



ASIA

In Asia, national HIV prevalence is highest in South-East Asia, with wide variation in epidemic trends between different countries. While the epidemics in Cambodia, Myanmar and Thailand all show declines in HIV prevalence, those in Indonesia (especially in the Papua province) and Viet Nam are growing. Although the proportion of people living with HIV in India is lower than previously estimated, its epidemic continues to affect large numbers of people. Overall in Asia, an estimated 4.9 million [3.7 million–6.7 million] people were living with HIV in 2007, including the 440 000 [210 000–1.0 million] people who became newly infected in the past year. Approximately 300 000 [250 000–470 000] died from AIDS-related illnesses in 2007.

Although HIV infections have been reported in each of **China's** provinces, most of the people living with HIV in China are believed to be in Henan, Guangdong, Guangxi, Xinjiang and Yunnan provinces (Ministry of Health China, 2006). It is estimated that just under half of all people living with HIV in China in 2006 were infected while injecting drug uses with contaminated equipment, while a similar proportion acquired the virus during unprotected sex (Ministry of Health China, 2006; Lu et al., 2006).

Although the epidemic is still dominated by injecting drug use, recent data indicate an emerging epidemic among men who have sex with men in the main cities and it is estimated that as many as 7% of HIV infections could be attributed to unsafe sex between men (Lu et al. 2006). Studies have found HIV prevalence among men who have sex with men ranging from 1.5% in Shanghai (Choi et al., 2007), 1.7% in the south (Tao et al., 2004; Zhu et al., 2005), and 3.1%–4.6% in Beijing (Choi et al., 2003; Ma et al., 2006). The overlap of injecting drug use and sex work is an important factor in the HIV epidemic in China. Increasing numbers of women are injecting drugs and in some places as many as half of those also sell sex. Many male injecting drug users also buy sex, often without using condoms. (Hesketh et al., 2006).

New, more accurate estimates of HIV indicate that approximately 2.5 million (2 million–3.1 million) people in **India** were living with HIV in 2006, with national adult HIV prevalence of 0.36%. Although the proportion of people living with HIV is lower than previously estimated, India's epidemic continues to affect large numbers of people.

The revised estimates are based on an expanded and improved surveillance system, and the use of more robust and enhanced methodology. The inclusion of the results of the recent national household survey (the National Family Health Survey 3, conducted in 2005–2006) in the estimation process contributed significantly to the revised estimates. Over 100 000 people were tested for HIV in the survey which was the first national population based survey to include a component on HIV (NFHS-3, 2007).

In addition, India has expanded its HIV sentinel surveillance system in recent years and the number of surveillance sites increased from 155 in 1998 to 1120 in 2006. Data from pregnant women attending antenatal clinics, people attending sexually transmitted infections clinics and population groups that are at a higher risk of exposure to HIV are included in the surveillance.

