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# Eastern Europe and Central Asia

## AIDS epidemic update

### Regional Summary



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UNAIDS/08.11E / JC1529E (English original, March 2008)

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WHO Library Cataloguing-in-Publication Data

Eastern Europe and Central Asia : AIDS epidemic update : regional summary.

"UNAIDS/08.11E / JC1529E".

1. HIV infections - prevention and control. 2. HIV infections - epidemiology. 3. Acquired immunodeficiency syndrome - epidemiology. 4. Disease outbreaks. 5. Asia, Central. 6. Europe, Eastern. I. UNAIDS. II. World Health Organization.

ISBN 978 92 9 173668 3

(NLM classification: WC 503.4)

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# Eastern Europe and Central Asia

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Regional Summary





## Eastern Europe and Central Asia<sup>1</sup>

Nearly 90% of newly reported HIV diagnoses in this region were in two countries: the **Russian Federation** (66%) and **Ukraine** (21%). Estimated at 1.4% [0.8%–4.3%] in 2005, national adult HIV prevalence in **Ukraine** is higher than in any other country in Europe or Central Asia, and annual HIV diagnoses have more than doubled since 2001. The HIV epidemic in the **Russian Federation** also continues to grow but at a slower pace than in the late 1990s. Elsewhere, the annual numbers of newly reported HIV diagnoses are also rising in **Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, Tajikistan** and **Uzbekistan** (which now has the largest epidemic in Central Asia).

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*Nearly 90% of newly reported HIV diagnoses in Eastern Europe and Central Asia in 2006 were in two countries: the Russian Federation and Ukraine.*

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The HIV epidemics in Eastern Europe and Central Asia are concentrated mainly among injecting drug users, sex workers, their respective sexual partners and, to a lesser extent, men who have sex with men. Of the new HIV cases

reported in 2006 for which there was information on the mode of transmission, nearly two thirds (62%) were attributed to injecting drug use and more than one third (37%) were ascribed to unprotected heterosexual intercourse.

The number of reported HIV diagnoses in injecting drug users increased significantly between 2001 and 2006 in several countries, including **Azerbaijan, Georgia, Tajikistan, Ukraine** and **Uzbekistan** (EuroHIV, 2007). About two thirds of the growing numbers of HIV cases among women in the **Russian Federation** and **Ukraine** are thought to be attributed directly or indirectly to injecting drug use. Overall, in Eastern Europe and Central Asia, approximately 35% of HIV-positive women probably acquired HIV through injecting drug use, and a further 50% were probably infected by drug injecting partners (EuroHIV, 2006a). About 40% of newly registered HIV cases in Eastern Europe and Central Asia in 2006 were among women (EuroHIV, 2007). Fewer than 1% of new HIV diagnoses across the region were among men who have sex with men (EuroHIV, 2007), although the real extent to which sex between men features in some of the region's epidemics is unknown (see next section).

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<sup>1</sup> The analysis for this region is based mainly on reported HIV diagnoses. Limited data were available from actual HIV sentinel surveillance. The use of annual HIV diagnoses to monitor the HIV epidemic has significant limitations. For example, this yardstick does not represent the total incidence, because it may include infections that occurred several years earlier; also, it only captures those people that have been tested. HIV trends based on reported HIV cases can therefore be skewed by changes in the HIV testing intake or in patterns of reporting. Where possible, this analysis alerts readers to instances where such changes have occurred.

## Russian Federation

The HIV epidemic in the **Russian Federation** continues to grow, though not as rapidly as in the late 1990s. The annual number of newly registered HIV cases declined between 2001 and 2003 (from a peak of 87 000 to 34 000), but has risen again subsequently. In 2006, 39 000 new HIV diagnoses were officially recorded, bringing the total number of HIV cases registered in the **Russian Federation** to about 370 000 (AIDS Foundation East-West, 2007; EuroHIV, 2007). Those officially documented HIV cases represent only those persons who have been in direct contact with the **Russian Federation's** HIV reporting system. The actual number of people estimated to be living with HIV is considerably higher, and was estimated to be 940 000 [560 000–1.6 million] at the end of 2005 (UNAIDS, 2006a).

