2004
Update

Bangladesh

EPIDEMIOLOGICAL FACT SHEETS
ON HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS

Joint United Nations Programme on HIV/AIDS
UNAIDS
UNICEF • WFP • UNDP • UNFPA • UNODC
ILO • UNESCO • WHO • WORLD BANK

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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	é		
Low estimate	2,500		
High estimate	15,000		
Adults (15-49)	é	Adult rate (%)	é
Low estimate	2,400	Low estimate	
High estimate	15,000	High estimate	<0.2
Children (0-15)	é		
Low estimate	é		
High estimate	é		
Women (15-49)	é		
Low estimate	400		
High estimate	2,500		

Estimated number of deaths due to AIDS

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

Deaths in 2003	é
Low estimate	
High estimate	<400

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	é
Low estimate	é
High estimate	é

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 agreedupon 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

The first case of HIV infection was detected in Bangladesh in 1989; by the end of December 2003 the number of reported cases of HIV was 363 with 57 cases of AIDS of which 31 had died. Bangladesh as a nation has a low prevalence of HIV but risk behaviours are sufficient for continued HIV transmission among groups at higher risk and to its general population. Bangladesh has an established second generation HIV surveillance system. This system consists of a sero-surveillance component (implemented by International Centre for Diarrhoeal Disease Research, Bangladesh for the Government of Bangladesh, using World Bank/DFID funding) and a behavioural surveillance component (undertaken by Family Health International, funded by USAID).

The data indicate that HIV prevalence rates among the most vulnerable population groups and some bridging population groups (mainly male clients of sex workers) have remained at <1% with the highest prevalence in injecting drug users with an average of 4%. IDUs also had high rates of HCV ranging from 59.8-79.5%. No HIV was detected in the 2003 sentinel surveillance round among male sex worker or among male clients of female sex worker (truckers, launch workers, STI patients and babus). Behavioural sentinel surveillance among high risk groups showed low levels of risk perception, high rates of risk behaviour, low condom use, and high levels of symptoms associated with sexually transmitted infections.

In the 2003 sentinel surveillance round, Syphilis rates were high among hijras (10.4% and varied from 3.6% to 9.2% among brothel based female sex workers. A declining trend of syphilis was however observed at many of the city brothels, possibly as result of the intense interventions in those groups.

Using sentinel surveillance data, WHO and UNAIDS have estimated that at the end of 2003 the number of people with HIV in Bangladesh was approximately 13,000.

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	149,664	UN population division database
Female population aged 15-24 (thousands)	2004	14848	UN population division database
Population aged 15-49 (thousands)	2004	77401	UN population division database
Annual population growth rate (%)	1992-2002	2.3	UN population division database
% of urban population	2003	24.1	UN population division database
Average annual growth rate of urban population	2000-2005	3.51	UN population division database
Crude birth rate (births per 1,000 pop.)	2004	28	UN population division database
Crude death rate (deaths per 1,000 pop.)	8	8	UN population division database
Maternal mortality rate (per 100,000 live births)	2000	380	WHO (WHR2004)/UNICEF
Life expectancy at birth (years)	2002	62.6	World Health Report 2004, WHO
Total fertility rate	2002	3.5	World Health Report 2004, WHO
Infant mortality rate (per 1,000 live births)	2000	63	World Health Report 2004, WHO
Under 5 mortality rate (per 1,000 live births)	2000	82	World Health Report 2004, WHO

SOCIO-ECONOMIC DATA	YEAR	ESTIMATE	SOURCE
Gross national income, ppp, per capita (Int.$)	2002	58	World Health Report 2004, WHO
Gross domestic product, per capita % growth	2001-2002	2.6	World Bank
Per capita total expenditure on health (Int.$)	2001	58	World Health Report 2004, WHO
General government expenditure on health as % of total expenditure on health	2001	44.2	World Health Report 2004, WHO
Total adult illiteracy rate	2000	60	UNESCO
Adult male illiteracy rate	2000	50.6	UNESCO
Adult female illiteracy rate	2000	69.8	UNESCO
Gross primary school enrolment ratio, male	2000/2001	100	UNESCO
Gross primary school enrolment ratio, female	1990	101	UNESCO
Gross secondary school enrolment ratio, male	1990	45	UNESCO
Gross secondary school enrolment ratio, female	1990	47	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*

