

PROGRESS REPORT | 2011

HIV/AIDS in Europe and central Asia



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2011 progress report

Acknowledgements

This report was prepared by the Joint United Nations Programme on HIV/AIDS (UNAIDS) Regional Support Team for Europe and Central Asia with the World Health Organization (WHO) Regional Office for Europe, on behalf of the regional offices of the UNAIDS Cosponsors in Europe and central Asia.

Input from the Regional Consultation on Universal Access to HIV Prevention, Treatment, Care and Support in Europe and Central Asia held in Kyiv, Ukraine, in March 2011 forms the basis for this report and its recommendations.

The authors wish to acknowledge the contributions made by these organizations:

United Nations Office on Drugs and Crime (UNODC); Global Fund to Fight AIDS, Tuberculosis and Malaria; United Nations Children's Fund Office for Central and Eastern Europe and the Commonwealth of Independent States; United Nations Population Fund Office for Eastern Europe and Central Asia; the Ministry of the Interior, Spain; Global Network of People Living with HIV (GNP+); International HIV/AIDS Alliance in Ukraine; International Labour Organization (ILO); GBCHealth; Russian Health Care Foundation; United Nations Development Programme; International Planned Parenthood Federation; United Nations Educational, Scientific and Cultural Organization (UNESCO); East Europe & Central Asia Union of PLWH (ECUO); Eurasian Harm Reduction Network; European AIDS Treatment Group.

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Abbreviations

AIDS	acquired immunodeficiency syndrome
ECDC	European Centre for Disease Prevention and Control
EU	European Union
HIV	human immunodeficiency virus
ILO	International Labor Organization
IOM	International Organization for Migration
NGO	nongovernmental organization
PLHIV TB	people living with HIV tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
UNODC	United Nations Office on Drugs and Crime
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
WHO	World Health Organization
UNDP	United Nations Development Programme

Foreword

In 2006, a quarter of a century after the first case of HIV was identified, the United Nations Member States met to assess the international response to the epidemic, as articulated in their 2001 Declaration of Commitment on HIV/AIDS. At this meeting, world leaders pledged to provide universal access to comprehensive HIV prevention, treatment, care and support. Since then, many countries in Europe and central Asia have made achieving universal access a public health priority.

In June 2011 at the United Nations High Level Meeting on AIDS, Member States unanimously adopted a new declaration (A/RES/65/277), Political Declaration on HIV/AIDS: Intensifying our Efforts to Eliminate HIV/AIDS, setting bold new targets and calling on Member States to redouble efforts to achieve by 2015 universal access to HIV prevention, treatment, care and support, with a view to attaining Millennium Development Goal 6. The declaration is also commendable for recognizing key populations at higher risk of HIV infection and transmission, including men who have sex with men, people who inject drugs, and sex workers.

Member States have committed to:

- halve sexual transmission of HIV by 2015;
- reduce transmission of HIV among people who inject drugs by 50% by 2015;
- ensure no children are born with HIV by 2015;
- increase access to antiretroviral therapy so that 15 million people are receiving life-saving treatment by 2015; and
- halve tuberculosis (TB) deaths among people living with HIV by 2015.

In preparation for the High Level Meeting on AIDS, the Regional Consultation on Universal Access to HIV Prevention, Treatment, Care and Support in Europe and Central Asia was held in Kyiv, Ukraine, to review progress towards universal access, to formulate new goals for 2015 and to discuss how to transform national political leadership into effective evidence-informed actions; to plan prevention, treatment and care services; and to increase access to and the uptake of essential services for people living with or at high risk for contracting HIV infection. Two hundred people from 30 countries, including representatives from government, civil society, multilateral agencies and donors, participated in the two-day consultation, which forms the basis for this report.

Although Europe and central Asia has made universal access a high priority, the region is one of only two in which the incidence of HIV infection continues to rise. An estimated 2.3 million people were living with HIV in Europe and central Asia in 2010, more than twice the 2001 estimate. The rise has primarily occurred in eastern parts of the region, where prevalence of HIV infection among adults has increased to an estimated 0.9% in 2010, three times the 2001 figure. The estimated prevalence in the west and centre of the region has remained stable at 0.2%. HIV prevalence of 1% or more has been reported in three countries in the region (Estonia, the Russian Federation and Ukraine). Despite expanded provision of antiretroviral therapy, mortality continues to increase.

During the past decade, understanding of the interventions needed to reduce mortality and morbidity among people living with HIV has improved significantly. The diverse national and community responses in the region provide ample opportunity to learn from other countries' experiences. It is time to increase collaboration and strengthen partnerships among governments in the centre, east and west, people living with HIV, communities and civil society organizations.

In this period of global financial constraint, sound evidence-informed investment has never been more crucial. The case for scaling up national investment in HIV efforts is strong, and countries have responded to some extent. Nevertheless, the region still faces challenges to identify and deliver cost-effective, high-impact services. The vertical nature of programmes keeps HIV in isolation and creates a significant barrier to universal access. Integrating HIV and sexual and reproductive health, primary health care, provider-initiated HIV testing and counselling, and drug and TB programmes at the policy, systems and service levels is needed to make universal access a reality.