Although the HIV epidemic is affecting all of the **Russian Federation's** regions, it has been concentrated largely in urban and industrial centres. A large proportion (59%) of HIV cases reported to date have been in 10 major cities and regions: the cities of Saint Petersburg and Moscow, the regions of Chelyabinsk, Irkutsk, Leningrad, Moscow, Orenburg, Samara, Sverdlovsk and Khanty Mansiisk autonomous republic (AIDS Foundation East-West, 2007).

Injecting drug use remains the main mode of HIV transmission in the **Russian Federation**. Of the newly registered HIV cases in 2006 where the mode of transmission was known, two thirds (66%) were due to injecting drug use and about one third (32%) to unprotected heterosexual intercourse (Ladnaya, 2007). The latter proportion, though, has been increasing steadily since the late 1990s, especially in areas with comparatively mature epidemics. In Orenburg, for example, 64% of newly registered HIV cases in 2006 were attributed to sexual intercourse (Zebzeeva, 2007).

Overall, women comprised about 44% of newly registered HIV cases in 2006 (Russian Federal AIDS Centre, 2007). National HIV prevalence among pregnant women is still low and was estimated at 0.4% in 2005 and 2006 (Ladnaya, 2007), although prevalence of 1% or more has been recorded in some areas, including Saint Petersburg and Orenburg (Lazutkina, 2007; Volkova, 2007). Substantial proportions of HIV-positive women—ranging from one in seven to

one in two in a recent five-region study—have reported injecting drugs (WHO, 2007). Most other HIV-positive women are believed to have acquired HIV through unprotected sex with injecting drug users.

It is estimated that between 1.5 million and 3 million (or 1%–2%) of the **Russian Federation's** population (141.4 million) are injecting drug users (Rhodes et al., 2006), and that most of them (about two thirds or more, depending on the location) are male (DfID, 2006). Nevertheless, a significant percentage are female—about one third (34%) in Moscow and one quarter (24%) in Volgograd, according to various studies (DfID, 2006).

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*National adult HIV prevalence in Ukraine is higher than in any other country in Europe or Central Asia.*

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Large proportions of injecting drug users use non-sterile injecting equipment, which carries a high risk of HIV transmission. In Saint Petersburg, 79% of the 900 injecting drug users enrolled in one study said they had used non-sterile needles (Kozlov et al., 2006). About 60% of the injecting drug users surveyed in Barnaul (Siberia), Moscow and Volgograd said they had injected drugs with previously used syringes or needles, and one in seven (14%) had done so in the previous four weeks. Most (84%) had used other non-sterile injecting paraphernalia in the previous month (DfID, 2006). In the Samara and Saratov oblasts, use of non-sterile injecting equipment was less frequent (about 15% of injecting drug users had used someone else's equipment in the previous 12 months), but more than two thirds had used other non-sterile injecting equipment (such as filters and containers) (Population Services International, 2007a). Among 520 injecting drug users followed for 12 months in a study in Saint Petersburg, HIV incidence was 4.5% (Kozlov et al., 2006). Estimated HIV prevalence varied from 3% in Volgograd to 9% in Barnaul and 14% in Moscow (DfID, 2006). Other studies have found HIV prevalence of 30% among injecting drug users in Saint Petersburg (Shaboltas et al., 2006) and more than 70% in Biysk (Pasteur Scientific and Research Institute of Epidemiology, 2005). Up to two thirds of the injecting drug users testing

HIV-positive in such studies were unaware that they had been infected (Rhodes et al., 2006).