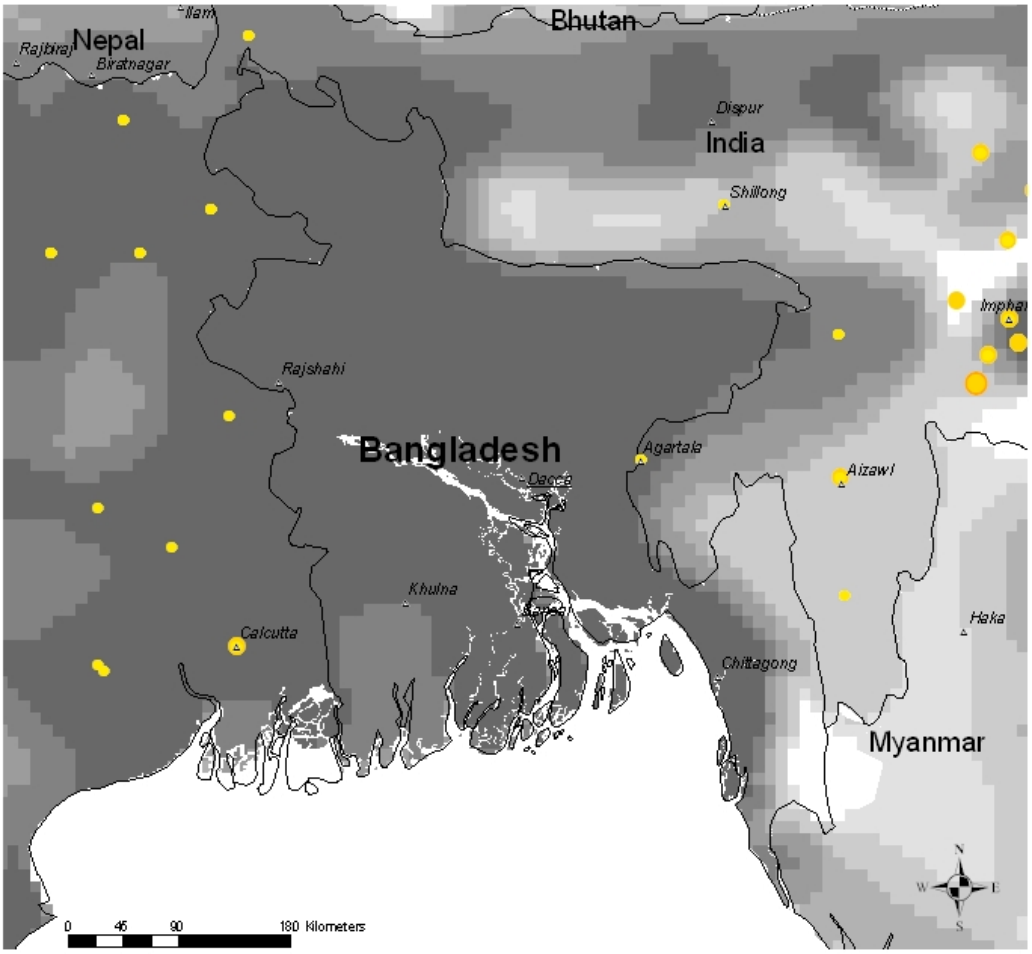
Group	Area		1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Pregnant women	Outside major urban areas	N-Sites			1.00														
		Minimum			0														
		Median			0														
		Maximum			0														
Sex workers	Major urban areas	N-Sites										1.00	1.00	2.00	1.00	1.00			
		Minimum										0.20	0	0	0	20.00			
		Median										0.20	0	0	0	20.00			
		Maximum										0.20	0	0	0	20.00			
	Outside major urban areas	N-Sites							1.00			1.00			6.00	5.00	5.00		
		Minimum							0.49			0			0	0	0		
		Median							0.49			0			0.75	0	0.48		
		Maximum							0.49			0			2.70	0.48	0.53		
Injecting drug users	Major urban areas	N-Sites													1.00				
		Minimum													2.49				
		Median													2.49				
		Maximum													2.49				
	Outside major urban areas	N-Sites			1.00										2.00	3.00	4.00		
		Minimum			0										2.50	0	0		
		Median			0										2.60	0.20	0		
		Maximum			0										2.70	1.40	1.75		
STI patients	Major urban areas	N-Sites													1.00				
		Minimum													0.25				
		Median													0.25				
		Maximum													0.25				
	Outside major urban areas	N-Sites										1.00			7.00	3.00	3.00		
		Minimum										0.51			0	0	0		
		Median										0.51			0	0	0		
		Maximum										0.51			0.30	0	0.25		
Men having sex with men	Major urban areas	N-Sites													1.00				
		Minimum													0.25				
		Median													0.25				
		Maximum													0.25				
	Outside major urban areas	N-Sites														1.00	1.00		
		Minimum														0	0		
		Median														0	0		
		Maximum														0	0		
Tuberculosis patients	Outside major urban areas	N-Sites			1.00									1.00					
		Minimum			0									2.40					
		Median			0									2.40					
		Maximum			0									2.40					

