

EASTERN EUROPE AND CENTRAL ASIA

HIV and AIDS statistics and features, in 2003 and 2005

	Adults and children living with HIV	Number of women living with HIV	Adults and children newly infected with HIV	Adult prevalence (%)	Adult and child deaths due to AIDS
2005	1.6 million [990 000–2.3 million]	440 000 [300 000–620 000]	270 000 [140 000–610 000]	0.9 [0.6–1.3]	62 000 [39 000–91 000]
2003	1.2 million [740 000–1.8 million]	310 000 [210 000–430 000]	270 000 [120 000–680 000]	0.7 [0.4–1.0]	36 000 [24 000–52 000]

The epidemics in Eastern Europe and Central Asia continue to grow and are affecting ever-larger parts of societies in this region. The number of people living with HIV in this region reached an estimated 1.6 million [990 000–2.3 million] in 2005—an increase of almost twentyfold in less than ten years. AIDS claimed almost twice as many lives in 2005, compared with 2003, and killed an estimated 62 000 [39 000–91 000] adults and children. Some 270 000 [140 000–610 000] people were newly infected with HIV in the past year. The overwhelming majority of people living with HIV in this region are young; 75% of the reported infections between 2000 and 2004 were in people younger than 30 years (in Western Europe, the corresponding figure was 33%) (Euro HIV, 2005).

The patterns of the epidemics are changing in several countries, with sexually transmitted HIV cases comprising a growing share of new diagnoses. In 2004, 30% or more of all new reported HIV infections in **Kazakhstan** and **Ukraine**, and 45% or more in **Belarus** and the **Republic of Moldova**, were due to unprotected sex (EuroHIV, 2005). Increasing numbers of women are being affected, many of them acquiring HIV from male partners who became infected when injecting drugs.

The bulk of the people living with HIV in this region are in two countries: the **Russian**

Federation and **Ukraine**. Ukraine's epidemic continues to grow, with more new HIV diagnoses occurring each year, while the Russian Federation has the biggest AIDS epidemic in all of Europe. Both epidemics have matured to the point where they constitute massive prevention, treatment and care challenges.

HIV has consolidated its presence in every part of the former Soviet Union, with the exception of Turkmenistan (where little information is available on the HIV epidemic). Several Central Asian and Caucasian republics are experiencing the early stages of epidemics, while quite high levels of risky behaviour in south-eastern Europe suggests that HIV could strengthen its presence there unless prevention efforts are stepped up.

RUSSIAN FEDERATION

By the end of 2004, approximately 300 000 HIV cases had been officially registered in the **Russian Federation** since the beginning of the epidemic (Russian Federal AIDS Centre, 2005; EuroHIV, 2005). The actual number of total infections is much higher: an estimated 860 000 people (420 000–1 400 000) were living with HIV in the Russian Federation at the end of 2003 (UNAIDS, 2004). The steep decline in newly registered cases in 2001–2003 (see *AIDS*

epidemic update 2004) did not continue in 2004, when just under 34 000 new infections were diagnosed (EuroHIV, 2005). That decline appears not to have represented an actual slowing of the epidemic; it reflected changes in HIV testing policy, the smaller number of tests carried out in population groups with high-risk behaviour (especially drug injectors and prisoners), and shortages of test kits (Pokrovskiy, 2005).

Young people are bearing the brunt of new HIV infections. Each year, more than three quarters of new diagnoses are in people aged 15–29 years (Pokrovskiy, 2005; EuroHIV, 2005; Field, 2004). At the heart of the country's epidemic are the extraordinarily large numbers of young people who inject drugs. There were more than 340 000 registered

well-established programme, set up in 1998, reached an estimated 80% of drug injectors in the city, while that of Tomsk was more recent and coverage ranged around 10%. Of the drug injectors who participated in Pskov and Tomsk's harm reduction programmes, only 6% and 8%, respectively, reported using non-sterile syringes in the month prior to the survey. Among their peers who did not take part in the programmes, 19% in Pskov and 30% in Tomsk had used non-sterile syringes—as had 31% of injectors in the city of Novgorod (which had no harm reduction programme). Condom use was also substantially higher among programme participants. In Pskov, 43% of participants had used a condom the last time they had sex (compared with 28% for non-participants) and in Tomsk the corresponding