New research also highlights the importance of social relations within networks of injecting drug users. For example, all the new injecting drug users participating in another Saint Petersburg study had been recruited by older, long-term injecting drug users, many of whom were likely to have already been HIV-positive. Newcomers using non-sterile injecting equipment or having sex with their “mentors” faced very high risks of exposure to HIV (Stormer et al., 2006).

The high prevalence of syphilis and other sexually transmitted infections found in injecting drug users suggests that unprotected sex is commonplace. In Barnaul, Moscow and Volgograd, between one half and two thirds of injecting drug users participating in studies had had more than two sexual partners in the previous 12 months. Between one half and three quarters of them had not consistently used condoms with non-paying sexual partners in the previous month. Sex between persons who inject drugs and those who do not is common, which underlines the possibility of HIV transmission from injecting drug users to the wider population (DfID, 2006).

The sexual transmission of HIV from male injecting drug users to their female partners is especially evident in Moscow, Saint Petersburg, the Sverdlovsk region of the Urals and in the central **Russian Federation**. Indeed, there is a substantial overlap between sex work and injecting drug use in this country's HIV epidemic. Four in 10 (39%) female sex workers in Samara oblast said that they had injected drugs (Population Services International, 2007b), as did 37% in a Saint Petersburg study (Benotsch et al., 2004), and up to 30% of sex workers participating in other studies (Rhodes et al., 2004). Sex with a non-regular partner was common. Almost half the sex workers who were injecting drug users in the Saint Petersburg study said that they had used injecting equipment with others (Benotsch et al., 2004); also, among the Samara sex workers, only two thirds (67%) said that they had consistently used condoms during paid sex, and only one quarter (24%) had done so with non-paying partners (Population Services International, 2007b).

There have been moves to develop prevention and treatment programmes inside the country's correctional system, where a large proportion of the

prison population are current or former injecting drug users (DfID, 2006). A study in Moscow has identified high HIV prevalence among prisoners, and found that a history of imprisonment was significantly associated with increased risk of HIV infection (DfID, 2006). Nationally, HIV prevalence among prisoners reached an estimated 4.3% in 2006 (Ladnaya, 2007).

In 2006, fewer than 1% of newly registered HIV cases in which the mode of transmission was known were attributed to unsafe sex between men (EuroHIV, 2007), but this possibly underestimates the extent to which HIV has been transmitted among men who have sex with men in the **Russian Federation's** epidemic.

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*The HIV epidemic in the Russian Federation continues to grow, but at a slower pace than in the late 1990s.*

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Research among men who have sex with men has revealed significant risk-taking that can increase the chances of acquiring HIV. In a survey carried out in nine regions of the country among men who have sex with men, 22% had bought sex, 10% had exchanged sex for some form of compensation and 2% had injected drugs. Condom use was relatively infrequent: more than one in three men (38%) did not use condoms with permanent partners, and four in ten (42%) did not use them with commercial partners (Population Services International, 2007c). An earlier survey in Saint Petersburg among men visiting nightclubs for homosexuals found that more than one in five of the men had bought or sold sex, yet fewer than half (46%) of them regularly used condoms (Amirkhanian et al., 2001, 2004). HIV prevalence among men who have sex with men varies from place to place. In Nizhni Novgorod, about one in ten (9%) men who have sex with men were found to be HIV-positive in 2006 (Ladnaya, 2007), but lower HIV prevalence has been found in Yekaterinburg (4.6%), Saint Petersburg (3.8%) and Moscow (0.9%) (Smolskaya et al., 2004; Smolskaya, 2006).

The lack of sexual behaviour information for the general population in the **Russian Federation** makes it difficult to gauge the extent to which sexual transmission of HIV might progress, independent of HIV spread among injecting drug

users and their partners. The likely evolution of the overall epidemic is therefore difficult to predict.