*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 sentinel surveillance in pregnant women
(No data available)

Percent seropositive
- Less than 1
- 1 - 4.9
- 5 - 9.9
- 10 - 14.9
- 15 - 19.9
- 20 - 29.9
- 30 and more
- Cities and towns

Population density (pers./sq.Km)
- Less than 10
- 10 - 49
- 50 - 99
- 100 - 249
- 250 - 499
- 500 - 749
- 750 and more

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	0	0	0	1	0	0	0	0	6	0	3	0

1999	2000	2001	2002	2003	Total	UNK	Date of last report
					10		3/31/1998

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
1997-1999	Urban	2.1	

Comments:

Source: Bogaerts J. Sexually transmitted infections among married women in Dhaka, Bangladesh: unexpected high prevalence of herpes simplex type 2 infection.
Sex Transm Infect. 2001 Apr;77(2):114-9.

Estimated prevalence of curable STIs among female sex workers

- Chlamydia

Year	Area	Rate	Range
1997-1999	Not specified	21.6	18.2-25

Comments:

Source: 1) Sarkar S. Low HIV and high STD among commercial sex workers in a brothel in Bangladesh: scope for prevention of larger epidemic. Int J STD AIDS 1998; 9 (1):45-47. 2) Rahman M. Etiology of sexually transmitted infections among street-based female sex workers in Dhaka, Bangladesh. J Clin Microbiol 2000: 38 (3): 1244-1246.

- Gonorrhoea

Year	Area	Rate	Range
1997-1999	Not specified	35.6	19.9-42

Comments:

Source: 1) Sarkar S. Low HIV and high STD among commercial sex workers in a brothel in Bangladesh: scope for prevention of larger epidemic. Int J STD AIDS 1998; 9 (1):45-47. 2) Rahman M. Etiology of sexually transmitted infections among street-based female sex workers in Dhaka, Bangladesh. J Clin Microbiol 2000: 38 (3): 1244-1246. 3) Bhuiyan BU. Antimicrobial susceptibilities and plasmid contents of Neisseria gonorrhoeae isolates from commercial sex workers in Dhaka, Bangladesh: emergence of high-level resistance to ciprofloxacin. J Clin Microbiol 1999; 37 (4): 1130-1136.

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

- Syphillis

Year	Area	Rate	Range
1997-1999	Not specified	47.1	32.5-57.1
2000-2001	Not specified	29.75	9.7-43.2

Comments:

Source: 1) Sarkar S. Low HIV and high STD among commercial sex workers in a brothel in Bangladesh: scope for prevention of larger epidemic. Int J STD AIDS 1998; 9 (1):45-47. 2) Rahman M. Etiology of sexually transmitted infections among street-based female sex workers in Dhaka, Bangladesh. J Clin Microbiol 2000: 38 (3): 1244-1246. 3) Ministry of Health and Family Welfare Govt. of the People's Republic of Bangladesh. Report on the Second National Expanded HIV Surveillance, 1999-2000. 4) UNAIDS. National Sentinel Surveillance for HIV and Syphilis. Interim Report 1999.

- Trichomoniasis

Year	Area	Rate	Range
1997-1999	Unknown	45.5	

Comments:

Source: Rahman M. Etiology of sexually transmitted infections among street-based female sex workers in Dhaka, Bangladesh. J Clin Microbiol 2000: 38 (3): 1244-1246.

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 (%)	2000	53.8	UNICEF/UNPOP
Percentage of contraceptive users using condoms			
% of births attended by skilled health personnel	2000	12.1	WHO
% of 1-yr-old children fully immunized - DPT	2002	85	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:	5
Source:	WHO

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

	Adults needing treatment
Number:	510
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: Only data collected since 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

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.

Azim, T., J. Bogaerts, D. L. Yirrell, et al. 2001 Injecting Drug Users in Bangladesh: Prevalence of Syphilis, Hepatitis and HIV and HIV Subtypes 6th International Congress on AIDS in Asia and the Pacific, Melbourne, Australia, 10/5-10, Session Su1616.

Bloem, M., Z. Uddin, S. Sarkar, et al. 1998 The Street Walkers of Dhaka City: STD/HIV Risk among Street Based Sex Workers of Dhaka City 12th World AIDS Conference, Geneva, 6/28 - 7/3, Abstract 43347.

Gomes, J. V. 2001 Challenges for Prevention of HIV/AIDS for a Country with High Risk and Low Prevalence Status: A Situation Analysis of Bangladesh 6th International Congress on AIDS in Asia and the Pacific, Melbourne, Australia, 10/5-10, Abstract Su0541.