The most difficult challenge will be to develop the political will to mobilize investment for the interventions that address the needs of population groups most affected by the epidemic, however controversial this may be. Europe and central Asia has a series of concentrated epidemics that can be controlled only by addressing the needs of key populations at higher risk of HIV infection and transmission.

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Executive summary

The global response to HIV lies at a critical juncture. The prospect of bringing under control the most severe epidemic in modern times is more than a pipe dream. Tremendous progress has been made in stabilizing and reducing rates of infection in many parts of the world, while the ability of antiretroviral therapy to block transmission has the potential to transform prevention efforts. But amid this promising outlook, dark clouds still hover. Entrenched obstacles and rising challenges threaten to undermine the gains made over the past decade, perhaps never more so than in Europe and central Asia.

On the positive side, universal access has been made a high priority and understanding of the interventions needed to reduce mortality and morbidity among people living with HIV improved markedly. In the west and centre of the region, HIV prevalence has remained stable since 2001.

But the progress has been patchy. Improvements in some settings have been offset by regressions in others. Europe and central Asia is one of only two regions in which HIV infections continue to rise. An estimated 2.3 million people were living with HIV in the region in 2010, more than twice the 2001 estimate. The rise has primarily occurred in eastern parts, where HIV infection among adults has increased an estimated threefold since 2001.

Indeed, the region's east has some of the fastest-growing epidemics in the world. Sexual transmission is on the rise, while the number of women newly diagnosed with HIV infection nearly doubled in the five years to 2009. Stigma and discrimination mean key populations at higher risk of contracting HIV find it difficult to access the services they need, while misplaced policy and funding arrangements mean increasingly scarce resources are often not targeted at the people most in need of them.

In March 2011, 200 representatives gathered in Kyiv for the Regional Consultation on Universal Access to HIV Prevention, Treatment, Care and Support in Europe and Central Asia to review progress in the response and set out a fresh agenda for the period to 2015.

Topics discussed included the challenges for HIV prevention programmes, particularly for key populations at higher risk of infection and transmission, sustainability of funding, the role of civil society, gender issues, and stigma and human rights.

The ensuing recommendations discussed in detail in chapter four, included mechanisms for future regional cooperation and contributed to the Report of the Secretary-General at the 2011 United Nations High Level Meeting on AIDS in New York that was held two months later.

The recommendations form a bold framework of action, comprising nine overarching priorities that broadly follow the targets laid out in the Political Declaration on HIV/AIDS: Intensifying our Efforts to Eliminate HIV/AIDS. This was unanimously adopted at the High Level Meeting to help countries reach their targets for universal access to HIV prevention, treatment, care and support, to halt and reverse the spread of HIV and contribute to the achievement of the Millennium Development goals. The regional priorities outline how countries in Europe and central Asia can tackle the challenges specific to their epidemics in order to achieve the global vision.

This ambitious set of regional targets includes a commitment to provide treatment to 80% of eligible people and to provide comprehensive service packages to address transmission of HIV through injecting drug use and sexual contact. To lower transmission rates, a comprehensive package of

services must be provided to people who inject drugs and other key populations at higher risk: sex workers, men who have sex with men, transgender people, prisoners, migrants and the sexual partners of people in these populations.

Countries will be encouraged to take greater ownership of their response to the epidemic by contributing a bigger proportion of HIV funding from their own national budgets. This need not be onerous. Directing resources towards priority interventions for key populations at risk and minimising the cost of antiretroviral treatment by procuring drugs at the most competitive prices – the Global Fund’s Voluntary Pooled Procurement mechanism offers a valuable tool – will significantly increase the cost-effectiveness of HIV programmes. In Ukraine, for example, antiretroviral prices have dropped substantially and drug quality increased as a result of civil society successfully challenging the state monopoly on drug purchases. The Russian Federation, where the cost of treatment is currently 5–10 times more than global averages, would do well to follow suit.

By 2015 new infections among children will be eliminated. Prevention of mother-to-child transmission will need to focus on hard-to-reach groups at higher risk and those most vulnerable to HIV infection and transmission, such as pregnant women who inject drugs or sell sex, illegal migrants and prisoners. The potential benefits of broadening access to antenatal-care services are enormous. Late presentation to services contributes to 30% of infants acquiring HIV infection, while ensuring that all pregnant women living with HIV receive the recommended combination of antiretroviral drugs would result in a 22% reduction in infant infection.

Laws that criminalize key populations at higher risk, and the stigma and discrimination that contribute to the rising rates of infection among the same groups, including vulnerable women and girls, will also be eliminated. Finally, as part of the effort to link the HIV response with broader health initiatives, TB deaths will be halved among people living with HIV.

Achieving these targets will not be easy, but they are the only way forward if the MDGs are to be achieved by 2015. It will require strong, enlightened political leadership that champions equity and human rights and addresses the needs of population groups most affected by the epidemic, even when such a targeted approach may be controversial in light of traditional beliefs and past policies and practices; historical prejudices must be abandoned. Regional leaders must move forward on the basis that Europe and central Asia has a series of concentrated epidemics that can be controlled only by addressing the needs of key populations at higher risk of HIV infection and transmission.