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injecting drug users in the Russian Federation at the end of 2004, though the actual number of injectors could be four to ten times as high (Federal Service of the Russian Federation in Consumer Rights Protection and Human Welfare, 2005; UNODC, 2005). In early 2004, more than 80% of all officially reported HIV cases since the beginning of the epidemic had been among drug injectors (Russian Federal AIDS Centre, 2004). Unsafe drug injecting practices still account for most HIV transmission, with an estimated 30–40% of injecting drug users using non-sterile needles or syringes, which greatly increases the odds of HIV transmission. As a result, large HIV epidemics among drug injectors continue to be reported in several regions. Two recent studies in St Petersburg, for example, found that more than 30% of injecting drug users were HIV-positive (Verevchkin et al., 2005), while in the provincial cities of Chernopovzhe and Velikiy Novgorod HIV prevalence of 12% and 15% was measured among drug injectors (Smolskaya et al., 2005). These figures are not surprising, given the high levels of risk behaviour among injecting drug users, 73% of whom in Chernopovzhe had re-used others' needles and syringes (Smolskaya et al., 2005).

In striking contrast are the findings of an evaluation of harm reduction programmes in the cities of Pskov (in the north-west) and Tomsk (in the north-east), conducted in 2003–2004. Pskov's

figure was 58% (30% for non-participants). HIV infection levels among drug injectors in Pskov and Tomsk were a fraction of those in Novgorod (0.3% and 2.1%, respectively, compared with 14.7%) (Eroshina et al., 2005a). Such findings are consistent with those of a recent rapid assessment of harm reduction programmes in 15 cities of the Russian Federation. In all but one of the cities, using non-sterile needles was lower among injecting drug users who had participated in such programmes compared with those who had not—in several cases by very large margins (Eroshina et al., 2005b).

Despite moves to introduce some prevention initiatives for prison inmates, Russia's prison system has been disproportionately affected by the epidemic. HIV prevalence in the country's jails has been estimated to be at least four times higher than in the wider population (Russian Ministry of Justice, Department of Corrections and Russian Federal AIDS Center, 2004). In a recent study among juvenile detainees, homeless persons and women at a temporary detention centre in Moscow, more than one half the female juvenile detainees had a sexually transmitted infection, as did almost two thirds of the women at the temporary detention centre and three quarters of the homeless women. Among male detainees 2.9% were HIV-positive, as were 4% of the women at the detention centre and 1.8% of the

homeless women. Most of the people with HIV appear to have been infected during unprotected paid sex and/or injecting drug use. HIV prevalence in these populations was found to be 30–120 times higher than in the general population, and was not much lower than that reported for injecting drug users (6%) in the city (Shakarishvili et al., 2005). Drug policy reforms started in 2004 have changed some of Russia's drug laws (which had mandated long prison sentences for the possession of even minute quantities of proscribed drugs). More than 32 000 drug offenders have been either released from prison or had their sentences shortened, which could help reduce HIV transmission in prisons and detention facilities.

The epidemic, meanwhile, is becoming more mature. Most drug injectors are sexually active and, if HIV-infected, they can transmit the virus sexually to their casual or regular partners (since many of them do not engage in protected sex). Studies in Togliatti and Nizhny Novgorod found that more than 80% of male injectors had not used condoms regularly in the last month (Lowndes et al., 2002; Filatov and Suharsky, 2002; Rhodes et al., 2004). In Chernopovzhe and Velikiy Novgorod, roughly half the sexually-active drug injectors were not using condoms with their casual partners (Smolskaya et al., 2005). Consequently, a significant rise in sexual transmission has been

in heterosexually transmitted infections. They include the continuing growth of the sex industry, the emergence of a sizeable and largely female mobile workforce in the informal economy, and the rising numbers of women who migrate in search of work. This gradual feminization of the epidemic is visible even among very young women. In 2004, women in their late teens (15–20 years) accounted for a bigger share of newly reported HIV cases than did men in that age group. Some of these women were infected through injecting drug use; the numbers of female drug injectors have increased significantly in the past decade. Many of the women, however, acquired HIV during unprotected sex with infected men (Federal Service of the Russian Federation in Consumer Rights Protection and Human Welfare, 2005). Initially concentrated around injecting drug users, the epidemic has now found additional momentum among sex workers and their clients, and among the non-injecting casual or regular sex partners of drug injectors.

