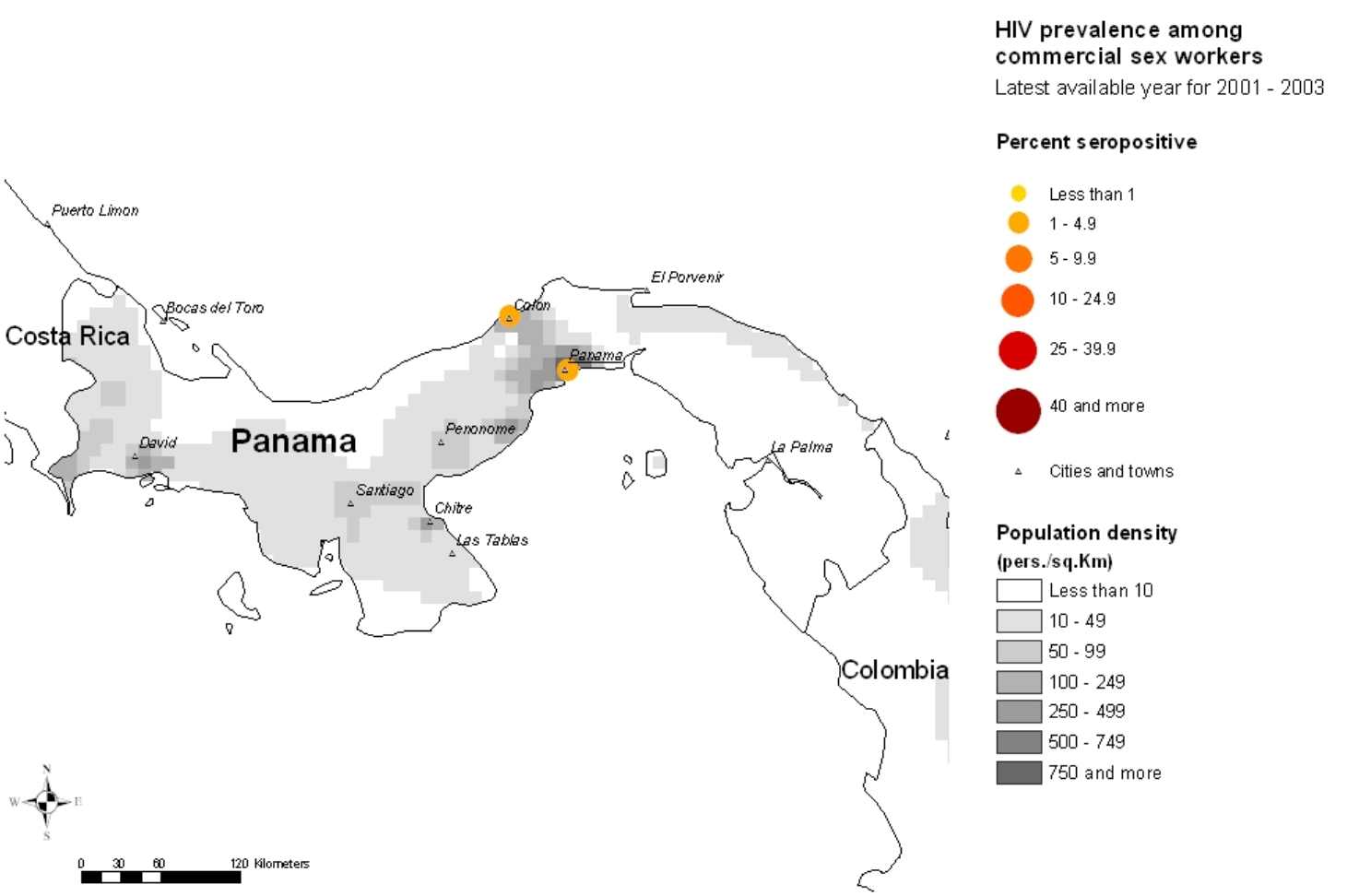
Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Pregnant women	Major urban areas	N-Sites							1.00	2.00		1.00	2.00						
		Minimum							0.73	0.18		0.51	0						
		Median							0.73	0.26		0.51	0.44						
		Maximum							0.73	0.33		0.51	0.88						
	Outside major urban areas	N-Sites							1.00		1.00	2.00							
		Minimum							0.81		0.87	0							
		Median							0.81		0.87	0							
		Maximum							0.81		0.87	0							
Sex workers	Major urban areas	N-Sites																2.00	
		Minimum																1.80	
		Median																2.00	
		Maximum																2.20	
	Outside major urban areas	N-Sites						1.00	1.00	1.00	1.00	1.00	1.00						
		Minimum						0.93	0.58	0.18	0.51	0.31	0.30						
		Median						0.93	0.58	0.18	0.51	0.31	0.30						
		Maximum						0.93	0.58	0.18	0.51	0.31	0.30						
Injecting drug users																			
STI patients																			
Men having sex with men	Major urban areas	N-Sites																1.00	
		Minimum																10.60	
		Median																10.60	
		Maximum																10.60	
	Outside major urban areas	N-Sites																	
		Minimum																	
		Median																	
		Maximum																	
Tuberculosis patients																			