AIDS has united the international community like no other crisis in recent times and this cooperation must be nurtured further so that all stakeholders in the response – governments in the centre, east and west of the region learning from each other’s experiences, people living with HIV, communities and civil society organizations – are brought together in a spirit of shared responsibility to work towards the one objective, to realize the vision of a world with zero HIV infections, zero discrimination and zero AIDS-related deaths.

Regional Consultation on Universal Access to HIV Prevention, Treatment, Care and Support in Europe and Central Asia set targets by 2015:

- Antiretroviral therapy for 80% of people in need.
- Comprehensive intervention package for injecting drug users.
- Comprehensive service package to address sexual transmission.
- More domestic funds for priority interventions.
- No mother-to-child transmission.
- Decriminalize key populations at higher risk.
- Migrants have universal access to prevention, treatment, care and support.
- No discrimination, no denial of rights.
- TB mortality halved.

Introduction: monitoring progress in national HIV responses – data sources and methods

In adopting the 2001 Declaration of Commitment on HIV/AIDS, Member States of the United Nations agreed to regularly report on progress in preventing people from acquiring HIV infection, increasing access to treatment and mitigating the impact of the epidemic. With the adoption of the Political Declaration on HIV/AIDS in 2006, progress on realizing universal access to HIV prevention, treatment, care and support by 2010 was added to the monitoring process. As part of this review process and on behalf of the United Nations Secretary-General, the United Nations Joint Programme on HIV/AIDS (UNAIDS) requested that all Member States provide country progress reports against a set of standardized core indicators.

Indicators

The complete set of indicators used for United Nations General Assembly Special Session on HIV/AIDS (UNGASS) reporting, including definitions, is available in *Monitoring the Declaration of Commitment on HIV/AIDS: guidelines on the construction of core indicators: 2010 reporting (1)*.

Registered and estimated cases

To describe these diverse epidemics, two primary sources of information are provided here: HIV case-reporting data (people diagnosed with and reported to be infected with HIV); and HIV prevalence and incidence estimates (estimated number of people who have acquired HIV infection).

Many countries in Europe and central Asia have well-developed HIV case-reporting systems. They provide actual counts of the number of people living with HIV who have been identified through testing and include information such as the total number of people diagnosed with HIV and the number of new diagnoses per year. This consistent annual data enables analysis of trends, which is particularly useful for understanding age, gender and mode of transmission. For these reasons, a deliberate decision was made to use case-reporting data as the main source for describing the epidemic in this report.

However, these data do not reflect the precise magnitude of the HIV epidemic: HIV infection is often diagnosed years after transmission; not all people living with HIV have received an HIV test and know their status; and changes in testing patterns affect case-identification rates. As a result, the reported annual number of HIV cases underestimates the true incidence, which is why this report has also cited modelled estimates in an effort to present a fuller understanding of the epidemic.

Epidemiological models can interpret surveillance and other available data and calculate estimates (2). These statistics are not precise counts but rather, estimates based on several epidemiological, behavioural and programmatic factors.¹ The total number of people living with HIV and the

¹ These factors include: the size of key populations at higher risk of HIV infection, risk behaviour data, epidemic trends, including prevalence data in key population groups, data on programmes on antiretroviral therapy and for preventing mother-to-child transmission and scientific evidence on the natural history of HIV infection. The stages of the natural history of HIV infection include: 1) acquisition of infection; 2) primary HIV infection; 3) asymptomatic HIV infection; 4) early symptomatic infection; late symptomatic infection; and 5) advanced HIV disease.

magnitude of the diagnosis gap profoundly influence prevalence, treatment need and mortality estimates, both current and projected.

Unless otherwise stated, data and estimates included in this report are taken from the 2010 *UNAIDS Report on the global AIDS epidemic* (3); country reports on progress related to the United Nations General Assembly Special Session on HIV/AIDS (UNGASS); joint World Health Organization (WHO), United Nations Children's Fund (UNICEF) and UNAIDS progress reports towards universal access to priority HIV/AIDS interventions in the health sector and related country reports on the health sector response; and the HIV/AIDS surveillance reports by the European Centre for Disease Prevention and Control (ECDC) and the WHO Regional Office for Europe (2). The UNGASS country progress reports (*WHO/UNICEF/UNAIDS. Global HIV/AIDS Response - Epidemic update and health sector progress towards Universal Access. Progress Report 2011. WHO, Geneva, 2011*) offer the most comprehensive, readily accessible data on the status of the HIV epidemic and programmatic response. The data reported between 2001 and 2009 have been consolidated and are available online at www.AIDSInfoOnline.org (5). All tables and graphs refer to the year when the data were reported to UNAIDS, not when the studies were completed.

Case-reporting data are provided by annual HIV/AIDS surveillance reports in Europe (4). These annual reports, prepared jointly by the ECDC and the WHO Regional Office for Europe, present data on HIV and AIDS for Europe and central Asia.

