

EASTERN EUROPE AND CENTRAL ASIA

HIV prevalence continues to rise in the Baltic States, Russian Federation and Ukraine. In Central Asia, the epidemic is expanding rapidly.

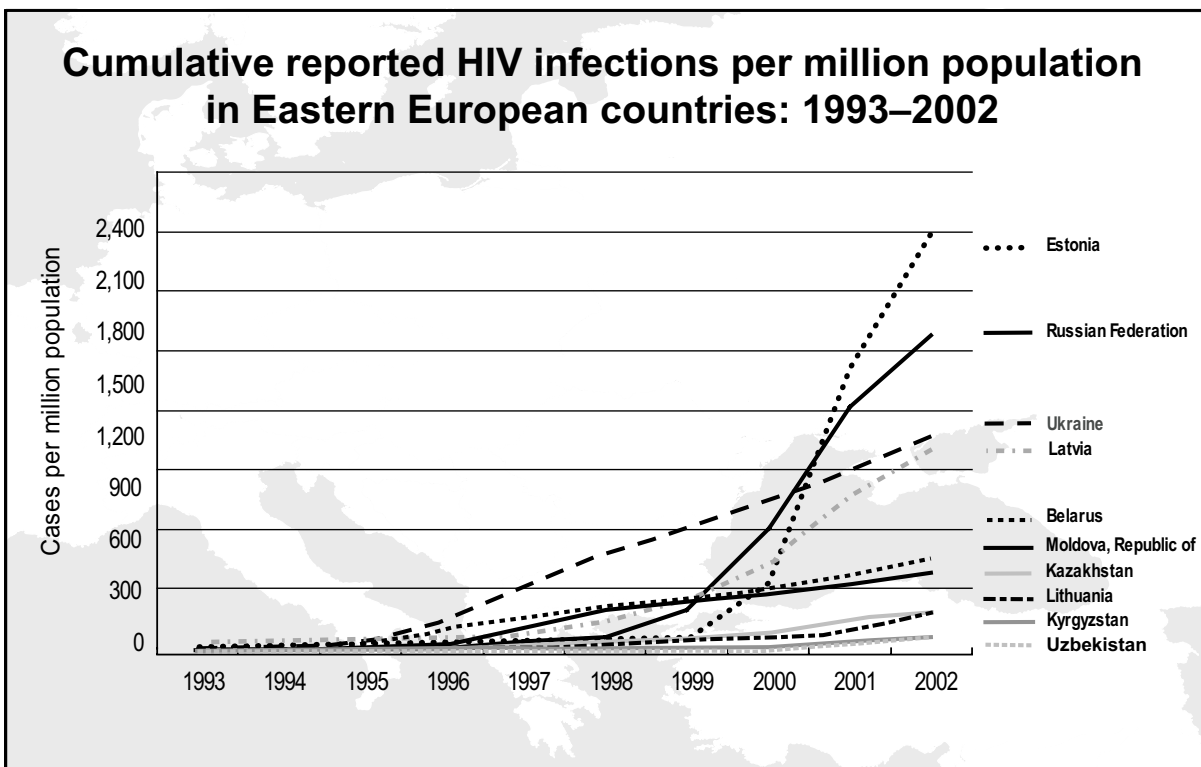
The AIDS epidemic in Eastern Europe and Central Asia shows no signs of abating. Some 230,000 people were infected with HIV in 2003, bringing the total number of people living with the virus to 1.5 million. AIDS claimed an estimated 30,000 lives in the past year.

Worst-affected are the Russian Federation, Ukraine, and the Baltic States (Estonia, Latvia

aged 15–49 are living with HIV in the Russian Federation (although various estimates from that country put the figure at between 600,000 and 1.5 million).

Driving these epidemics is widespread risky behaviour—injecting drug use and unsafe sex—among young people. Extraordinarily large numbers of young people regularly or intermit-

Figure 6



Source: National AIDS Programmes (2002). HIV/AIDS surveillance in Europe. End-of-year report. Data compiled by the European Centre for the Epidemiological Monitoring of AIDS.

and Lithuania), but HIV continues to spread in Belarus, Moldova and Kazakhstan, while more recent epidemics are now evident in Kyrgyzstan and Uzbekistan (see Figure 6). It is now estimated that around 1 million people

tently engage in injecting drug use, and this is reflected in increasing HIV prevalence among injecting drug users throughout the former Soviet Union. Condom use is generally low among young people, including those at high-

est risk of HIV transmission in Eastern Europe and Central Asia. According to one survey in the Russian Federation, fewer than half of teenagers aged 16–20 used condoms when having sex with casual partners. The percentage of sex workers reporting consistent condom use has seldom topped 50%, while, among injecting drug users, fewer than 20% on average report consistent condom use.

HIV-positive persons are under 30 years of age. In the Russian Federation, 80% of HIV cases due to injecting drug use are in young persons under 30. On the whole, more than 80% of people who are HIV-positive in this region have not yet turned 30, in contrast to the situation in Western Europe and the United States of America, where only 30% of the reported cases are among people under 29 years of age.

Driving the epidemic are persistently high levels of risky behaviour—specifically injecting drug use and, to a lesser extent, unsafe sex—among young people.

A relatively new phenomenon in these countries, injecting drug use has taken hold amid jolting social change, widening inequalities and the consolidation of transnational drug-trafficking networks in the region. By some estimates, there could be as many as 3 million injecting drug users in the Russian Federation alone, more than 600,000 in Ukraine and up to 200,000 in Kazakhstan. (In Estonia and Latvia, it has been estimated that up to 1% of the adult population injects drugs, while, in Kyrgyzstan, that figure could approach 2%). Most of these drug users are male and many are very young—in St Petersburg, studies found that 30% of them were under 19 years of age, while, in Ukraine, 20% were still in their teens. A survey of Moscow youth aged 15–18 found that 12% of the males had injected drugs. Overall, up to 25% of injecting drug users are estimated to be under 20 years of age across Eastern Europe and Central Asia. And the use of unclean equipment, often through sharing of drug injecting equipment, remains the norm. In Moldova, for example, an estimated 80% of users share injecting equipment (often to affirm trust towards other users), while one Moscow sample found that 75% of users had shared injecting equipment in the past month.