This new phase of the Russian Federation's epidemic is most evident in those regions where HIV was first observed (such as Kaliningrad, Krasnodarskiy Krai, Nizhniy Novgorod and Tver). It is also apparent, however, in places with relatively recent epidemics, such as Moscow, Novgorod, Orenburg, Rostov, Volgograd, and

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observed. About 6% of registered infections were related to sexual transmission in 2001; by 2004, that proportion had grown to 25% (Federal Service of the Russian Federation in Consumer Rights Protection and Human Welfare, 2005). More women are acquiring HIV. While the majority of people living with HIV in the Russian Federation are men, about 38% of total registered HIV cases are in women—a bigger share than ever before. Overall, HIV infection levels measured among pregnant women rose from less than 0.01% in 1998 to 0.11% in 2003.

Several additional factors—most of them rooted in the country's ongoing socioeconomic changes—are also contributing to the increase

in the republics of Chechnya, Ingushetia, and Kabardino-Balkarsk—in all of which more than half the newly registered HIV cases in 2004 occurred during unprotected sex (Federal Service of the Russian Federation in Consumer Rights Protection and Human Welfare, 2005). Safe sex campaigns have increased in recent years, but a recent survey among young people in Moscow suggests such campaigns will have to grow considerably in both number and scale before they will achieve a marked impact. The survey noted no positive changes in sexual behaviour, with condom use decreasing slightly among people in their twenties (FOCUS-MEDIA Public Health and Social Development Foundation, 2005).

Meanwhile, more children are being born to HIV-positive mothers, making prevention of mother-to-child transmission a priority. Reported cases of pregnant women with HIV have increased greatly in the past six years, and the total number of children born to HIV-positive mothers now exceeds 13 000 (Russian Federal AIDS Centre, 2005). According to one recent survey, HIV-positive women and children, however, face widespread discrimination, including from health care professionals, (Human Rights Watch, 2005).

Unless effective prevention efforts are expanded—particularly among injecting drug users and their sexual partners, as well as among sex workers and their clients—the Russian Federation’s AIDS epidemic will keep growing.

The need for a comprehensive response to the combined challenges of HIV and injecting drug use, especially among young people, is particularly urgent. Drug-related services, including prevention of drug use, drug treatment services and harm reduction programmes (including needles and syringe exchange, substitution therapy, condoms, etc.) are an integral part of such a response. This applies also to those regions where injecting drug use is rampant but where HIV prevalence among users is still comparatively low. As anticipated, the epidemic appears to be strengthening its presence beyond the 10 territories where over half of all reported cases HIV cases to date have occurred. There have been sharp increases in HIV

Hide and seek

Rooted in the socioeconomic and sociopolitical upheavals of the 1990s, Russia’s AIDS epidemic is driven mainly by the extraordinarily large numbers of people who inject drugs, many of them young and out of work. More than 80% of all registered HIV infections to date have been in drug injectors, a significant share of whom are long-term injecting drug users. While some users experiment with drug injecting for short periods before abandoning the practice, others become drug-dependent. More than half the injectors taking part in a study in Togliatti City, for example, had been injecting for more than five years and a further one quarter had been doing so for three to five years (Rhodes et al., 2004a). Estimates vary, but at least 1% and possibly as much as 2% of the country’s population inject drugs, and an estimated 5–8% of all men younger than 30 years have injected drugs (Molotilov et al., 2003).

A shift away from injecting home-produced drugs to injecting heroin powder has been apparent in many Russian cities since the late 1990s. However, the practice of injecting in groups—and multiple re-use of injecting equipment—has continued. So, too, has the practice of ‘front-loading’ and ‘back-loading’ (squirting drug solutions from one syringe into another) (Rhodes et al., 2004a). Both practices have been shown to greatly increase the risk of HIV transmission.