Countries in Europe and central Asia

In 2010, 53 United Nations Member States in the Europe and central Asian region (the same countries as the WHO European Region) submitted country progress reports to UNAIDS. The proportion of Member States submitting such reports has increased consistently over each of the four rounds of reporting. The numbers of reports received from the west and centre of the region increased from 67% in 2008 to 89% in 2010.

The 53 countries included in this report are grouped into epidemiological and geographical areas as defined by the ECDC and the WHO Regional Office for Europe in the HIV/AIDS surveillance reports on this region (4).

Countries and country groups in the Europe and central Asia region

West	Centre	East
Andorra ^a	Albania	Armenia
Austria	Bosnia and Herzegovina	Azerbaijan
Belgium	Bulgaria	Belarus
Denmark	Croatia	Estonia
Finland	Cyprus	Georgia
France ^a	Czech Republic	Latvia
Germany	Hungary	Lithuania
Greece	Montenegro	Republic of Moldova
Iceland ^a	Poland	Russian Federation
Ireland	Romania	Ukraine
Israel	Serbia	Central Asia
Italy	Slovakia	Kazakhstan
Lichtenstein ^b	Slovenia	Kyrgyzstan
Luxembourg	The former Yugoslav Republic of Macedonia	Tajikistan
Malta	Turkey	Turkmenistan ^a
Monaco		Uzbekistan
Netherlands		
Norway		
Portugal		
San Marino ^a		
Spain		
Sweden		
Switzerland		
United Kingdom		

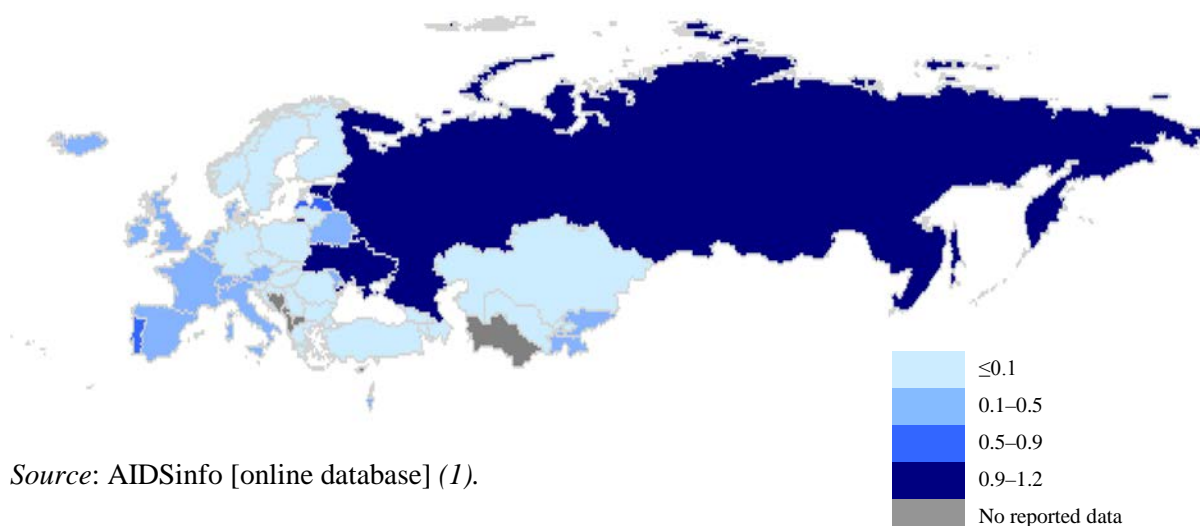
^aCountries not providing an UNGASS report.

^bLiechtenstein is not a WHO European Member State

1. Epidemic update

Introduction

Fig. 1.1. Estimated HIV prevalence in Europe and central Asia, 2009



Source: AIDSinfo [online database] (1).

Diverse HIV epidemics are under way in Europe and central Asia. The west of the region is home to older, entrenched epidemics. In contrast, the east has some of the fastest-growing epidemics in the world. In Europe and central Asia, the number of people living with HIV has risen exponentially in just a few years, reaching an estimated 2.3 million [2.1 million–2.5 million] people across the region in 2010. Of these, 1.5 million [1.3 million–1.7 million] are estimated to be in the east (1). The numbers of AIDS-related deaths have risen substantially in the east (more than 10-fold since 2001) but remained stable in the west and centre because of antiretroviral therapy (Table 1.1). Between 1994 and 2009, countries in the east have gone from a handful of reported HIV infections (3) to 739 435 diagnosed infections and an estimated HIV prevalence of 0.9% [0.8%–1.1%] among people aged 15–49 years in 2010 (2). The prevalence in the west and centre, estimated at 0.2% [0.2%–0.2%], has remained relatively stable since 2001 (Fig. 1.1).

Table 1.1. Estimated numbers of adults and children newly infected and living with HIV and AIDS-related deaths in Europe and central Asia

		Adults and children living with HIV	Adults and children newly infected with HIV	Prevalence of HIV infection (%) among people 15–49 years old	AIDS-related deaths among adults and children
East	2010	1.5 million [1.3–1.7 million]	158 000 [114 000–204 000]	0.9 [0.8–1.1]	90 000 [74 000–107 000]
	2001	415 000 [345 000–494 000]	205 000 [171 000–244 000]	0.3 [0.2–0.3]	7800 [6000–10 800]
West and centre	2010	839 000 [768 000–932 000]	30 000 [22 000–39 000]	0.2 [0.2–0.2]	10 000 [9000–11 000]
	2001	630 000 [575 000–690 000]	30 000 [26 000–34 000]	0.2 [0.2–0.2]	10 400 [9500–11 400]

Source: AIDSinfo [online database] (1).