Young people predominate in this region among reported HIV cases. In Ukraine, 25% of those diagnosed with HIV are younger than 20, in Belarus 60% of them are aged 15–24, while in Kazakhstan and Kyrgyzstan upwards of 70% of

HIV prevalence continues to rise in the Russian Federation, which remains saddled with the worst epidemic in this region. By the end of 2002, a cumulative total of 229,000 people had been diagnosed with HIV. Almost a quarter (50,400) of that total was added in 2002 alone, indicating that the epidemic is growing at a fearsome rate. Moreover, these reported cases almost certainly grossly underestimate the number of people living with HIV.

Most of these infections are occurring through the use of contaminated equipment when injecting drugs, with young men bearing the epidemic's brunt. But another striking pattern is now evident. Women account for an increasing share of newly diagnosed HIV infections—33% in 2002, compared to 24% a year earlier. One consequence is a sharp rise in mother-to-child transmission of the virus. These patterns are most evident in regions where the epidemic took hold several years ago, such as Kaliningrad (in the west of the country) and Krasnodar (in the south-west). They indicate the onset of a new stage in the epidemic in parts of the country, where the sexual spread of the virus is becoming a more prominent feature. Because most injecting drug users are young and sexually active, a significant share of new infections is occurring through sexual transmission (often when injecting drug users or their HIV-infected partners engage in unsafe sex).

Although advancing steadily, the Russian Federation's epidemic is still in its early stages.

HIV has been detected in 88 of the country's 89 administrative territories, but it is spreading unevenly across this vast country. In a few places, such as the Nizhny Novgorod region, interventions appear to have stabilized localized epidemics. But, in at least 9 territories, serious epidemics are under way, and the virus has gained a firm foothold in a further 11 territories.

These patterns highlight the need for a more vigorous and comprehensive response that diminishes the vulnerability of young people, and

were newly diagnosed with the virus. Lithuania is on a similar path. There, the 72 new HIV cases detected in 2001 increased more than five-fold in 2002. Lithuania appears to be facing two distinct epidemics—one affecting mainly injecting drug users in regions adjacent to Kaliningrad (Russia), and the other spreading among men who have sex with men in Vilnius.

The most recent HIV outbreaks in the region are to be found in Central Asia, where reported HIV infections have grown exponentially from 88 in

There is a concern that hidden epidemics are possibly occurring among men who have sex with men and among other groups at higher risk of infection.

enables them to reduce drug injecting and risky sexual behaviour. That means greater access to information, as well as to prevention tools and services. Harm reduction forms a cornerstone of such a comprehensive response, and should be broadened quickly to address the needs of young drug injectors who face immediate and high risks of HIV infection. Special attention should be paid also to their predominantly female sexual partners, to men who have sex with men, and to the young women and men who engage in sex work. The prevention of mother-to-child transmission is a new and urgent priority. But the growing treatment and care needs of people living with HIV can no longer be overlooked.

Much the same holds true for Ukraine (where a cumulative total of more than 52,000 people had been officially diagnosed with HIV by the end of 2002), Belarus (with a total of 4,700 people diagnosed with HIV) and Moldova (reporting almost 1,700 HIV cases)—all countries with comparatively older epidemics. Although the majority of HIV infections still occur among young people who inject drugs (and their sexual partners), there are indications that the epidemics are starting to spread beyond them.

Although overall numbers of infections remain low, HIV spread continues at an alarming pace in the Baltic States. At 2,300 in 2002, the total number of HIV diagnoses in Latvia has risen five-fold since 1999. Just four years ago, Estonia reported 12 new HIV cases; in 2002, 899 people

1995 to 5,458 in 2002. This is mainly due to the sharp rise in infections recorded in Kazakhstan, Kyrgyzstan and Uzbekistan. HIV has now spread to all regions of Kazakhstan, while the majority of cases reported in Kyrgyzstan are concentrated in the Osh region, which serves as a drug transit route for neighbouring countries. Given that the five Central Asian republics straddle major drug trafficking routes into the Russia Federation and Europe, it is no surprise that the majority of infections currently are related to injecting drug use. Indeed, in some parts, heroin is now believed to be cheaper than alcohol. As elsewhere in the region, young people are the worst-affected, with those on the margins of the economy particularly vulnerable. In Kazakhstan, for example, three-quarters of people diagnosed with HIV were unemployed.

These epidemics are very recent and can be halted if prevention efforts are targeted at those who are currently most affected—injecting drug users and sex workers—and are supported by prevention work among young people generally. In some instances, even more elementary prevention steps are required—such as screening blood donations for HIV. Tajikistan, for example, reportedly did not test 40% of those who donated blood in 2002.

Further west, new reported HIV infections have remained stable (at roughly 500–600 annually) in Poland since the mid-1990s, and a similar pattern has been evident in the Czech Republic, Hungary

and Slovenia since the late 1990s. However, in parts of south-eastern Europe (notably countries emerging from conflict and difficult transitions) drug injecting and risky sexual behaviour appear to be on the increase—raising the prospect of possible HIV outbreaks unless preventive steps are swiftly introduced.