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

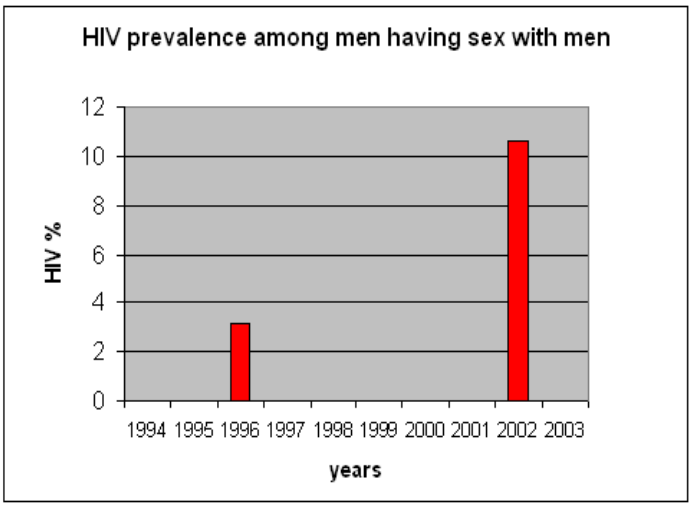
Maps & charts

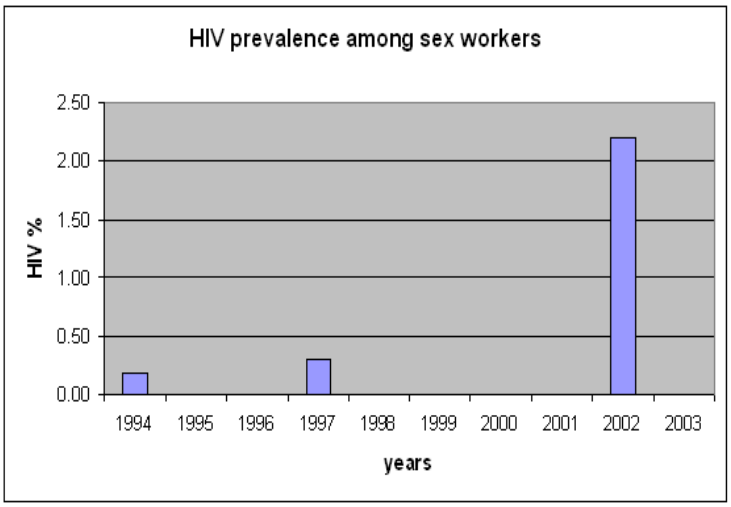
Mapping the geographical distribution of HIV prevalence among different population groups may assist in interpreting both the national coverage of the HIV surveillance system as well in explaining differences in levels of prevalence. The UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance,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



Trends in HIV prevalence in high risk groups





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

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
					6	6	18	31	64	80	73	90	118	204	289	344	380	463	563