There is enough evidence from around the world that easier access to needles and syringes can help reduce the odds of HIV transmission ((Rhodes et al., 2004a; Des Jarlais et al., 2002; Gibson et al., 2001). The Togliatti City study cited above found that injectors who acquired their equipment from pharmacies were 12 times less likely to use, or let others use, non-sterile needles and syringes, compared with their counterparts who got the equipment from friends or other users (Rhodes et al., 2004a). Syringe exchange projects have increased in the Russian Federation in recent years, but are still too few in number to significantly limit the AIDS epidemic’s growth. Although it is legal to purchase injecting equipment from pharmacies, many drug injectors still use non-sterile equipment. Policing strategies can have the effect of encouraging the use of non-sterile equipment. In one five-city study, 40% of the injectors attending syringe exchanges said they did not carry equipment in order to avoid confrontations with the police. Research from elsewhere in the world suggests that high-visibility policing strategies are associated with a reluctance among drug injectors to carry injecting equipment, fewer visits to syringe exchanges and with shifts toward increased injecting risk behaviour (Aitken et al., 2002; Grund et al., 2001). Indeed, in Togliatti City, injectors who had been arrested for drugs were four times more likely to use non-sterile equipment than were those who have never been arrested. Such findings underscore the need to expand syringe distribution coverage among drug injectors, in conjunction with wider access to community-based drug treatment and drug use prevention services. Achieving this will require building innovative partnerships between law enforcement and public health agencies, which could help create an enabling environment for HIV prevention in the long term (Rhodes et al. 2004a).

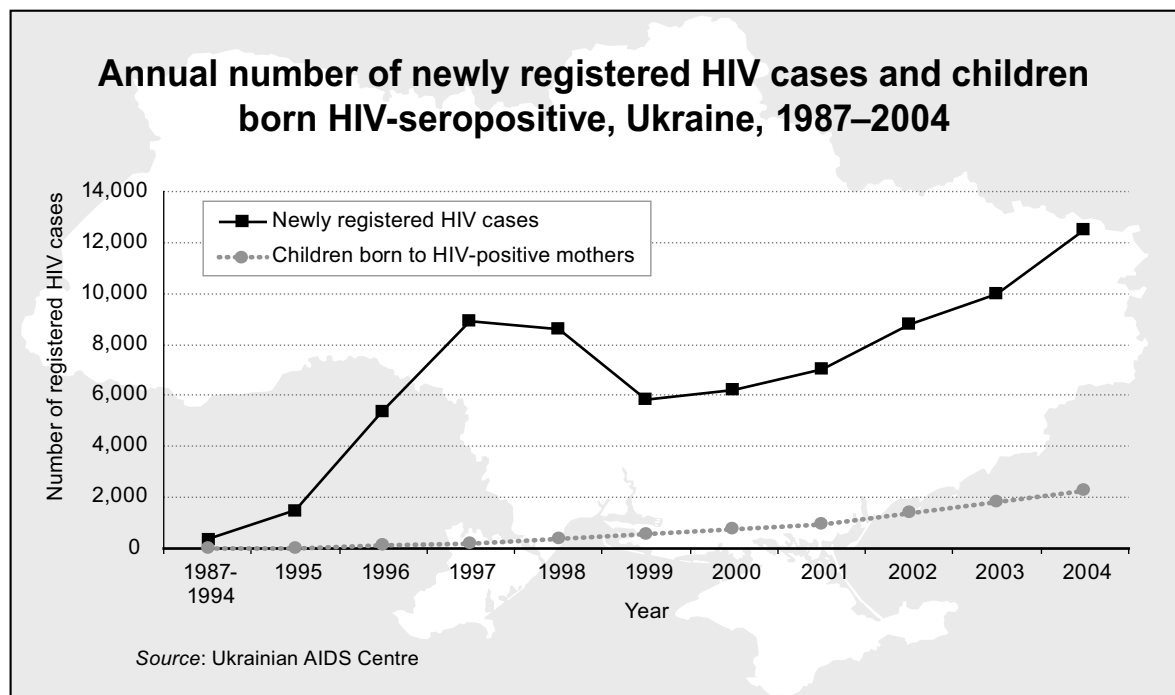


Figure 16

diagnoses in the oblasts of Ivanovo, Perm and Tjumen, as well as in the Republic of Tatarstan, for example (Federal Service of the Russian Federation in Consumer Rights Protection and Human Welfare, 2005). Timely prevention efforts are needed to avoid the epidemic from growing further.

Along with the need for more effective prevention programmes is the responsibility to ensure treatment and care services to the growing number of Russians living with HIV, including those who belong to marginalized populations. Progress on this front remains slow. By mid-2005, fewer than 10% (a mere 4000–6500 people) of those in need of antiretroviral therapy were receiving it (UNAIDS/WHO, 2005).