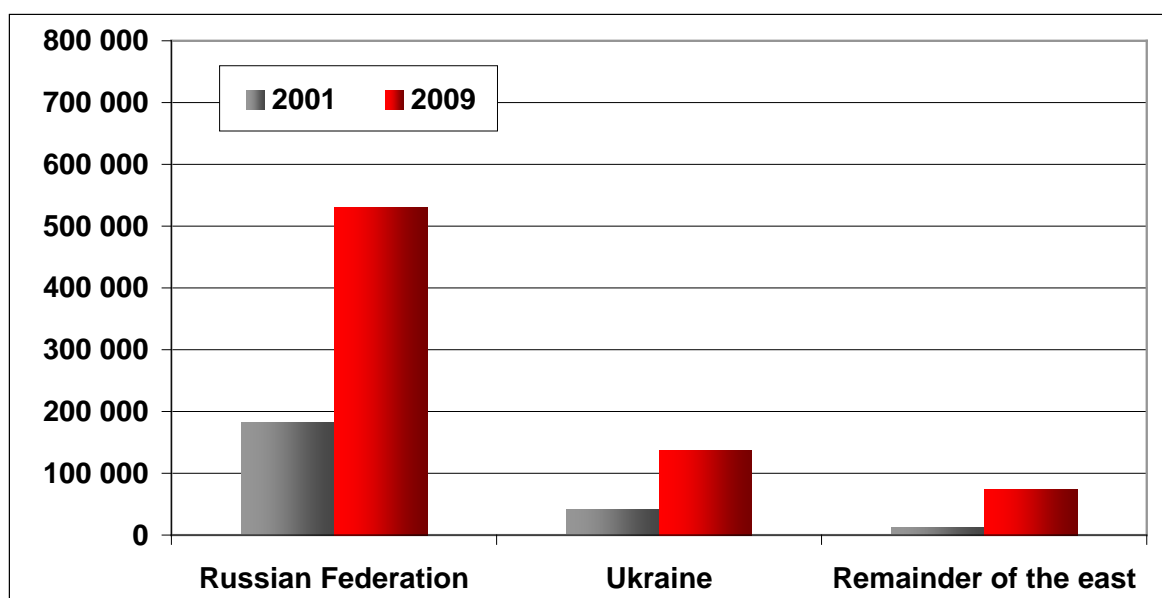
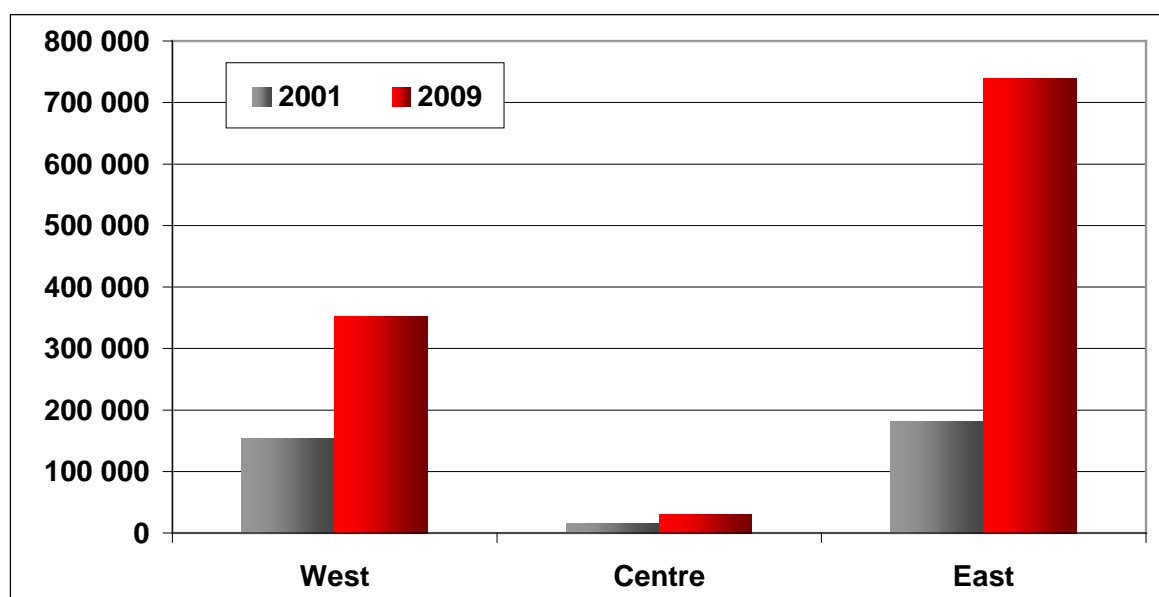
In the west and centre of the region, the estimated number of people newly infected with HIV each year has remained consistent during the past 10 years (Table 1.1). In the west, this is confirmed by HIV case reporting data showing that the number of people newly diagnosed with HIV infection has remained between 26 000 and 28 000 since 2004 (Fig. 1.2) (2).