The Russian Longitudinal Monitoring Survey conducted among more than 6000 Russians between 1992 and 2003 found low rates of HIV-related risky sexual behaviours in the general population. Only 5% of participants reported having had sex without a condom with two or more partners in the previous 12 months, and although 2% said they had injected drugs at some point in their lives, only 0.2% said they had done so in the previous month. The study also suggests that younger population groups might be adopting safer sexual behaviour, compared with 30–40-year-olds (DfID, 2006). However, other evidence indicates that young people are becoming sexually active at earlier ages, and that they rarely use condoms. On average, 14–20-year-olds began having sex before their 16th birthday; whereas, on average, 30–40-year-olds had not had sex until they were 18 years old. In addition, almost two thirds (63%) of sexually active 14–20-year-olds said

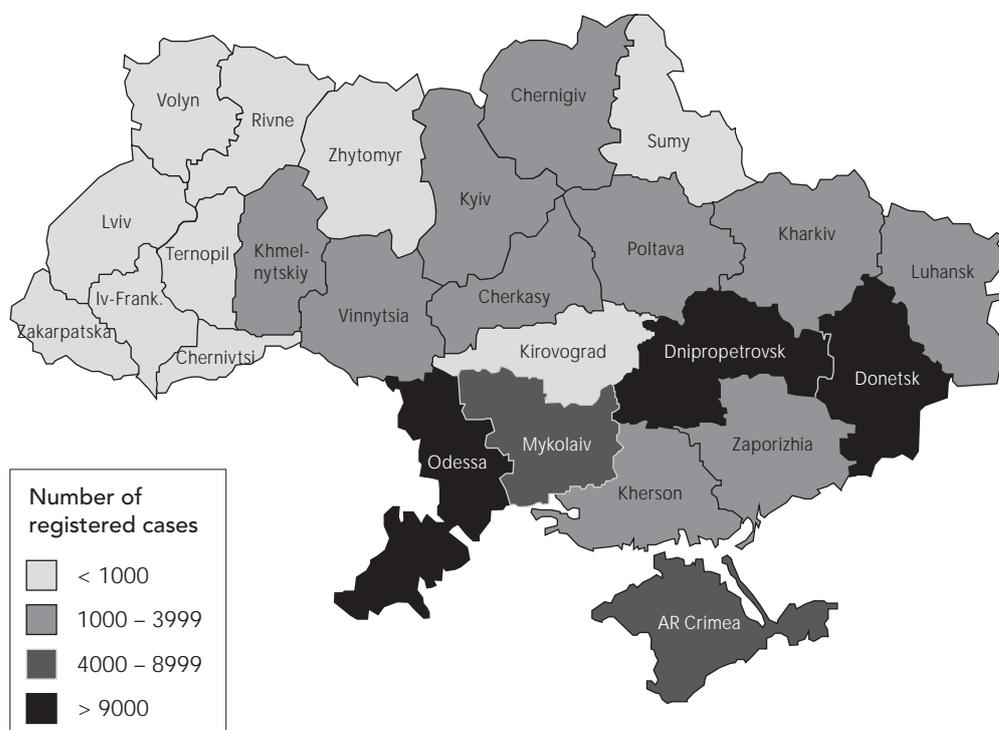
they had not used a condom the last time they had sex (Vannappagari & Ryder, 2004).

## Ukraine

Estimated at 1.46% [0.8%–4.3%] in 2005, **Ukraine** has the highest adult HIV prevalence of any country in Europe or Central Asia (UNAIDS, 2006a). Annual HIV diagnoses have more than doubled since 2001, reaching 16 094 in 2006 and exceeding 8700 in the first six months of 2007 (Ministry of Health of Ukraine, 2007). By mid-2007, a total of 113 000 cases of HIV infection had been reported since the beginning of the epidemic in 1987. As elsewhere in the region, official figures understate the actual size of the epidemic because they only reflect infections among people who have been in direct contact with official testing facilities. The actual number of people living with HIV is agreed to be considerably higher, and was estimated at 377 600 [250 000–680 000] at the end of 2005 (Ministry of Health of Ukraine, 2006).