Current data are based only on people who are tested for HIV, and not all potentially affected groups of people are being tested. Therefore, the data reflect the situation among those people and groups (chiefly injecting drug users) who come into contact with HIV-testing programmes. There is a concern that hidden epidemics might be occurring among men who have sex with men, who are severely stigmatized across the region. Significant networks of men who have sex with men have been documented in Central Asia, Belarus and Ukraine, and Lithuania's vigorous epidemic is at least partly lodged among men who have sex with men, while possibly incipient epidemics in Croatia and Slovenia appear to be following a similar pattern. Some early surveys of sexual behaviour in the Russian Federation and Ukraine showed high levels of unprotected sex in the first half of the 1990s, while a study in the Russian Federation in 2000 suggested

that high-risk behaviours have persisted in communities of men who have sex with men.

An increasing number of countries in the region are beginning to come to grips with HIV/AIDS. The epidemic now features at the Commonwealth of Independent States' summits of Heads of States and Heads of Governments. As well, people living with HIV/AIDS and other civil society groupings are gaining a voice and forming partnerships with governments in Belarus, Kazakhstan, Romania and Ukraine. In the Russian Federation, a new Advisory Council on HIV/AIDS has brought together, for the first time, government sectors and organizations of people living with HIV/AIDS. Buttressing such recent advances is stronger HIV/AIDS-related international assistance, which has increased six-fold since the end of 2001 across the region (thanks, in part, to funding from the Global Fund to Fight AIDS, Tuberculosis and Malaria, the World Bank and major bilateral donors). Also on the agenda now is the provision of treatment and care for the 1.5 million people living with HIV/AIDS in the entire region. These steps forward are flanked, though, by an increased need to provide technical support for resource management, and monitoring and evaluation.

ASIA AND THE PACIFIC

The epidemic is spreading into areas and countries where, until recently, there was little or no HIV present—including China, Indonesia and Viet Nam (home to over 1.5 billion people).

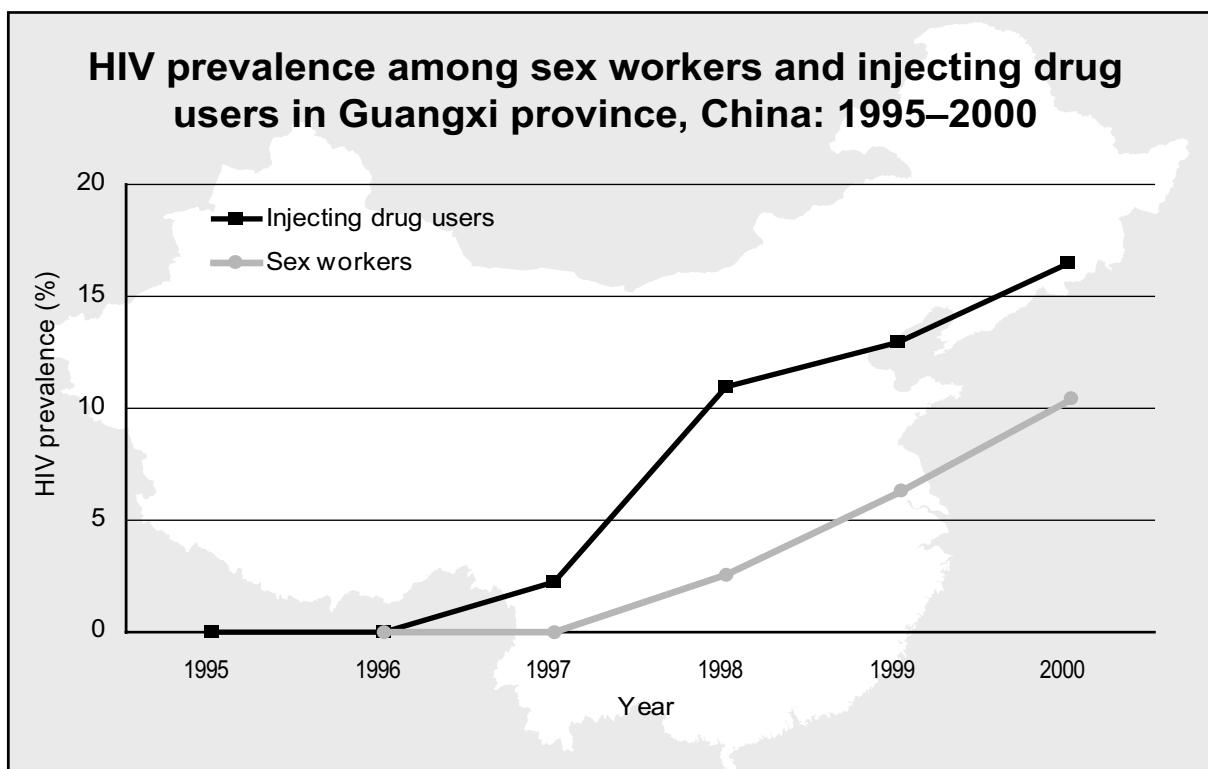
Over 1 million people in Asia and the Pacific acquired HIV in 2003, bringing to an estimated 7.4 million the number of people now living with the virus. A further 500,000 people are estimated to have died of AIDS in 2003.

National adult HIV prevalence is still under 1% in the majority of this region's countries. That figure, though, can be deceptive. Several countries in the region are so large and populous that national aggregations can obscure serious epidemics in some provinces and states. Although national adult HIV prevalence in India, for example, is below 1%, five states have an estimated prevalence of over 1% among adults. Moreover, there are increasing warning signals that serious HIV outbreaks threaten in several countries. Injecting drug use

and sex work are so pervasive in some areas that even countries with currently low infection levels could see epidemics surge suddenly.