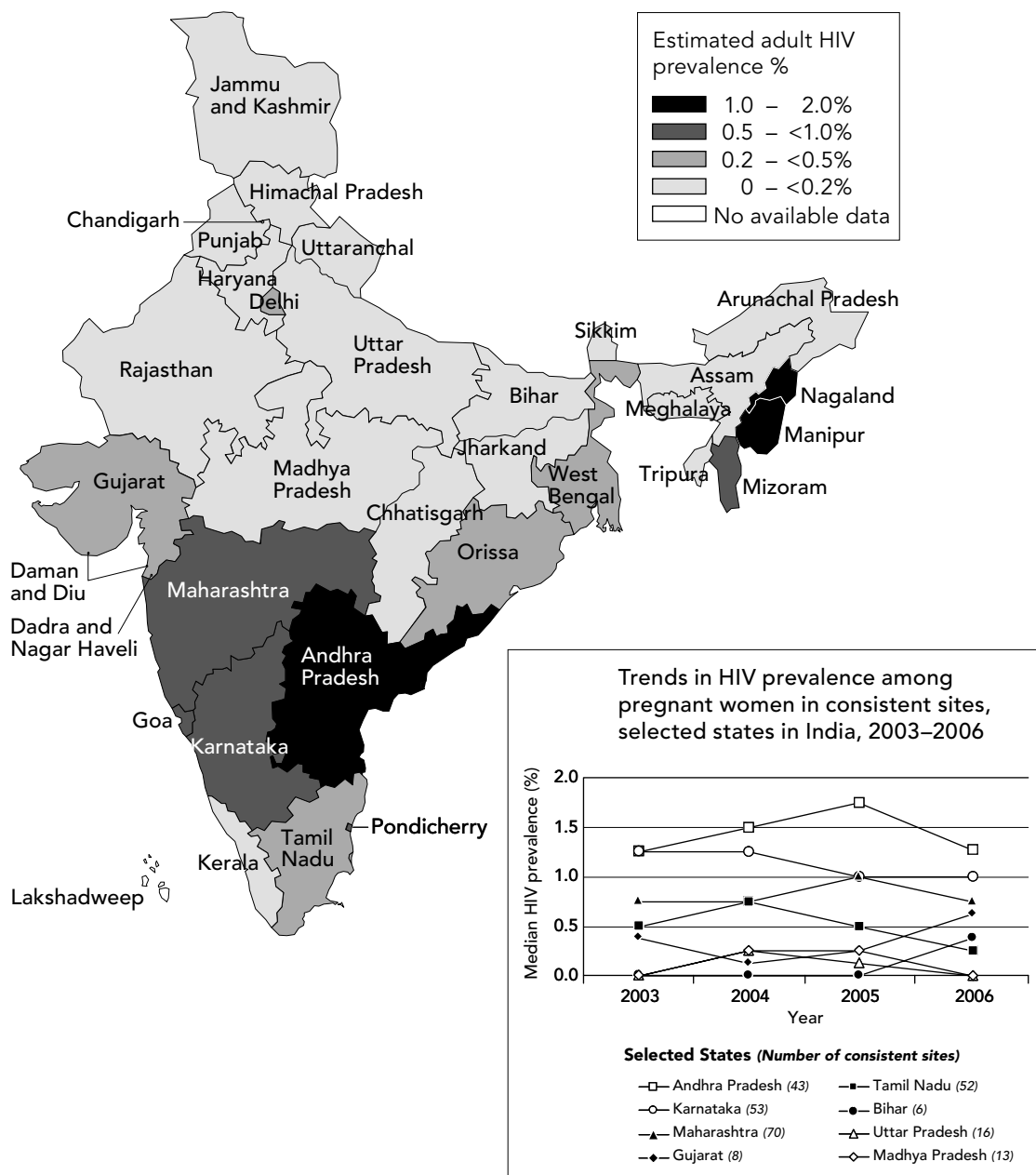
Prevalence trends in India vary greatly between states and regions. Even in the four southern

states (Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu) where the large majority of people living with HIV are residing, HIV prevalence varies and the epidemic tends to be concentrated in certain districts (NACO, 2005a; World Bank, 2005). Reported adult HIV prevalence in six states included in the recent national population-based survey (NFHS-3, 2007) varied from 0.07% in Uttar Pradesh, to 0.34% in Tamil Nadu, 0.62% in Maharashtra, 0.69% in Karnataka,

0.97% in Andhra Pradesh, and 1.13% in Manipur. Prevalence in all other states together was 0.13%. An earlier analysis of sentinel surveillance data also showed that HIV prevalence in southern states overall was about five times higher than in northern states in 2000–2004 (Kumar R et al., 2006). However, pockets of high HIV prevalence (mainly among population groups at high risk of exposure to HIV) have also been identified in

Figure 8

Estimated adult HIV prevalence (15–49 years), by state, India 2006



Source: National AIDS Control Organization, 2007.

states where overall prevalence is generally low, warning against complacency.

Data from the expanded 2006 sentinel surveillance show stable or declining prevalence among pregnant women in Tamil Nadu, Maharashtra, Karnataka, and Andhra Pradesh, but high HIV prevalence among sex workers, and rising HIV prevalence among injecting drug users and men who have sex with men in a few states. Outside of the north-east of the country, where the use of contaminated drug injecting equipment is a key risk factor, HIV appears to be spreading mainly as a result of unprotected sex between sex workers and their clients, and their respective other sex partners (Kumar et al., 2005). Prevention programmes focusing on sex workers show some success and HIV prevalence is on the decline among sex workers in areas that have been the focus of targeted prevention efforts, especially in Tamil Nadu and other southern states. However, prevention efforts are often complicated by the varied nature of commercial sex. (Char, Piller & Shirke, 2003).