Figure 1

HIV infection in Ukrainian regions\*, 2007



\* Data on number of officially registered cases of HIV infection currently under medical care at the regional level in Ukraine as of 01 July 2007.

Source: Ukrainian AIDS Centre, 2007.

South-eastern **Ukraine** continues to be the most affected area, especially the regions of Dnipropetrovsk, Donetsk, Mikolaiv and Odessa, as well as the Autonomous Republic of Crimea. These regions, together with the capital city, Kiev, represent more than 70% of all registered cases of HIV currently in **Ukraine** (Ministry of Health of Ukraine, 2007). However, HIV infection is also spreading rapidly in several central and western regions. In 2006, Kherson, Sumy, Ternopil, Kiev oblast and the Crimean port city of Sevastapol reported increases of more than 50% in the number of newly registered HIV cases (Ministry of Health of Ukraine, 2007).

Injecting drug use remains the main mode of HIV transmission, and the number of injecting drug users newly diagnosed with HIV infection increased from 3964 in 2001 to 7127 in 2006 (EuroHIV, 2006b, 2007). In the first half of 2007, 3639 new cases of HIV infection were reported among injecting drug users—the largest increase among any population in **Ukraine**—indicating that injecting drug use remains the driving force behind the spread of HIV in the country (Ministry of Health of Ukraine, 2007). Exceptionally high HIV prevalence has been found among injecting drug users and female sex workers. In recent HIV sentinel surveys in six cities in 2007, HIV prevalence among injecting drug users ranged from 10% in Lugansk to 13% in Kiev, and 89% in Krivoi Rog (Ukrainian Institute for Social Research et al., 2007a). HIV prevalence among sex workers ranged from 4% in Kiev to 24% in Donetsk and 27% in Mikolayev (Booth et al., 2006; Ministry of Health of Ukraine, 2007).

Most injecting drug users are sexually active, and risky sexual behaviours are common among them, increasing the opportunities for HIV transmission. In two recent surveys, 73% and 81% of Ukrainian injecting drug users reported having had sex in the previous month, and a little more than one third (37% and 38%) of those surveyed reported they had used a condom during that period (Booth et al., 2006; International HIV/AIDS Alliance in Ukraine, 2007).

As in the **Russian Federation**, a significant overlap exists between injecting drug use and sex work (WHO, 2006a). Consequently, a growing proportion of new HIV diagnoses can be attributed to unprotected heterosexual intercourse: 35% in 2006, compared with 28% in

2001 (Ministry of Health of Ukraine, 2007). The largest proportion of these new HIV infections is directly attributable to unprotected sex with an injecting drug user. An ongoing behavioural study of people who had become HIV-positive in 16 regions of **Ukraine** noted that pregnant women who reported sexual contact with an injecting drug user had a sevenfold increase in the likelihood of transmission (Bolshov et al., 2007). Among these respondents, only 6% of newly infected women reported consistent condom use with their regular sexual partner. In contrast, sexual contact with an injecting drug user was not a significant factor for men recently infected through sexual transmission, with only 6% of men reporting sex with a female injecting drug user in the last year. Prevention programmes in Ukraine tend to have a more widespread coverage than those of other countries in this region. For example, 46% of injecting drug users and 69% of female sex workers reported that they were covered by at least one HIV prevention service in the last 12 months (Ukrainian Institute for Social Research, 2007b).

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*Across this region, the HIV epidemics are concentrated mainly among injecting drug users, sex workers and their respective sexual partners.*

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The number of pregnant women diagnosed with HIV has doubled since 2002, and reached 3207 in 2006 (Ministry of Health of Ukraine, 2007). Nationally, HIV prevalence among pregnant women is among the highest in Europe, and was estimated at 0.33% in 2006, having risen from 0.002% in 1995 (EuroHIV, 2006b). However, **Ukraine** has taken substantial steps to limit HIV transmission from mothers to children. In 2006, 95% of all pregnant women were tested for HIV, and 93% of HIV-positive women who delivered babies have been receiving antiretroviral prophylaxis to prevent HIV transmission during pregnancy and delivery (Zhilka, 2007). As a result, the national mother-to-child transmission rate has been reduced to 7%, with rates as low as 4% at some sites (European Collaborative Study, 2006; Zhilka, 2007).