In parts of China, for example, high rates of HIV prevalence have been found among injecting drug users—35–80% in Xinjiang and 20% in Guangdong—while a severe HIV epidemic has affected communities where unsafe blood-collection practices occurred in the 1990s. Available evidence suggests that injecting drug use is increasing (with a high proportion of injectors using contaminated needles and syringes), and that condom use remains low among sex workers and other vulnerable groups, such as men who have sex with men. In sum, China's low national HIV prevalence obscures the fact that serious, concentrated epidemics

Figure 7



Source: Sentinel surveillance reports, National Center for HIV/AIDS Surveillance

have been under way for many years in certain regions (such as Yunnan, Xinjiang, Guangxi, Sichuan, Henan and Guangdong) and are poised to take off in several others. The epidemic has spread to 31 provinces (autonomous regions and municipalities) and the number of reported HIV/AIDS cases has increased significantly in recent years.

Most of these new emerging epidemics are driven by injecting drug use, with additional HIV spread occurring through commercial sex.

Three Asian countries have already had to contend with serious nationwide epidemics: Cambodia, Myanmar and Thailand. While it remains to be seen whether Myanmar's nascent prevention efforts will limit HIV prevalence to the 1–2% reported among 15–24-year-olds in urban areas, national adult HIV prevalence in Cambodia has remained stable at about 3% since 1997, thanks to resolute efforts to hold the epidemic in check. Seroprevalence appears to have dropped significantly among brothel-based sex workers—from 43% in 1998 to 29% in 2002—and among urban police, largely due to the vigorous condom-promotion programme supported by the government and nongovernmental organizations. Cambodia's Ministry of Health recently estimated that the country would have seen three times as many HIV infections had it not mounted this response.

Thailand's feted 100% condom use programme brought its rampant epidemic to heel in the 1990s, with national HIV prevalence hovering around 2% in 2002 and prevalence among 21-year-old military conscripts dropping to under 1% in 2002 (from as high as 4% in the mid-1990s). In both Cambodia and Thailand, two breakthroughs spearheaded their achievements: condom use in commercial sex increased, and men sought the services of sex workers less frequently. Analysis suggests, however, that HIV transmission between spouses has become a more prominent cause of new infections—a reminder that it is inadequate to only target vulnerable groups.

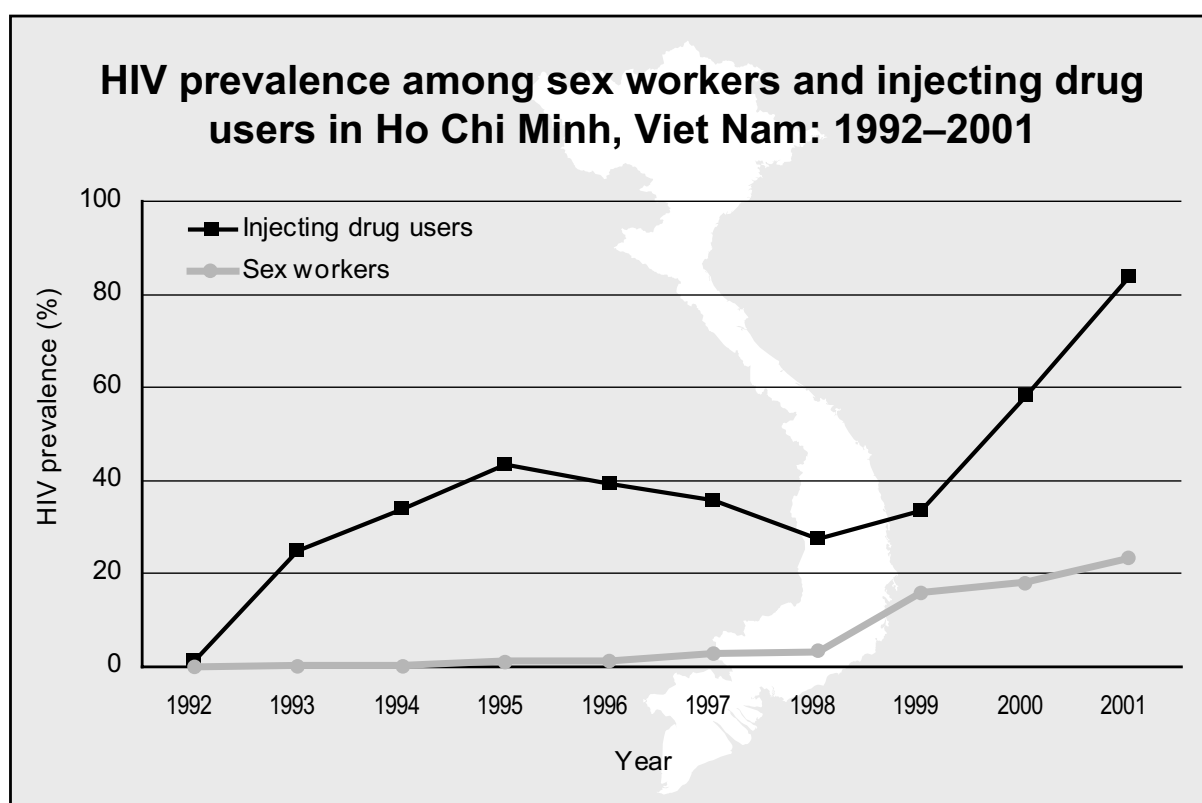
Unusual for this region, injecting drug use has featured minimally in Cambodia's epidemic—unlike many other countries in the region, including Thailand, where efforts to limit HIV transmission through injecting drug use appear to be lagging, however. Unless rectified, this could lead to a resurgence of the country's epidemic. Injecting drug use could become

the main mode of transmission, with the virus then being passed on to other users, their sexual partners and children.