1999	2000	2001	2002	2003	Total	UNK	Date of last report
534	263	453			3979		5/16/2002

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 pregnat 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

Comments:

Source:

Estimated prevalence of curable STIs among female sex workers

- Chlamydia

Year	Area	Rate	Range

Comments:

Source:

- Gonorrhoea

Year	Area	Rate	Range

Comments:

Source:

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

- Syphillis

Year	Area	Rate	Range

Comments:

Source:

- Trichomoniasis

Year	Area	Rate	Range

Comments:

Source:

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	2001	80	ONU
% of population with access to health services - urban			
% of population with access to health services - rural			
Contraceptive prevalence rate (%)	1984	58.2	UNICEF/UNPOP
Percentage of contraceptive users using condoms			
% of births attended by skilled health personnel	2000	90	WHO
% of 1-yr-old children fully immunized - DPT	2002	89	WHO/UNICEF
% of 1-yr-old children fully immunized - Measles	2001	95	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:	1,530
Source:	WHO

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

	Adults needing treatment
Number:	
Source:	WHO/UNAIDS

Coverage of HIV testing and counselling

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

Year	Area	N=

Comments:

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 asssessing changes over time as a result of prevention efforts. One of the main goals of the 2nd generation HIV serveillance 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, particulary with youg 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

Comments:

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.

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 youg 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. Thes activities should be monitored and have resources directed to problem aresas. The indicator below highlights the availability of condoms. However, even if condoms are widely available, this does not mean that individuals can or do acess 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
2001	42867	100

Comments:

Source: Ministry of Health.

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.

Investigación sobre concocimientos, actitudes y prácticas en ETS, VIH/SIDA en adolescentes escolares de la Provincia de Panamá. APLAFA, Panamá, 1997. Hilda Martínez de Jaime.

Reeves, W.C., M. Cuevas, J.R. Arosemena, et al. 1988 Human Immunodeficiency Virus Infection in the Republic of Panama; American Journal of Tropical Medicine and Hygiene, vol. 39, no. 4, pp 398-405.

Penna, M. 1996; Panama HIV/AIDS Summary Report Sited by Patricio Murgueytio, PASCA, personal memo.

Gladys, A.G.D. 1998; Revision de Estudios de Seroprevalencia del VIH en Panama; Informe de Consultoria, PASCA - BUCEN, unpublished document.

Gladys, A. G. D. 1998 Revision de Estudios de Seroprevalencia del VIH en Panama Informe de Consultoria, PASCA - BUCEN, unpublished document.

Nunez, C. A., R. J. Soto, K. G. Foreit, et al. 2002 Prevalence of HIV/STD among Men Who Have Sex with Men and Female Sex Workers - The Central American Multicenter Study of ... XIV International AIDS Conference, Barcelona, Spain, 7/7-12, Abstract LbOr03.

Penna, M. 1996 Panama HIV/AIDS Summary Report Sited by Patricio Murgueytio, PASCA, personal memo.

Reeves, W. C., M. Cuevas, J. R. Arosemena, et al. 1988 Human Immunodeficiency Virus Infection in the Republic of Panama American Journal of Tropical Medicine and Hygiene, vol. 39, no., 4, pp. 398-405.

Websites:

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	Centros de Salud, Panama Oeste regi										0.51	0.88						
		M. Guerrero Hospital, Colon Provinc								0.18									
		Panama Province											0						
		San Miguelito region								0.33									
		Santo Tomas Hospital, Metropolitana region							0.73										
	Outside major urban areas	HCAC, Herrera Province										0							
		HRCH, Bocas del Toro Province										0							
		R. Hernandez Hospital, Chiriqui Pro							0.81		0.87								
Sex workers	Major urban areas	Colon																2.20	
		Panama City																1.80	
	Outside major urban areas	Not specified						0.93	0.58	0.18	0.51	0.31	0.30						
Injecting drug users																			
STI patients																			
Men having sex with men	Major urban areas	Panama City																10.60	
	Outside major urban areas	Herrera & Los Santos Provinces (rur																	
Tuberculosis patients																			