In 2006, only 35 HIV cases were officially reported among men who have sex with men,

representing more than one third of the 110 cases officially registered since 1987. Recent research has revealed the extent of the previously hidden epidemic among men who have sex with men in **Ukraine**. A study in four cities found HIV prevalence ranging from 4% in the capital, Kiev, to 23% in the city of Odessa. Among the HIV-positive men in this study, only 34% reported condom use the last time they had sex with a male partner (Ukrainian Institute for Social Research et al., 2007a).

## Central Asia

Newly reported HIV cases have increased in several of the Central Asian republics. In **Uzbekistan**, which now has the largest epidemic in Central Asia, the number of newly reported HIV diagnoses rose exponentially between 1999 and 2003, from 28 to 1836. Since then, the number of newly reported HIV infections has grown at a slower pace, and reached 2205 in 2006 (EuroHIV, 2007). The number of registered HIV infections in injecting drug users more than doubled between 2002 and 2006, from 631 to 1454 (EuroHIV, 2007), and almost one in three (30%) injecting drug users tested HIV-positive in a study in Tashkent between 2003 and 2004 (Sanchez et al., 2006).

In **Uzbekistan**, the epidemic is likely to continue to grow, given the high level of injecting drug use and sex with non-regular partners. For example, a wide-ranging study in 14 administrative territories in 2005 found that one third (33%) of injecting drug users used non-sterile equipment the last time they injected drugs, and almost two thirds (61%) did not use a condom the last time they had sex with a non-regular partner. More than one third (35%) of sex workers surveyed across the country did not use condoms consistently, and one in 20 (5%) also injected drugs. When surveyed, 39% of men who have sex with men said they did not use condoms consistently with non-regular male partners, and 58% did not use them with female partners. Almost 40% of the men said they had experienced symptoms of sexually transmitted infections in the previous six months (Ministry of Health Uzbekistan, 2007). HIV prevalence of 10% was found among sex workers (Todd et al., 2006) and 11% among men who have sex with men, in Tashkent in 2005 (Ministry of Health Uzbekistan, 2007).

In **Kazakhstan**, newly registered HIV cases increased from 699 in 2004 to 1745 in 2006 (EuroHIV, 2007). The increase can be attributed in part to expanded HIV testing (including testing in correctional settings, among most-at-risk groups and among pregnant women), although a nosocomial HIV outbreak infecting more than 130 children in the south of the country was reported in 2006 (AIDS Center of the South-Kazakhstan Oblast, 2007). The majority of new cases have been reported in five territories: Almaty city and South-Kazakhstan oblast (in the south), Karaganda oblast (in the centre), and Pavlodar and East-Kazakhstan oblasts (in the north-east). Injecting drug users accounted for two in three (66%) new, reported HIV infections in 2006. High HIV prevalence has been found among this population; for example, 17% of injecting drug users participating in a 2005 study in Temirtau were HIV-positive (Ministry of Health Kazakhstan et al., 2005). Sentinel surveillance in 23 towns and cities across the country in 2005 indicated that a little more than 3% of injecting drug users nationally were infected with HIV (Republican Centre for AIDS Prevention and Control, 2005).