Although spared, to date, Viet Nam faces the possibility of a serious epidemic (see Figure 8). The most recent estimate pegged national HIV prevalence at well under 1%, but outbreaks among injecting drug users are already occurring. According to official estimates, 65% of Viet Nam's HIV infections are occurring among drug users, due to the use of contaminated injecting equipment. Sentinel surveillance in 2002 found that more than 20% of injecting drug users in most provinces were HIV-positive. Already, there are signs that the epidemic is spreading in other vulnerable populations. HIV prevalence rates of 11% and 24% have been detected among sex workers in Can Tho and Ho Chi Minh City, respectively. Although many sex workers are believed to also inject drugs, there is growing evidence that this surge in infections is now also occurring through sexual intercourse. These developments are not restricted to the south; HIV prevalence among sex workers reached 15% in Hanoi and 8% in Hai Phong in 2002.

Viet Nam faces an urgent, double challenge. By introducing HIV-prevention programmes, it can limit the spread of HIV through injecting drug use—thus protecting not only drug users but also their sexual partners and, in the case of female users, their children. It also has to act swiftly to forestall potentially explosive heterosexual transmission through sex work into the wider population. Research suggests that a significant

Figure 8



Source: Sentinel surveillance reports, National AIDS Bureau, Ministry of Public Health, 1992-2001

proportion of men buy sex in urban areas. As Vietnamese society continues to liberalize, and migration from rural to urban areas increases, this proportion could well rise.

Already stricken with a more serious epidemic, Myanmar has little time to lose. Injecting drug use and commercial sex are responsible for most HIV infections, and there are reports that migrant workers (especially gem miners and loggers) are becoming a major conduit for the virus's spread into the wider population. UNAIDS has helped marshal a special fund to tackle the epidemic over the next three years, but significant improvements are also needed in the country's battered public-health system. To date, only piecemeal activities have been undertaken; a coordinated national response is now an absolute priority if transmission through commercial sex and injecting drug use is to be curbed.

The warning signs are not diminishing in Indonesia, either. Condom social marketing and AIDS-awareness campaigns have been boosted since the late 1990s, but condom use remains low, even in commercial sex. It is estimated that

fewer than 10% of the 7–10 million Indonesian men who frequent sex workers use condoms consistently. In 2002, roughly the same low percentage of sex workers in Jakarta said they always used condoms during paid sex. Not surprisingly, HIV prevalence among sex workers is following a steady upward arc in largely rural provinces, such as Kalimantan and Papua, as well as in industrial development areas, such as Riau.

It is injecting drug use, however, that is the major driver of Indonesia's epidemic. Over 90% of injecting drug users have been found to use unclean injecting equipment in three major cities and, in one of these, as many as 70% report having had unprotected sex with sex workers. Injecting drug users are regularly arrested and spend time in jail—an environment where risky behaviours are common. The potential for rapid HIV transmission to other vulnerable populations and the wider population is substantial.

The region of Papua, Indonesia (Irian Jaya) shares an island with the country of Papua New Guinea. Both the Indonesian side and Papua New Guinea have a high prevalence of HIV among

sex workers. For Indonesia, it appears to be the highest rate among sex workers in the country: in the town of Sorong, HIV prevalence among sex workers reached 17% in 2002. Across the border in Papua New Guinea, only 15% of female sex workers report consistent condom use, and HIV prevalence among sex workers has reached 17%. Indeed, Papua New Guinea now has the highest reported rate of HIV infection in the Pacific, with an estimated HIV prevalence of almost 1% among pregnant women attending antenatal clinics in Port Moresby. Papua New Guinea has had a national HIV/AIDS policy since 1989, but these recent developments point to a pressing need to strengthen prevention efforts.

The HIV/AIDS picture in **South Asia** remains dominated by the epidemic in India, where between 3.82 and 4.58 million people were infected nationally by the end of 2002. In the past year, at least 300,000 people acquired HIV, and

In older epidemics, such as those in Cambodia and Thailand, there is now significant HIV spread from people with high-risk behaviour to their sexual partners

serious epidemics are now under way in several states—including Maharashtra and Tamil Nadu (where HIV prevalence of over 50% has been found in sex workers in some cities), and in Manipur (with HIV prevalence among injecting drug users ranging between 60% and 75%). According to India's National AIDS Control Organization (NACO), HIV/AIDS is not confined to vulnerable groups or to urban areas, but is gradually spreading into rural areas and the wider population. In states such as Andhra Pradesh, Karnataka, Maharashtra, Manipur and Nagaland, HIV prevalence rates among pregnant women have crossed the 1% threshold, while, in Gujarat and Goa, HIV prevalence among populations with high-risk behaviour is above 5% (though below 1% among pregnant women). Worryingly, not enough is known about HIV spread in the vast populous interior of Uttar Pradesh and other northern Indian states, where current HIV surveillance is providing an incomplete picture of the epidemic. Elsewhere, Maharashtra and Tamil Nadu offer localized examples of where prevention efforts appear to be making some

headway, but there is not yet persuasive evidence that the epidemic is being curbed in individual states, let alone in the country as a whole.

In neighbouring Bangladesh and Nepal, national HIV prevalence has remained under 1%, but risky behaviour in parts of the population is so extensive that it could be just a matter of time before wider epidemics erupt. In the Nepalese capital, Kathmandu, HIV epidemics are centred around injecting drug users and sex workers, most of them young. Among the former, HIV prevalence of up to 68% has been detected in recent years, while, among the latter, prevalence is around 17%.

Young people are at the hub of Nepal's AIDS challenge. While studies suggest that their HIV/AIDS knowledge is passable, they remain prone to HIV exposure. Sexual activity starts early (almost one in five Nepalese teenagers have had sex by the time they turn 15) and condom use is very low.

Recent small-scale studies have revealed that sex between men is relatively common, especially in Kathmandu. Unsafe sex is the norm, between male partners and between these men and their female partners.