In the east, an estimated 158 000 [114 000–204 000] people became newly infected with HIV in 2010 (Table 1.1). The number of new infections diagnosed each year continues to increase steadily (from almost 48 000 in 2004 to about 86 000 in 2009), with no sign the epidemic has peaked (2). In the Russian Federation, the number of people diagnosed with HIV infection increased sharply between 1999 and 2001, resulting from a targeted testing campaign that probably captured many acquiring infection before 2001 (Fig. 1.2) (6). Despite considerable on-going transmission related to injecting drug use, the east is experiencing an increasing proportion of reported cases of sexual transmission, representing a shift in the epidemic from one primarily reported as parental transmission among people who inject drugs.

Presentation of HIV/AIDS surveillance data

HIV case reporting forms the basis of national HIV surveillance in most countries in Europe and central Asia. With few exceptions, national HIV reporting has been in place in all 53 countries in the WHO European Region (the same countries as in the UNAIDS Europe and central Asia region) since the mid- to late 1980s. Country-specific data have been collected and presented in annual reports since 1984 by the European Centre for the Epidemiological Monitoring of AIDS (a WHO and UNAIDS Collaborating Centre, initially named the HIV/AIDS Surveillance Programme in Europe and later renamed EuroHIV) and since 2007 through collaboration between the European Centre for Disease Prevention and Control (ECDC) and the WHO Regional Office for Europe. A few countries in the west of the region established national HIV reporting systems or began to provide data at the European level only from 2002–2004. Historical HIV surveillance data are, therefore, unavailable for a few countries (including countries with considerable HIV epidemics, such as France, Italy and Spain) for the years before 2002–2004. In addition, HIV reporting for recent years exists only for a subset of regions within Italy and Spain. For this reason, the cumulative number of people reported to be newly diagnosed with HIV infection in the overall region is an undercount of the actual number of people ever diagnosed with HIV infection in Europe and central Asia. In addition, the annual number of people newly diagnosed in the west is underestimated. To partly compensate for these missing data and to acknowledge that national and European reporting systems do not capture all people diagnosed with HIV infection, the WHO Regional Office for Europe has traditionally added reported AIDS cases from France, Italy and Spain for the years when HIV data were not reported to the cumulative number of infections for the WHO European Region. Diagnosed AIDS cases for these countries during these years amount to almost 180 000 (2). Under this correction, the cumulative number of people ever diagnosed with HIV in Europe and central Asia would be adjusted upwards from the 1 122 104 presented in Table 1.2 to about 1.3 million. This correction still results in an underestimate, since where HIV reporting exists the number of people diagnosed with AIDS is typically smaller than the number of people diagnosed with HIV infection.

Fig. 1.1. Cumulative number of people diagnosed and reported with HIV infection in Europe and central Asia, 2001 and 2009



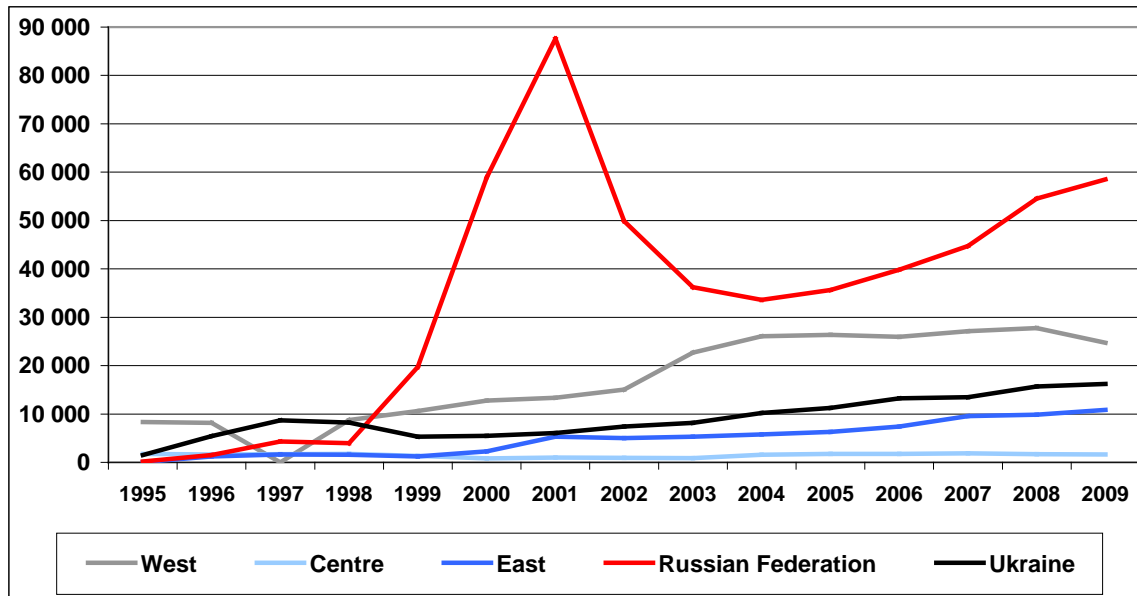
Sources: AIDSinfo [online database] (1), European Centre for Disease Prevention and Control and WHO Regional Office for Europe (2) and [2010 Country Progress Report of the Russian Federation on the Implementation of the Declaration of Commitment on HIV/AIDS] (6).