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*The annual number of newly reported HIV diagnoses are rising in Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation, Tajikistan, Ukraine and Uzbekistan.*

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Also centred largely on injecting drug use, the HIV epidemics in **Kyrgyzstan** and **Tajikistan** are considerably smaller than those in the other countries of the region, though the numbers of annual, newly registered HIV cases are rising gradually. In **Tajikistan**, annual, newly diagnosed HIV infections increased from seven in 2000 to 41 in 2003 and 204 in 2006, and in **Kyrgyzstan** they increased from 16 in 2000 to 132 in 2003 and 244 in 2006 (EuroHIV, 2007). In **Tajikistan**, an estimated 4900 people were living with HIV in 2005 (UNAIDS, 2006b), most of them injecting drug users (EuroHIV, 2007). HIV prevalence among injecting drug users increased from 16% in 2005 to 24% in 2006 in the cities of Dushanbe and Khujand. Also of concern is the sudden rise in prevalence among sex workers in those same cities (from 0.7% to 3.7% over the

same period). Indeed, about 18% of new HIV cases reported in 2006 were attributed to unsafe sex, up from 9% in 2004. Many of these cases probably involved the partners of injecting drug users (Ministry of Health Tajikistan, 2007).

In **Kyrgyzstan**, which is located on a major drug trafficking route from **Afghanistan** to Europe and the **Russian Federation**, the HIV epidemic is also concentrated largely among injecting drug users. A total of 1315 HIV cases have been reported in **Kyrgyzstan** since its epidemic began. Sentinel surveys in Bishkek and Osh found HIV prevalence of 0.8% among injecting drug users, 3.5% among prisoners, 1.3% among female sex workers and 1% among men who have sex with men in 2006 (Ministry of Health Kyrgyzstan, 2007). The high levels of syphilis found among sex workers (40%), men who have sex with men (23%), prisoners (16%) and injecting drug users (12%) suggest that safe sex is infrequent, making it likely that sex is the main route for transmission of HIV, especially from injecting drug users to their sexual partners (Republic AIDS Centre, 2005). Only two cases of HIV have been officially reported in **Turkmenistan**, and little is known about the prospects for HIV transmission there (EuroHIV, 2007).

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*Uzbekistan now has the largest epidemic in Central Asia, and the epidemic is likely to continue to grow, given the high level of injecting drug use and sex with non-regular partners.*

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The HIV epidemic in **Belarus** may have stabilized, with the annual number of newly reported

HIV diagnoses varying only slightly since 2003 (between 713 and 778) (EuroHIV, 2007). Most new HIV infections are being reported in and around the capital, Minsk, and in the provinces of Brest and Vitebsk (Ministry of Health Belarus, 2007). Here, too, the epidemic is largely concentrated among injecting drug users, with a high HIV prevalence found in this population: 34% in Zhlobine, 31% in Minsk, 23% in Soligorsk, 20% in Rechitza and 17% in Gomel (WHO, 2006c). However, increasing numbers of new HIV cases are attributed to unprotected sex (157 in 2001, rising to 464 in 2006), and more women are being affected by HIV. In wide-scale HIV testing in 2006, 80% of new HIV cases in women were attributed to unsafe sex (up from about 56% in 2003) (Ministry of Health Belarus, 2007). Most of the persons infected with HIV during sex probably acquired the virus from sexual partners who were infected through injecting drug use (WHO, 2006c). With HIV prevalence of about 1% found among female sex workers, unsafe paid sex appears to be a minor factor in the epidemic. About 10% of sex workers also injected drugs in 2006, although condom use levels were relatively high (in 2006, 70% of sex workers said they used a condom at last paid sex) (Republican Center for Hygiene, Epidemiology and Public Health, 2007).

Increasing numbers of new HIV cases are being reported in each of the Caucasian republics. In **Georgia**, more than half (60%) of the 1156 registered HIV cases to date were reported in the past three years (2004–2006), and the annual number of newly registered HIV infections has risen each year (EuroHIV, 2007). Most people living with HIV reside in the capital, Tbilisi, and in the west of the country (especially in Batumi