Bangladesh poses as big a challenge, despite the fact that HIV has a tentative presence currently (even among vulnerable populations). Almost half the population is under 15 years of age, and risky behaviours—including high rates of unsafe injecting drug use, a thriving sex trade and unsafe blood-transfusion practices—are widespread. And the people involved in these activities overlap; many sex workers also inject drugs, injecting drug users often frequent sex workers; and some studies indicate that users often sell blood. Condom use is almost non-existent. In central Bangladesh, more than 90% of sex workers do not use condoms; elsewhere in the country, virtually all surveyed sex workers have reported at least occasionally having sex without condoms. Meanwhile, it is estimated that more than 90% of injecting drug users are exposed to

contaminated injecting equipment. In addition, knowledge of AIDS is slight: only about 65% of young people, and fewer than 20% of married women and 33% of married men have heard of AIDS. The upshot is a very high potential for rapid HIV transmission. In the most recent surveillance round, up to 4% of injecting drug users in central Bangladesh were found to be HIV-positive—up from around 1% in surveillance rounds in previous years.

Both Bangladesh and Nepal have golden opportunities to prevent their epidemics from spinning out of control. While the former has put in place an integrated national AIDS strategy that also draws on the efforts of a countrywide network of nongovernmental organizations, some basic steps

still need to be taken, including more comprehensive blood screening in hospitals.

The few HIV surveillance studies available for Pakistan suggest that HIV prevalence among injecting drug users and sex workers has been low (ranging from 0% to 11.5%), with a median prevalence of 0%. However, a growing number of the estimated 3 million heroin users in Pakistan have begun injecting since the late 1990s. A recent study among drug users in Quetta found that 55% of injecting drug users had used unclean injection equipment, and roughly the same proportion had had sex with a sex worker. Only 4% had ever used a condom, and only 16% of drug users had heard of AIDS.

LATIN AMERICA AND THE CARIBBEAN

National HIV prevalence has reached or exceeded 1% in 12 countries, all of them in the Caribbean Basin.

More than 2 million people are now living with HIV in Latin America and the Caribbean, including the estimated 200,000 that contracted HIV in the past year. At least 100,000 people died of AIDS in the same period—the highest regional death toll after sub-Saharan Africa and Asia.

HIV/AIDS is well entrenched in this region, with national HIV prevalence at least 1% in 12 countries, all of them in the Caribbean Basin. The most recent national estimates showed HIV prevalence among pregnant women reaching or exceeding 2% in six of them: the Bahamas, Belize, the Dominican Republic, Guyana, Haiti, and Trinidad and Tobago. In contrast, most of the other countries of the region have highly concentrated epidemics, notably in South America where Brazil (with by far the largest overall population in the entire region) is home to the vast majority of people living with HIV in the region.

Distinctive epidemiological patterns are being observed in the region. All the main modes of transmission coexist in most countries amid significant levels of risky behaviour—such as early sexual debut, unprotected sex with multiple

and between men). In the Caribbean, heterosexual transmission predominates (and, in many cases, is associated with commercial sex), although Haiti's persistently serious epidemic is now well established in the wider population. One notable exception is Puerto Rico, where injecting drug use appears to be the main driver of the epidemic.

Two of the region's most serious epidemics are on Hispaniola Island—in Haiti and the Dominican Republic. Stricken with the lowest health and other development indicators in the entire region, Haitians' woes are being aggravated dramatically by the AIDS epidemic, which is claiming an estimated 30,000 lives a year and has left some 200,000 children orphaned by AIDS. Haiti's national HIV prevalence levels have remained at 5–6% since the late 1980s. The factors contributing to this apparent levelling off of national HIV prevalence are unclear, although it must be noted that sentinel surveillance has shown that HIV prevalence levels vary dramatically (from as high as 13% in the north-west to 2–3% in the south along the border with the Dominican Republic). With about 60% of the population under 24 years of age, much scope exists for

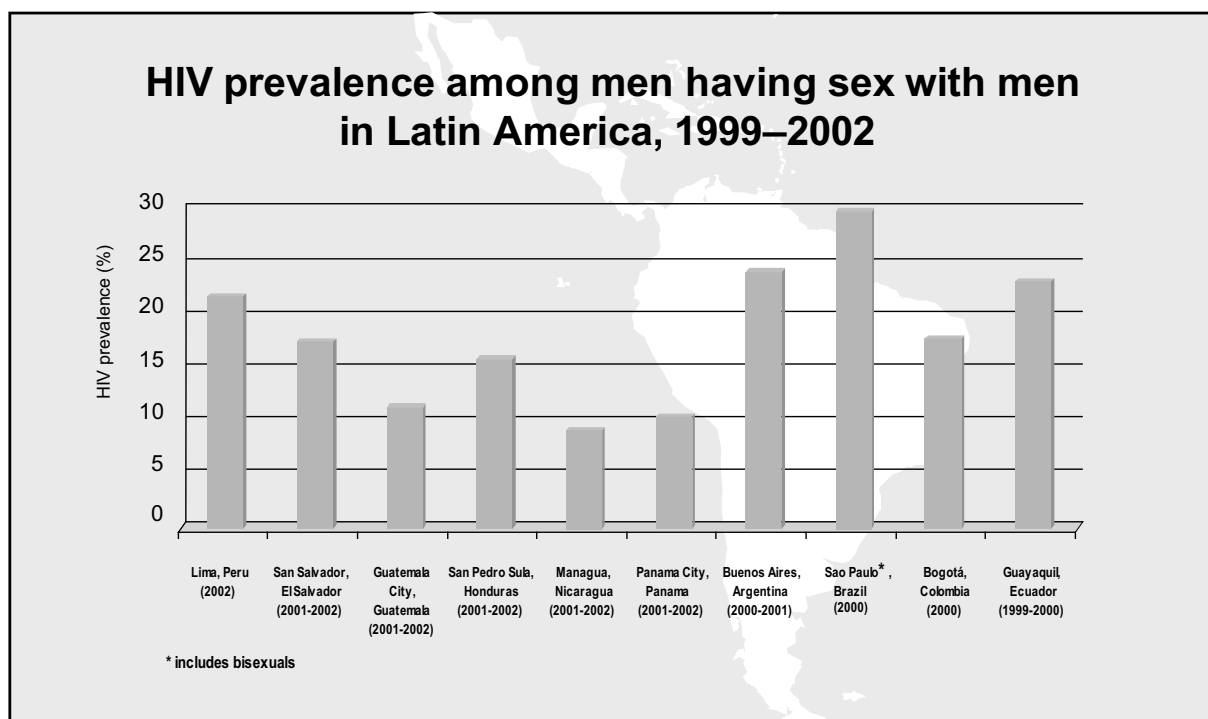
Sex between men is an important, but neglected, feature of Latin America's epidemic.