There are signs of growing recognition on the Russian government's part that the epidemic's ongoing growth demands a stepped-up response. Substantial international funding has been made available to scale up harm reduction programmes (most of them targeting the ten most-affected oblasts) and drug treatment services. Methadone substitution therapy (which can boost adherence to antiretroviral treatment, as well as enhance the health and social stability of drug injectors), however, still remains illegal, and harm reduction projects are few in number. Nevertheless, the drug policy reform process, which commenced in 2004, could mark a step forward on this front. Domestic

spending on AIDS also looks set to expand, with much of the additional funds earmarked for a larger treatment and care programme. Stronger national leadership and coordination of the AIDS response is needed to marshal the various role players, including people living with HIV, into a concerted effort.

UKRAINE

Ukraine, with estimated adult HIV prevalence of 1.4%, remains the worst-affected country in Europe. Fuelled by unsafe injecting drug use and unprotected sex, its epidemic shows no signs of abating. The annual number of newly reported HIV cases continues to rise and exceeded 12 400 in 2004, almost 25% more than the 10 000 cases diagnosed in 2003 and almost double the number diagnosed in 2000 (Ukrainian AIDS Centre, 2005a; EuroHIV, 2005). These figures understate the actual size of the epidemic by a wide margin since they only reflect infections among people who have been in direct contact with official testing facilities.

The epidemic is rapidly spreading beyond the ten regions in southern and eastern Ukraine where over two thirds of all HIV cases have been reported to date. Sharp increases in new reported infections are occurring in central regions of Ukraine previously thought to be minimally

affected. There is a growing risk that the epidemic could spread rapidly in these and other regions unless timely and effective prevention efforts are introduced on a wide scale.

Against the backdrop of widespread drug use, drug injecting remains a key factor in Ukraine's epidemic. The number of newly-reported HIV infections among injecting drug users continues to grow (Ukrainian AIDS Centre, 2005a). Although most injectors are young males, a significant proportion (23%) of those diagnosed with HIV in 2004 were females. A study in the eight most-affected regions found HIV prevalence among injecting drug users as high as 58% in Odessa and 59% in Simferopol (Ukrainian AIDS Centre, 2005b). Risk behaviour among injecting drug users remains widespread. A recent national study found that only 20% of drug injectors said they avoided using non-sterile injecting equipment and practised safe sex (Ministry of Health of Ukraine,

infected through sexual transmission of HIV has increased from 14% of new cases (1999–2003) to over 32% in 2004 (Ukrainian AIDS Centre, 2005a). Many of those people were infected by a sexual partner who likely acquired HIV through unsafe injecting drug use. However, a growing proportion of new, sexually-transmitted HIV cases involve people whose sexual partners do not have a history of injecting drug use (Grund et al., 2005). This underlines the diffuse nature of Ukraine's epidemic, with HIV now circulating within the general population and increasing numbers of women becoming infected. Women accounted for 42% of people newly-diagnosed with HIV infection in 2004 (Ukrainian AIDS Centre, 2005a). As a result, the number of children born to HIV-positive mothers continues to rise, and was over 2200 in 2004 as shown in Figure 16 (Ukrainian AIDS Centre, 2005a). However, on this front, Ukraine is making headway. The rate of mother-to-child transmission of HIV has decreased from

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2005). Safer behaviour was most common among clients of harm reduction programmes—24% of them used condoms consistently and avoided using non-sterile injecting equipment, compared to 16% of their peers who did not participate in those programmes (Ministry of Health of Ukraine, 2005). Harm reduction programmes are now being implemented in several Ukrainian regions with high HIV prevalence. Coverage of these programmes, though, remains low. Just 10% of the estimated 560 000 injecting drug users in Ukraine are covered by harm reduction programmes (Balakireva et al., 2003). Pilot programmes for substitution therapy among injecting drug users are now being implemented, but those services will have limited coverage.

Adding further impetus to the epidemic is the overlap between injecting drug use and commercial sex. In Odessa, 67% of sex workers who also injected drugs were HIV-positive, while in Donetsk, Lutsk, Poltava and Simferopol the corresponding figure ranged from 35% to 50%. HIV prevalence among non-injecting female sex workers in Odessa and Donetsk was much lower, at 17% (Ukrainian AIDS Center, 2005b). The proportion of people

28% in 2001 to less than 10% in 2003, one of the lowest in Eastern Europe (Ministry of Health of Ukraine, 2005).