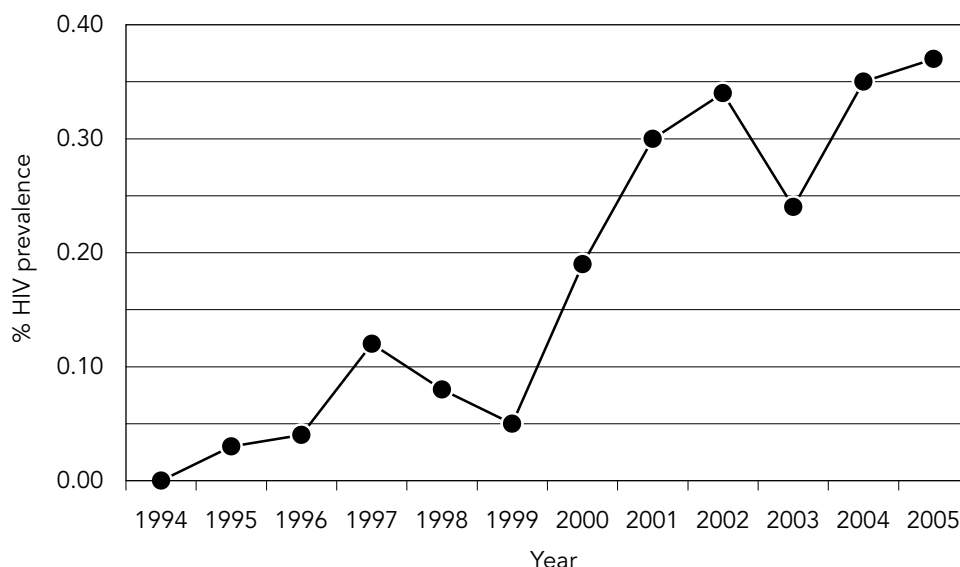
In **Pakistan**, HIV prevalence is increasing among injecting drug users. One study in Karachi showed an increase in HIV prevalence among injecting drug users from under 1% in early 2004

to 26% in March 2005 (Emmanuel, Archibal & Altaf, 2006), while other studies have found that HIV prevalence among injecting drug users has reached 24% in Quetta (along the border with Afghanistan) (Achakzai, Kassi & Kasi, 2007), 12% in Sargodha, nearly 10% in Faisalabad (Nai Zindagi and Associates, 2006) and 8% in Larkana (Abbasi, 2006). HIV prevalence remains low in other populations at higher risk of infection. Among female sex workers in Karachi, HIV prevalence in 2005 was 2% while it was below 1% in Lahore and Rawalpindi (Ministry of Health Pakistan, 2005; National AIDS Control Program Pakistan, 2005).

The estimated number of people living with HIV in **Viet Nam** has more than doubled between 2000 and 2005 from 120 000 to 260 000 (Ministry of Health Viet Nam, 2005). The main risk factors associated with HIV infection are the use of contaminated injecting equipment and unprotected sex with non-regular partners or sex workers (Tuang et al., 2007). Among injecting drug users in Viet Nam, prevalence increased from 9% in 1996 to about 34% in 2005 (Ministry of Health Viet Nam, 2006 & 2005). As the epidemic evolves, increasing numbers of women are acquiring HIV from males who were infected during unsafe paid sex and injecting drug use, as