partners and the use of unclean drug-injecting equipment. In the bulk of the South American countries, HIV is being transmitted chiefly through injecting drug use and sex between men (with subsequent heterosexual transmission to other sexual partners), while in Central America most HIV infections appear to be occurring through sexual transmission (both heterosexual

and renewed growth in Haiti's mainly heterosexually-transmitted epidemic. Condom use is very low among young people, despite evidence that HIV/AIDS knowledge is comparatively strong (though more so among men than women).

Further east, in the Dominican Republic, prevention efforts in recent years appear to have stabilized HIV prevalence among 15–24-year-olds in the

Figure 9



Sources: (1) Lima data: HIV Infection and AIDS in the Americas: lessons and challenges for the future. Provisional Report MAP/EpiNet, 2003. (2) San Salvador, Guatemala City, San Pedro Sula, Managua and Panama City data: Multicenter study of HIV/STD prevalences and socio-behavioral patterns, PASCA/USAID. (3) Buenos Aires data: Avila M, Vignoles M, Maulen S et al., HIV Seroincidence in a Population of Men Having Sex with Men from Buenos Aires, Argentina. (4) Sao Paulo data: Grandi J, Oliveria L, Orival et al., Busca Ativa de DST em Centro de Testagem e Aconselhamento – CTA. (5) Bogotá data: MS/INS/LCLCS/NMRCDC 2000 study. (6) Guayaquil data: Guevara J, Suarez P, Albuja C et al. Seroprevalencia de infeccion por VIH e Grupos de Riesgo en Ecuador. Revista medica del Vozandes. Vol 14, No.1:7-10, 2002.

capital of Santo Domingo. Having climbed to 3% in 1995, HIV prevalence among pregnant women in that age group in the capital has fallen to less than 1%. Increased condom use and fewer sexual partners appear to have been factors. However, the situation appears different in some other cities, where HIV prevalence as high as 12% has been measured among female sex workers, pointing to the need to expand and sustain prevention efforts. In addition, little is known about HIV patterns among men who have sex with men—a potentially important facet of the country's epidemic.

In Central America, national HIV prevalence is around 1% in Guatemala, Honduras and Panama. New data from an international study on HIV prevalence show that HIV prevalence in sex workers varies significantly—from less than 1% in Nicaragua, 2% in Panama, 4% in El Salvador, and 5% in Guatemala, to over 10% in Honduras. HIV prevalence among men who have sex with men was found to be uniformly high in those countries—ranging from 9% in Nicaragua to 18% in El Salvador (see Figure 9). These findings

underscore the need to bring more resources and effort to bear on the epidemics among sex workers and men who have sex with men.

In Colombia and Peru, HIV spread is most marked among men who have sex with men. HIV prevalence of 18% was recently reported in this population group in Bogotá, while another survey in the same city found very low consistent condom use in this group. Highlighted is the considerable potential for HIV transmission from men who have sex with men to their female partners and children. Studies from Peru are bearing out this concern. HIV prevalence of 22% has been measured in the city of Lima among men who have sex with men (up from 18% in 1998), where 1 in 10 men surveyed said they had sex with other men (and, of these, almost 9 in 10 said they also had sex with women). Consistent condom use appeared to be a rare exception, especially during heterosexual intercourse.

Although Brazil's epidemic has spread from the major urban centres to smaller municipalities across most of the country, median HIV preva-

lence among pregnant women attending antenatal clinics has remained below 1%, with little variation over the past five years. This is partly a testament to the prevention programmes mounted since the 1990s, including efforts to extend coverage of harm reduction and other prevention programmes among vulnerable groups (and, in addition, an active and successful programme to treat persons with HIV). However, Brazil cannot rest on its laurels. HIV prevalence rates of 3–6% have been measured in Rio Grande do Sul among women who enjoy only rare access to the public

The response in this region has intensified over the past year, especially in the most affected countries. The proportion of patients who need and receive antiretroviral treatment in the region varies enormously, with some countries having coverage of less than 25% while others have more than 75%. Overall it has been estimated that antiretroviral treatment is provided to about half of the patients in the region who need it. But several subregional initiatives are raising the prospect of increased access in some countries, including the Bahamas, Barbados and Honduras.

AIDS responses have been strengthened recently in many countries, but there is concern that the economic and social instability experienced in parts of the region could undermine those programmes.

health system. This has raised fears that serious epidemics might be under way but undetected in some disenfranchised communities. The country's Ministry of Health has now launched an initiative to recruit, test and (where necessary) treat pregnant women who do not regularly access prenatal care clinics.