The magnitude of the HIV epidemics varies not only between subregions but also within subregions (Table 1.2). In 2009, 47% of all new cases reported in the west of the region were located in the United Kingdom (6630) and France (4885); Poland reported 39% of all new cases identified in the centre of the region (2). However, since national HIV reporting is incomplete in Italy (covering 15 of 22 intra-country regions) and Spain (covering 15 of 19 intra-country regions), the relative contribution of cases from the United Kingdom and France is lower than 47%.

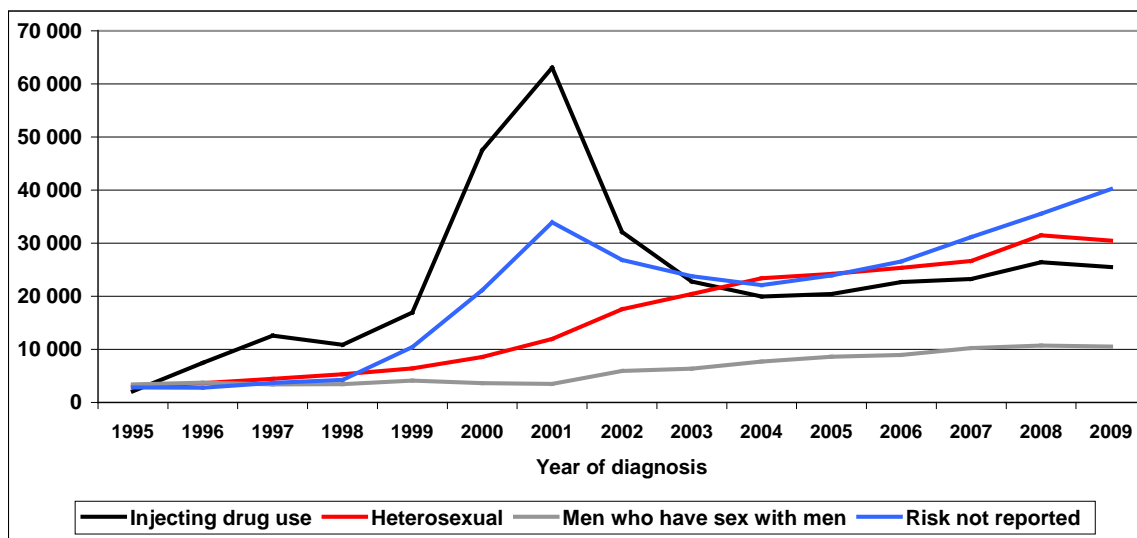
In the east, three countries now exceed an estimated HIV population prevalence of 1%: Estonia (1.2%), the Russian Federation (1.0%) and Ukraine (1.1%) (1). The Russian Federation and Ukraine

combined account for 90% of people newly reported as diagnosed with HIV infection and continue to have the highest absolute number of people diagnosed with HIV infection each year (Fig. 1.3) (2,6).

Fig. 1.2. Annual reported number of people newly diagnosed with HIV infection by subregion and by mode of transmission, Europe and central Asia



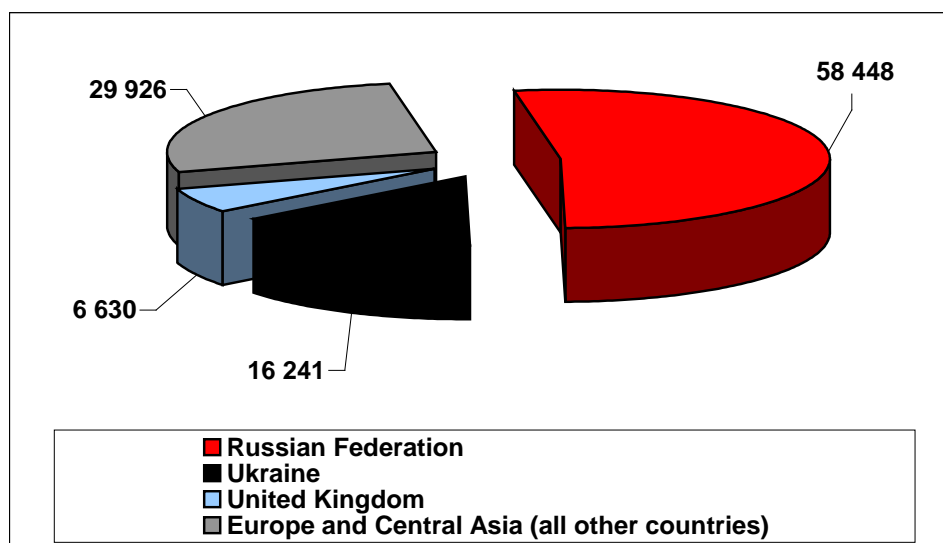
The east of the region here excludes the Russian Federation and Ukraine.