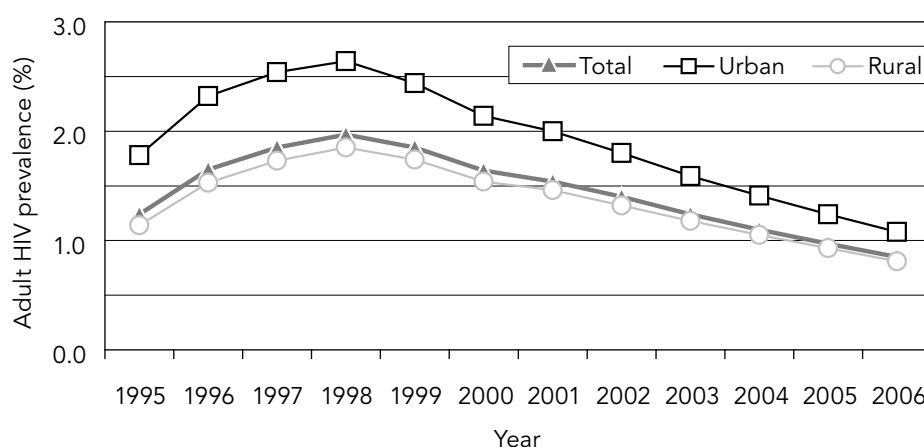
Figure 9

HIV prevalence among pregnant women in Viet Nam, 1994–2005



Source: Ministry of Health, Sentinel Surveillance Survey Data.

HIV prevalence among the general population in Cambodia, 1995–2006



Source: National Center for HIV/AIDS, Dermatology and STDs (NCHADS).

Figure 10

seen by the increase over time in the prevalence among pregnant women attending antenatal clinics (see Figure 9). In 2006, an estimated one third of people living with HIV were women (Viet Nam Commission for Population et al., 2006). However, the majority of HIV infections are still directly or indirectly linked to injecting drug use.

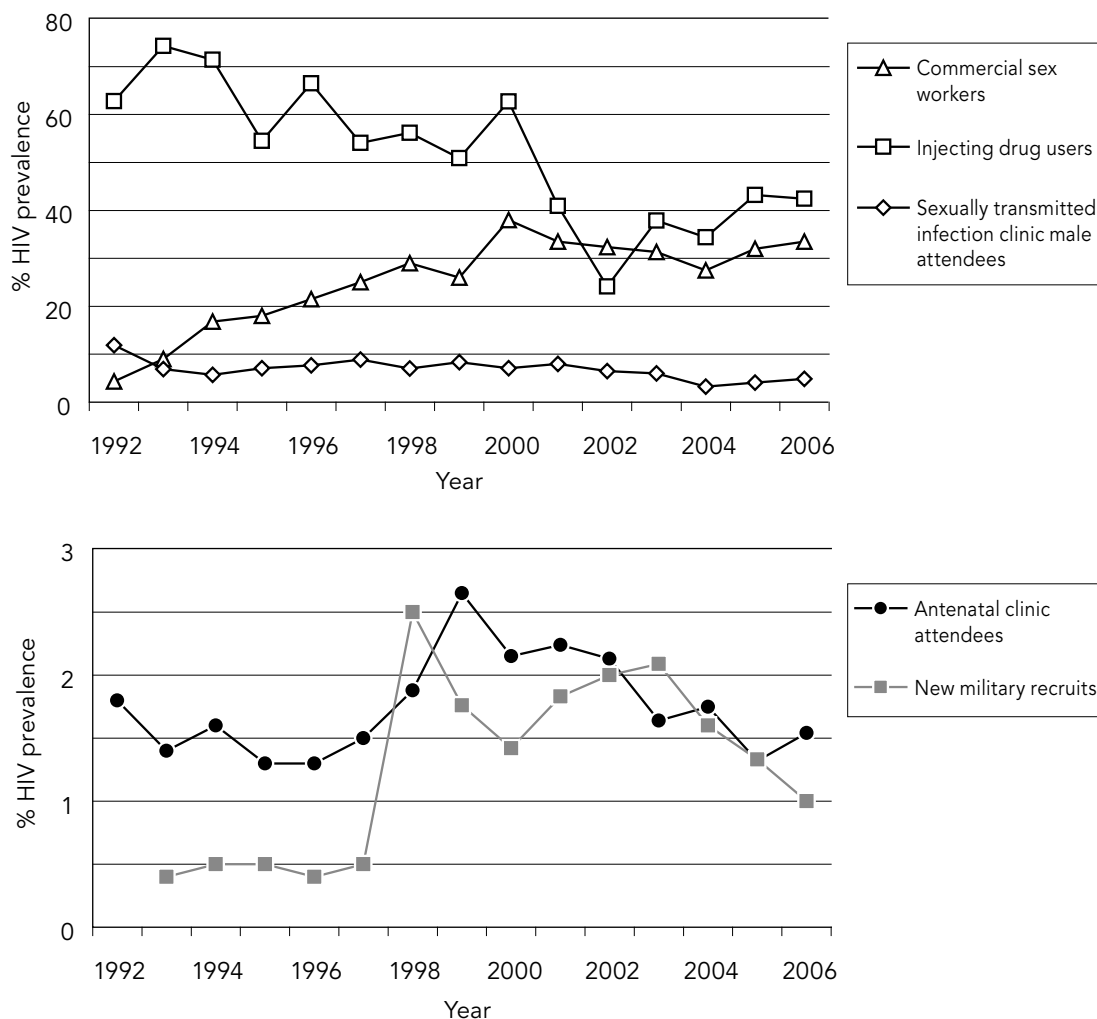
The HIV epidemic in **Indonesia** is among the fastest growing in Asia. The majority of HIV infections are estimated to occur through the use of contaminated injecting equipment, unprotected paid sex and, to a lesser extent, unprotected sex between men. (Ministry of Health Indonesia & Statistics Indonesia, 2006). When surveyed in 2005, more than 40% of injecting drug users in Jakarta tested HIV-positive (WHO & Ministry of Health Indonesia, 2007), and about 13% in West Java (Ministry of Health Indonesia, 2006). In addition, many injecting drug users also buy or sell sex (Ministry of Health Indonesia & Statistics Indonesia, 2006). In 2005, approximately one quarter of injecting drug users in Bandung, Jakarta and Medan said they had had unprotected paid sex in the previous year (Ministry of Health Indonesia & Statistics Indonesia, 2006).