The epidemics will not be vanquished until countries come to terms with the hidden but widespread realities of injecting drug use and male-to-male sex. Stigmatizing and denying such behaviour can only fuel the silent epidemics that are under way in this region. Absent currently is sufficient information about vulnerable groups that can inform better HIV/AIDS programming. Better epidemiological and behavioural surveillance data, coupled with stronger social and political mobilization around AIDS, can boost responses to match the realities of the epidemic.

Several countries have boosted their national HIV/AIDS budgets, while Central American and Caribbean countries have seen an almost four-fold increase in external resources for AIDS, compared to three years ago. Partnerships are also being consolidated, including those mustered under the mantle of the Horizontal Technical Cooperation Group (in Latin America) and the Pan-Caribbean Partnership.

Stigma and discrimination remain a major obstacle, however. A recent analysis of national expenditure on AIDS (performed by the SIDALAC project, with UNAIDS support), for example, has shown that investment in prevention and care activities for the most vulnerable populations (such as men who have sex with men, and sex workers) still does not match their prominence in the epidemic. Discrimination appears to be the chief cause of this pattern.

THE MIDDLE EAST AND NORTH AFRICA

HIV prevalence in this region is still very low, with the exception of southern Sudan and recent outbreaks among injecting drug users in some countries.

The notion that this region has sidestepped the global HIV epidemic is not borne out by the latest estimates, which indicate that 55,000 people acquired HIV infection in the past year, bringing to 600,000 the total number of people living with HIV/AIDS in the Middle East and North Africa. AIDS killed a further 45,000 people in 2003. There is the potential for a considerable rise in the number of HIV infections in this region.

By far the most seriously affected country at present is the Sudan—specifically the south, where a mainly heterosexual epidemic is well under way. Available data indicate a national adult HIV prevalence of more than 2%, but conflict is hampering both surveillance of the epidemic and the mounting of a potentially effective response. The last round of surveillance data showed that HIV prevalence among pregnant women was 6–8 times higher in the south of Sudan, compared to Khartoum.

In most other countries, HIV spread in this region appears to be nascent, although scant surveillance data in several countries could mean that serious outbreaks in certain populations (including men who have sex with men and injecting drug users) may be being missed.

There also appears to be significant movement of HIV-infected persons between some countries. More than half of those officially reported to have HIV in Tunisia, for example, are believed to have crossed the border from Libya to seek antiretroviral treatment and/or to undergo drug rehabilitation. (Tunisia has been providing free

and universal antiretroviral treatment since the turn of the century.)

The epidemic threatens to expand along diverse routes in the region, including through blood transfusions and blood collection. Universal precautions and blood screening have greatly reduced the risks of transmission in health-care settings in most countries, but HIV transmission through blood and blood products remains a potentially significant danger in some.

Also of concern is the rise in HIV infections among injecting drug users, particularly in Bahrain, Libya and Iran, while HIV infections linked to this mode of transmission have been reported in Algeria, Egypt, Kuwait, Morocco, Oman and Tunisia. Most of the HIV infections occurring in Iran appear to be associated with injecting drug use and serious levels of HIV infection have been reported in the country's prison system. HIV prevalence among injecting drug users in 10 Iranian prisons has reached as high as 63%. It has been estimated that Iran could be home to as many as 200,000 injecting drug users, most of them men. An earlier study in Iran revealed that about half of injecting drug users were married, and a third had reported extra-marital sex, pointing to the potential for secondary heterosexual transmission. To date, the HIV epidemic among adults in Libya has been driven by injecting drug use, with 90% of all known HIV infections occurring among injecting drug users. In the one drug-dependence treatment facility in Libya, 49% of all new patients have been found to be HIV-positive in the past three years.

Several other vulnerable groups face increasing risk of HIV infection in the region, notably sex workers and men who have sex with men. A recent report from Yemen, for example, suggests that 7% of sex workers are HIV-positive. Across the region, more in-depth studies are needed to examine sex work realities, especially street-based situations, and their potential contribution to HIV spread, first among sex workers and their clients, and subsequently to clients' wives and children.

Too little is known about the transmission of HIV between men who have sex with men in this region, and the shortfall of information is

Effective prevention is needed speedily across the regions, designed to target both vulnerable groups and groups that could be drawn into the next phase of HIV spread, such as migrant workers, refugees and displaced persons, transport route workers, tourists, and young people generally. At present, however, even basic activities such as condom promotion are largely absent in the region. Yet there are encouraging exceptions to what appears to be a general pattern of official denial in the region. Algeria, Iran, Lebanon and Morocco, for example, are developing more substantial prevention programmes, while some

Surveillance systems are being improved in some countries and examples of positive prevention efforts are on the increase. But denial and stigma create an ideal context for the spread of HIV.

largely due to the stigma attached to sex between men. Egypt is one of the few countries to have monitored the transmission of HIV in groups of men who have sex with men, among whom HIV prevalence appears to have been around 1% at the turn of the century. The proportion of AIDS cases attributed to men who have sex with men was reported to be 21% in 2000. A review of HIV epidemiology in Morocco similarly found that sexual transmission between men accounted for over 7% of cumulative cases of HIV infection in the previous decade.

Up-to-date surveillance and behavioural data have been scant, though steps to remedy the situation are now being taken in much of the region.

countries (notably Iran and Libya) appear more willing to acknowledge and tackle epidemics associated with injecting drug use.

The AIDS epidemic history presents ample proof that it is among these groups that HIV often gains a foothold before spreading more generally. Part of the challenge facing countries of this region is to defuse the stigma and blame that are so often attached to vulnerable groups, and to deepen the wider public's knowledge and understanding of the epidemic. The social and cultural barriers to directing attention towards populations at higher risk are sometimes so great that the political costs of prevention are perceived to eclipse the public health benefits.