Greater effort is needed to reach other vulnerable populations, such as prisoners and men who have sex with men. By the end of 2004, approximately 12 700 prisoners had been diagnosed with HIV in the country's prison system, of whom more than 3500 were still behind bars. Prisoners' knowledge of HIV is poor: according to one recent survey, only 39% knew how to prevent the sexual transmission of HIV. However, among prisoners who had been reached with prevention programmes in prison, 67% knew how to protect themselves against HIV infection (Ministry of Health of Ukraine, 2005). The epidemic among men who have sex with men is even more hidden, with only nine new cases of HIV in 2004 officially reported as sexual infections between men. Yet, there are signs that prevalence in this population group could be very high. In the first sentinel surveillance conducted among men who have sex with men, seven of 25 men in Odessa were found to be HIV-positive, as were two of the 22 men tested in Mykolaiv (Ukrainian AIDS Centre, 2005b). Knowledge and awareness

of AIDS among this population is also poor, and risky behaviour appears widespread. In a study in seven Ukrainian cities, only 55% of men said they had used a condom the last time they had sex with a man (Ministry of Health of Ukraine, 2005). Prevention activities among prisoners and men who have sex with men need to be intensified and scaled up.

Overall, in some regions of Ukraine, pilot projects appear to be encouraging safer behaviours. However, few in number and limited in scope, they are dwarfed by a large epidemic. In the absence of a scaled-up national response to the combined challenges of HIV, drug injecting and sexual risk behaviour, Ukraine's AIDS epidemic can be expected to continue expanding.

Women are increasingly affected (comprising 36% of new infections in 2004) and the epidemic is concentrated largely among people younger than 30 years. Strikingly, some 16% of HIV diagnoses in Latvia have been in teenagers (15–19 years) (AIDS Prevention Centre, 2005). The surge of new HIV cases reported in **Lithuania** in 2002 (when newly diagnosed increased fivefold in one year) appears to have subsided to some extent. Last year, 135 infections were newly reported, the vast majority of them attributable to injecting drug use (Lithuanian AIDS Centre, 2005).

In Belarus (where more than 6200 people had been diagnosed with HIV by the end of 2004) and **Moldova** (where the figure stood at over 2300), the epidemic shows no sign of slowing. Sexual

Expanding treatment access

Alongside the need for more and stronger prevention programmes stands the urgent and growing need to scale up treatment and care for the rapidly growing number of Ukrainians living with HIV, particularly those who belong to vulnerable populations. More than 17 000 people in Ukraine are estimated to be in need of antiretroviral treatment (WHO, 2005). Supported by the Global Fund, Ukraine is rapidly expanding access to antiretroviral treatment. Beginning in September 2004, more than 2400 new patients were put on treatment within one year, with 90% still alive and on treatment at six months. These programmes need to be expanded rapidly: 1138 people with AIDS died in the first seven months of 2005, almost one fifth of the total number of AIDS-related deaths to date in Ukraine (Ukrainian AIDS Centre, 2005a). The affordability of antiretroviral treatment remains a key issue. First-line regimens in Ukraine are among the cheapest in Europe currently, with prices as low as US\$ 260 per patient, per year. Keeping the price of antiretroviral medications low will determine whether treatment can be sustained and scaled-up in Ukraine.

In the Baltic states, the epidemic continues to grow but at a slower pace than in the early 2000s. The overall numbers of reported HIV infections remain low. Nonetheless, the total number of reported HIV cases in **Estonia**, the worst-affected of the Baltic states, has doubled since end-2001, reaching 4442 in 2004. Until 1999, a dozen or fewer new HIV cases were being diagnosed in Estonia annually, but in 2004, 743 new diagnoses were reported. An increasing share of infections are among women, who accounted for 33% of new HIV cases in 2004 (EuroHIV, 2005; Health Protection Inspectorate Estonia, 2005). **Latvia** is also seeing a steady rise in the total number of HIV cases, which by mid-2005 was more than six times higher than it had been in 1999 (3169 compared with 492). There are signs, though, that the epidemic's pace is slowing in Latvia, with new reported HIV infections decreasing consistently since 2001.

transmission of HIV has become much more prominent in **Belarus**, accounting for one half of newly-registered HIV cases in 2004 (Ministry of Health Belarus, 2005a). Injecting drug use remains a powerful factor as well, with recent studies among drug injectors showing HIV prevalence of 26% in Soligorsk, 31% in Minsk, and 34% in Zhlobin (Ministry of Health Belarus, 2005b). As elsewhere in the region, more than three quarters of new HIV cases are in young people (aged 30 years or less). Studies suggest that high-risk behaviour is common: some 30% of young drug injectors still use non-sterile syringes and over 50% use syringes already used by others, injecting in groups (Ministry of Health Belarus, 2005b). The **Republic of Moldova** is also seeing a decrease in the rates of HIV transmission among injecting drug users. In 2004, drug injectors accounted for 42% of HIV diagnoses, compared with 78% in