In Papua province (bordering Papua New Guinea) the epidemic is more serious with unprotected sex being the main mode of transmission. In a province-wide population-based survey in Papua in 2006, adult HIV prevalence was estimated at 2.4%, and reached 3.2% in the remote highlands and 2.9% in less-accessible lowland areas. Among 15–24-year-olds, HIV prevalence was 3% (Ministry of Health Indonesia & Statistics Indonesia, 2007).

In **Cambodia** there is evidence that well-focused and sustained prevention efforts can help reverse an HIV epidemic. Nationally, HIV prevalence has fallen to an estimated 0.9% among the adult (15–49 years) population in 2006, down from a peak of 2% in 1998 (National Center for HIV/AIDS, Dermatology and STIs, 2007).

The number of new annual HIV infections in **Thailand** continues to decline, although the decline in HIV prevalence has been slowing in recent years as more people are receiving antiretroviral therapy. The patterns of HIV transmission in Thailand have changed over time, with the virus spreading increasingly to persons considered to be at lower risk. More than four in 10 (43%) new infections in 2005 were among women, the majority of whom probably acquired HIV from

HIV prevalence among various groups in Myanmar, 1992–2006



Source: Progress of HIV Epidemic in Myanmar, International Congress on AIDS in Asia & the Pacific. Colombo, Sri Lanka, August 2007.

Figure 11

husbands or partners who had been infected either during unsafe paid sex or through injecting drug use (WHO, 2007).

Despite the overall achievements in reversing the HIV epidemic in Thailand, prevalence among injecting drug users has remained high over the past 15 years, ranging between 30% and 50% (WHO, 2007). Similarly, recent studies show increasing HIV prevalence among men who have sex with men (e.g. in Bangkok

from 17% in 2003 to 28% in 2005) (van Griensven, 2006).

The epidemic in **Myanmar** is also showing signs of a decline, with HIV prevalence among pregnant women at antenatal clinics having dropped from 2.2% in 2000 to 1.5% in 2006 (National AIDS Programme Myanmar, 2006). Despite the overall decline in prevalence, the elevated prevalence of HIV among key populations at higher risk is of concern (see Figure 11).