HIV surveillance in Bangladesh

Bangladesh has been implementing a national HIV surveillance system based on UNAIDS/WHO guidelines for second-generation surveillance since 1998. The system consists of serological surveillance to monitor the progress of the epidemic and risk behaviour to provide warning signs for its spread. ICDDR,B and the Institute of Epidemiology, Disease Control and Research conduct the sero-surveillance on behalf of the Government of Bangladesh. The behavioural surveillance has previously been undertaken by ICDDR,B but is now conducted by other key organizations.

Only the serological surveillance was conducted in 2006.

Methodology

As Bangladesh has continued to remain a low prevalence country for HIV, sampling concentrates on those populations considered most vulnerable to HIV, and those that may act as a bridge from the most-at-risk to the general population. Blood samples are collected voluntarily through organizations running HIV intervention programmes.

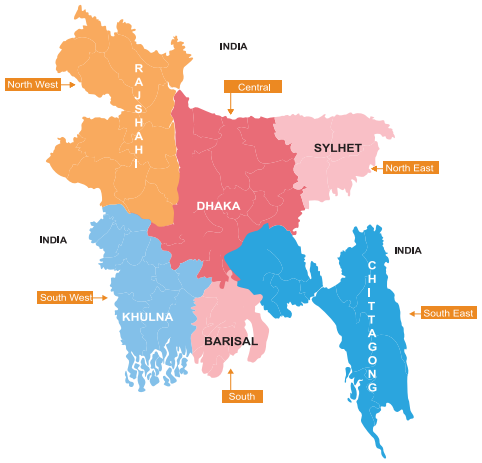
Who is most-at-risk?

The population groups considered to be most-at-risk have been the same over the years and for the most recent round of the serological surveillance they included:

- female sex workers in brothels, hotels, streets, and casual (part time)
- male sex workers
- males who have sex with males (MSM)
- transgender (hijras)
- injecting drug users (IDU)
- heroin smokers.

The 7th Surveillance Round: 2006

The seventh round of serological surveillance was conducted between January 2006 and June 2006. More than 10,300 individuals were tested across 43 sites around Bangladesh. The geographical coverage of injecting drug users has increased dramatically over the rounds, with only one city being covered in the first round in 1998 to 18 cities tested in 2006.



Key knowledge

Overall HIV prevalence rates amongst most-at-risk groups remained <1%.

Overall, 0.9% of the most-at-risk individuals tested in the seventh round of the surveillance were HIV-positive. For the first time this surveillance indicates a concentrated epidemic in Dhaka in male injecting drug users, meaning Bangladesh is now no longer a low prevalence country. The epidemic in IDU is largely confined to one neighbourhood in Dhaka which may be considered to be the epicentre.

What is a concentrated epidemic?

A concentrated epidemic is defined as one in which HIV prevalence in any most-at-risk subpopulation is 5 percent or higher, but is still less than 1 percent among women attending antenatal clinics in urban areas.

Injecting drug users (IDU)

Since the first surveillance in 1998, the highest HIV prevalence rates in Bangladesh have been observed in IDU. This is coupled with continuing high-risk behaviours such as increased sharing of injecting equipment and a decline in condom use in sexual encounters with female sex workers (2005 Behavioural Surveillance Survey data). The IDU population is well integrated into the surrounding community, socially and sexually, increasing concern about the spread of HIV infection from this most-at-risk population. Although the overall HIV infection levels are still low, the ever-increasing rates among some groups, despite concentrated prevention and intervention efforts, are of concern.

In 2006, IDU were sampled in 18 cities, and HIV found in four cities only (Dhaka, Narayanganj, Chandpur & Ishwardi).

- In just 12 months HIV prevalence in male IDUs in Dhaka increased from 4.9% to 7%.
- In just 12 months HIV prevalence in male IDUs in one neighbourhood of Dhaka increased from 7.1% to 10.5%.
- More than 50% of female IDUs engaged in sex work in the last six months.

Other most-at-risk populations

Female sex workers (brothels, hotels, streets, part-time)	<1%
Male sex workers	<1%
Males who have sex with males	<1%
Transgender *(hijras)*	<1%

Mobile populations

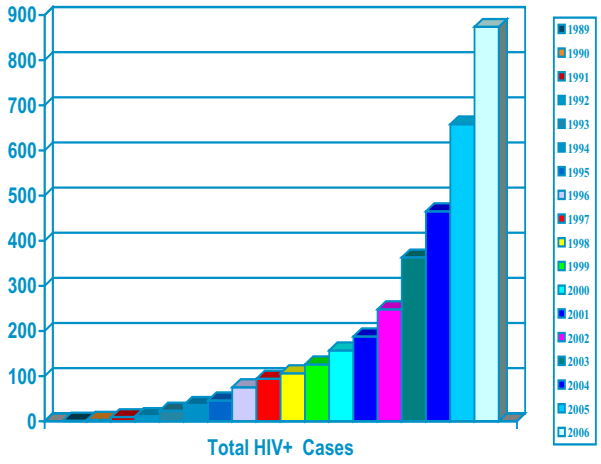
Casual female sex workers were sampled from three border cities. Sex workers in the two northwestern border cities (Hily & Burimari) and one southeastern city (Teknaf) commonly reported crossing over the border to India and Myanmar respectively where a considerable proportion sold sex. Of the three border areas, HIV was detected in only one city (Hily, 0.8%), which is the same as in the last two rounds.

Trends

Surveillance Round		No. of Most-at-Risk People Tested	HIV Prevalence
1	1998-1999	3871	0.4%
2	1999-2000	4388	0.2%
3	2000-2001	7063	0.2%
4	2002	7877	0.3%
5	2003-2004	10445	0.3%
6	2004-2005	11029	0.6%
7	2006	10368	0.9%

Reported HIV/AIDS cases

The Government of Bangladesh has been compiling annual HIV and AIDS case figures via passive reporting from a number of different organizations since 1989. In December 2006, the government reported that there are 874 people living with HIV and 240 people living with AIDS in Bangladesh.



ICDDR,B contributes to this data through its Voluntary Testing and Counselling unit, and in 2006, ICDDR,B diagnosed 216 new cases of HIV. Other than the groups sampled in the surveillance, HIV passive case reporting suggests that migrants travelling abroad for work are also a very vulnerable group.

Estimates

On behalf of the National AIDS/STD Programme of the Government of Bangladesh, WHO and UNAIDS have estimated that at the end of 2005 the estimated number of adults and children living with HIV in Bangladesh was approximately 7500.

For more details about HIV research at ICDDR,B, see www.icddrb.org/activity/HIV.

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