#### PUSHING AHEAD WITH HARM REDUCTION

Wide-scale availability of harm-reduction programmes has slowed or reversed HIV infection trends among injecting drug users in Western Europe. Unfortunately, the belated introduction of such programmes in Eastern Europe and Central Asia allowed the HIV epidemics to grow (Sarang, Stuijckte & Bykov, 2007). This situation has been changing, though. In the **Russian Federation**, more than 50 needle- and syringe-exchange projects were operating in 2007, and in **Kazakhstan**, a nationwide programme of more than 120 harm-reduction sites had been set up by 2005 (Aceijas et al., 2007). Some countries have introduced pilot projects for treatment with opioid substitutes; these include **Azerbaijan**, **Georgia**, **Kazakhstan**, **Kyrgyzstan**, the **Republic of Moldova** and **Uzbekistan** (European Monitoring Center for Drugs and Drug Addiction, 2007). These activities need to be scaled up, and integrated into comprehensive harm-reduction programmes (Open Health Institute, 2006; Sarang, Stuijckte & Bykov, 2007).

and Zugdidi). HIV prevalence found in most-at-risk populations is still low (1.3% in female sex workers and 1.1% in injecting drug users). But the rising numbers of newly reported HIV infections, widespread injecting drug use and frequent cross-border movement of persons to and from higher-prevalence countries, such as the **Russian Federation** and **Ukraine**, suggest that **Georgia's** epidemic will continue to grow unless more effective prevention programmes are introduced (WHO, 2006d).

Similar patterns are evident in **Armenia's** smaller epidemic (EuroHIV, 2007), where most reported HIV infections have been among injecting drug users (almost all of them men). HIV prevalence of about 9% was found among injecting drug users, whereas prevalence of less than 2% was found among female sex workers (Armenian National AIDS Foundation, 2006). More than half (56%) of the HIV infections identified to date have been in the capital, Yerevan (WHO, 2006e).

Almost half (47%) of all HIV infections documented in **Azerbaijan's** relatively recent

epidemic were reported in 2005–2006 (EuroHIV, 2007). Almost half of the HIV cases registered by 2006 were in the capital, Baku, where 13% of injecting drug users tested HIV-positive in a 2003 survey. Injecting drug use is widespread, and most HIV infections reported to date have been attributed to exposure to non-sterile drug injecting equipment. About 0.1% of the adult population injects heroin, according to the United Nations Office on Drugs and Crime (WHO, 2006f). In addition, high prevalence of HIV (9%) and other sexually transmitted infections (9% syphilis and 63% chlamydia) has been found among female sex workers, among whom condom use appears to be infrequent (WHO, 2006f).

Newly reported HIV cases in the **Republic of Moldova** have more than doubled since 2003, numbering 621 in 2006 (EuroHIV, 2007). Most HIV cases are concentrated in the districts of Balti and Chisinau, and in Transnistria (mostly in Tiraspol) (WHO, 2006f). More than half (59%) of HIV infections reported in 2006 were attributed to unprotected sexual transmission (EuroHIV, 2007).

#### SAFEGUARDING BLOOD SUPPLIES

Screening of blood donations for HIV also needs to be improved. In **Tajikistan**, for example, 1.8% of registered HIV cases are thought to have been due to blood transfusions (Ministry of Health Tajikistan, 2007), and in **Ukraine**, 0.13% of HIV cases have been due to HIV-infected blood donations (Eurosurveillance Editorial Team, 2007). Although low in Western and Central Europe, HIV prevalence in blood donations has increased in Eastern Europe and Central Asia—from less than one HIV-infected donation per 100 000 in 1995 to 40.3 per 100 000 in 2004. The trend reflects the growing HIV epidemics in this region, and underlines the need to make sure that all blood donations are accurately screened for HIV (EuroHIV, 2006b).



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UNAIDS, the Joint United Nations Programme on HIV/AIDS, brings together the efforts and resources of ten UN system organizations to the global AIDS response. Cosponsors include UNHCR, UNICEF, WFP, UNDP, UNFPA, UNODC, ILO, UNESCO, WHO and the World Bank. Based in Geneva, the UNAIDS secretariat works on the ground in more than 80 countries worldwide.

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