Hussain, M., N. Islam, Z. Hossain, et al. 1999 Study on Prevalence of HBV, HCV and HIV Markers among Blood Donors and Pregnant Women in Bangladesh Department of Transfusion Medicine, IPGMR, Dhaka, Bangladesh, November, report.

Islam, M. N., S. Islam, K. M. Hassan, et al. 2000 Assessment of Impact of Targetted Intervention in the CSWs in a Remote Area of Bangladesh by Out Reach Laboratory Service XIII International AIDS Conference, Durban, South Africa, 7/9-14, Abstract ThPeC5368.

Islam, N., T. Azim, C. Jenkins, et al. 2000 Report on the Sero-Surveillance and Behavioural Surveillance on STD and AIDS in Bangladesh 1998-1999 AIDS and STD Control Programme, Ministry of Health and Family Welfare, Government of the People's Republic of Bangladesh, June, report.

Kabir, M. D. A., H. Mahmud, M. A. H. Mian, et al. 1998 Are Parlor Girls at Risk? - Assessment of Risk Related Sexual Behaviors and Serology for Syphilis and HIV 12th World AIDS Conference, Geneva, 6/28-7/3, Abstract 23410.

Kamal, M., E. Karim, et al. 1992 Status of AIDS/HIV Infection: Bangladesh Institute of Epidemiology, Disease Control and Research, report.

Mahmud, H., M. A. Kabir, M. A. H. Mian, et al. 1998 Behavioral Risk Assessment and Serology for Syphilis, Hepatitis B and HIV among Commerical Sex Workers in an Isolated . .. 12th World AIDS Conference, Geneva, 6/28-7/3, Abstract 33248.

Mian, M. A. H., M. A. Kabir, K. Begum 1996 Comparative Analysis of Point Prevalence of the Different Types of STD in ICSW and FCSW XI International Conference on AIDS, Vancouver, 7/7-14, Abstract Pub.B.1048.

Rich, J. D., R. Nizam, K. Das, et al. 1997 HIV and Syphilis Prevalence in Chittagong, Bangladesh AIDS, vol. 11, no. 5, pp. 703-704.

Sarkar, S., F. Durandin, A. A. Quader, et al. 1997 Estimation of Number of Street Based Female Commerical Sex Workers (CSWS) and Their HIV Situation in the City of Dhaka . .. 4th International Congress on AIDS in Asia and the Pacific, Manila, Philippines, 10/25-29, Poster AP071.

Sultan, P., K. Das, F. Zuberi, et al. 1999 Seroprevalence of HIV, HTLV, Syphilis and Hepatitis in Tuberculosis Patients in Chittagong, Bangladesh 5th International Congress on AIDS in Asia and the Pacific, Kuala Lumpur, Malaysia, 10/20-27, Abstract MAB08-06.

Sultana, S., Rahman, Fakir, et al. 2000 Concealed Carrier of HIV/AIDS in Bangladesh among the Floating Sex Workers XIII International AIDS Conference, Durban, South Africa, 7/9-14, Abstract WePeC4305.

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	Outside major urban areas	Not specified			0														
Sex workers	Major urban areas	Dhaka (1), Dhaka										0.20	0	0		20.00			
		Dhaka (2), Dhaka												0					
		Marie Stopes Clinic Society & CARE,													0				
	Outside major urban areas	A, Central area													0	0	0.49		
		B, Central area														0	0.26		
		C, South West area															0		
		Central area													0	0.20	0.48		
		D, Central area													1.50				
		D, South West area															0.53		
		Goalanda, Goalanda, Rajbari							0.49										
		Not specified													2.70	0.48			
		South West area														0			
		Taan Bazaar, Narayanganj													1.50				
		Tangail										0							
		Tangail, Narayanganj													0				
Injecting drug users	Major urban areas	Mukti and Tejgoan, Dhaka													2.49				
	Outside major urban areas	Central area														1.40			
		Clinic based, Central area													2.50	0.20	0		
		NEP-A, Central area															1.75		
		NEP-A, North West area														0			
		NEP-B, North West area															0		
		NEP-C, North West area															0		
		Not specified			0										2.70				
STI patients	Major urban areas	Medical College Hospital, Dhaka													0.25				
	Outside major urban areas	A, South East area													0.20	0	0.25		
		B, North East area													0		0		
		Central area													0.30	0			
		Chittagong										0.51							
		MAG Osman Medical College Hospital,													0				
		Medical College Hospital, Chittagon													0.24				
		Medical College Hospital, Rajshahi													0				
		NEP-C, North West area													0	0	0		
Men having sex with men	Major urban areas	Bandhu Social Welfare Society, Dhak													0.25				
	Outside major urban areas	Central area														0	0		
Tuberculosis patients	Outside major urban areas	Medical College Hospital, Chittagon												2.40					
		Not specified			0														