2001; more than one half of new diagnoses (55%) in 2004 were through heterosexual contact. There are also signs that HIV is circulating in diverse social networks. In sentinel surveillance studies in Chisinau, for example, almost 5% of sex workers tested HIV-positive, as have just under 2% of men who have sex with men (WHO-EURO and Pasteur Institute, 2003).

Among the **Central Asian** republics, **Uzbekistan** is experiencing the most dynamic epidemic. In 1999, just 28 HIV diagnoses were reported there; last year there were 2016 new HIV infections, bringing to more than 5600 the total number of HIV cases (EuroHIV, 2005). Injecting drug use is the driving force in this epidemic, which has its epicentre in the capital Tashkent and surrounding districts. Fuelling the epidemic is an overlap between injecting drug use and commercial sex. HIV prevalence of 10% was found among female sex workers in Tashkent in a recent study, and among women who traded drugs for sex, 28% were HIV-infected (Todd et al., 2005). **Kazakhstan's** epidemic, too, is centred on young people who inject drugs, some of whom also engage in commercial sex. Almost 4700 HIV cases had been reported there by end-2004—more than three times the total just four years earlier (EuroHIV, 2005). This trend needs to be reversed through efforts to boost knowledge of HIV and encourage lower risk behaviour among drug injectors. In sentinel surveillance studies, fewer than half of injecting drug users knew the main ways in which HIV can be transmitted, and almost 60% of them used non-sterile injecting equipment. Few programmes exist to inhibit the spread of HIV among—and beyond—drug injectors in Kazakhstan who, by some estimates, could number as many as 200 000 (Kazakhstan AIDS Center). Sexual risk-taking is also very prevalent. Just 53% of drug injectors reported using a condom the last time they had sex, and syphilis prevalence of 25% has been found in sex workers. It is not known how widespread sex between men is, but in Almaty City men who have sex with men tend not to use condoms regularly: almost one third (32%) said they never used one during penetrative sex (Kazakhstan AIDS Center, 2005). HIV has made less dramatic inroads in **Kyrgyzstan** (where an average 150 new infections have been diagnosed annually since 2000) and in **Tajikistan** (where

more than one half of all HIV diagnoses to date occurred in 2004, mainly as a result of increased testing) (EuroHIV, 2005).

In the Caucasus, meanwhile, low-key and still-relatively stable epidemics are underway in **Armenia** and **Azerbaijan**. In both cases, though, the possibility of a sudden increase in HIV transmission cannot be ruled out. Research in Azerbaijan's capital, Baku, has revealed significant HIV prevalence among drug injectors and street-based sex workers (WHO Regional Office for Europe, 2004). A pronounced shift in HIV transmission routes is being reported in Armenia where, until quite recently, most reported infections were being attributed to unsafe sex (Armenian National AIDS Center, 2005). In 2004, though, two thirds of new cases were linked to injecting drug use against a backdrop of increasing drug injecting in the country (EuroHIV, 2005).

Although few new HIV diagnoses are being reported in most of south-eastern Europe, drug injecting and sexual risk behaviour in several countries could favour swift HIV spread once the virus establishes stronger footholds. Worst-affected in this subregion is **Romania**, where new infections are attributed to unsafe sex, most of it heterosexual (EuroHIV, 2005).

Generally, in Eastern Europe and Central Asia, current HIV data reflect the situation only among those people who come into contact with HIV testing programmes. As a result, not enough is known about HIV spread among people who do not interact with the authorities and/or testing services. Thus, for example, the role of unsafe sex between men in this region's epidemics remains largely a matter for conjecture. Few studies have been conducted among men who have sex with men, who as a group face discrimination and stigma across the region. Available research points to high levels of unprotected sex, with a significant proportion of men who have sex with men also having sexual relations with women (WHO Regional Office for Europe, 2004).

The total number of people receiving antiretroviral treatment almost doubled in the 12 months up to mid-2005, from 11 000 to 20 000 people, but lags far behind the number of people in need of treatment, with the largest disease burden in the Russian Federation and Ukraine.