Sources: European Centre for Disease Prevention and Control and WHO Regional Office for Europe (2), EuroHIV and [HIV infection information bulletin #34 of the Russian Federal AIDS Center] (4).

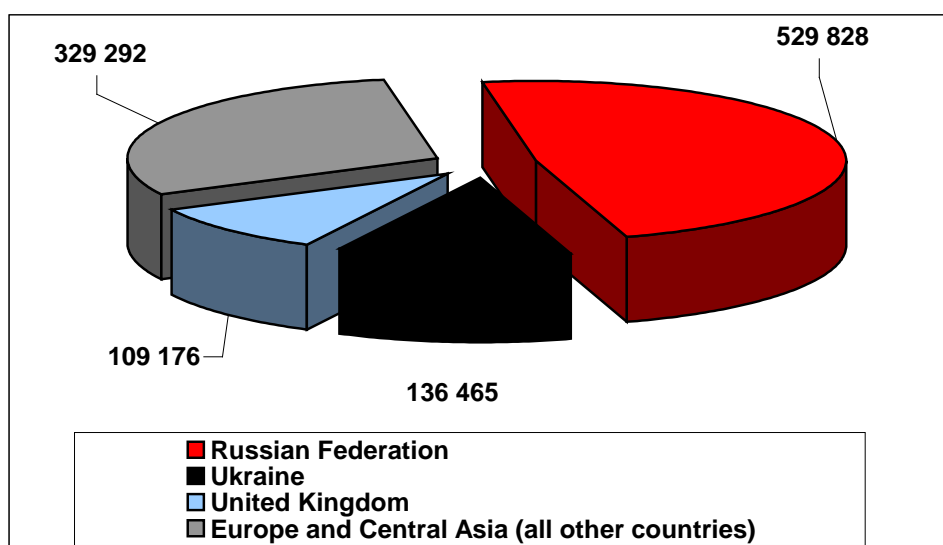
The annual number of people diagnosed with HIV infection in Ukraine has more than doubled since 2001 (5), and the number with newly diagnosed HIV infection per 100 000 population (35.4 in 2009) (2) far exceeds that of other countries in the east of the region, except for the Russian Federation, where 41.2 per 100 000 population was reported in 2009 (6). The epidemic in the Russian Federation is outpacing all other countries in the region and represents more than 50% of all people newly diagnosed with HIV infection in the Europe and central Asia region (Fig. 1.4). The number of people newly reported with HIV infection has increased in several countries in central Asia, including Uzbekistan, which has the greatest proportion of cases in central Asia (2), although the estimated prevalence remains low at 0.1%.

Fig. 1.3. Number of people newly diagnosed with HIV infection, selected countries and the rest of the Europe and central Asia region, 2009



Source: European Centre for Disease Prevention and Control and WHO Regional Office for Europe (2) and [2010 Country Progress Report of the Russian Federation on the Implementation of the Declaration of Commitment on HIV/AIDS] (6).

Fig. 1.4. Cumulative number of people diagnosed with HIV infection, selected countries and the rest of the Europe and central Asia region, 2009



Sources: European Centre for Disease Prevention and Control and WHO Regional Office for Europe (2) and [2010 Country Progress Report of the Russian Federation on the Implementation of the Declaration of Commitment on HIV/AIDS] (6).

Table 1.2. Annual and cumulative number of people reported with HIV infection by region and country, Europe and central Asia, 2009

	2009 ^a	Cumulative ^b
West	24 703	352 782
Andorra	2	51
Austria	...	3 705
Belgium	1 115	22 166
Denmark	236	5 597
Finland	183	2 590
France	4 885	38 676
Germany	2 856	37 182
Greece	534	9 933
Iceland	15	233
Ireland	395	5 536
Israel	382	6 147
Italy	1 951	10 323
Luxembourg	47	950
Malta	17	127
Monaco	...	...
Netherlands	813	16 941
Norway	282	4 368
Portugal	1 055	25 661
San Marino	1	62
Spain	2 264	12 844
Sweden	393	8 934
Switzerland	647	31 580
United Kingdom	6 630	109 176
Centre	2 065	29 887
Albania	29	226
Bosnia and Herzegovina	6	163
Bulgaria	171	1 109
Croatia	53	793
Cyprus	38	640
Czech Republic	157	1 344
Hungary	140	1 771
Montenegro	8	94
Poland	630	12 784
Romania	143	4 574
Serbia	130	2 448
Slovakia	53	330
Slovenia	48	452
The former Yugoslav Republic of Macedonia	6	32
Turkey	453	3 127
East	85 560	739 435
Armenia	149	823
Azerbaijan	455	2 264
Belarus	1 067	10 135
Estonia	411	7 320
Georgia	385	2 236
Kazakhstan	2 081	13 766
Kyrgyzstan	686	2 717
Latvia	275	4 614
Lithuania	180	1 581
Republic of Moldova	704	5 653
Russian Federation	58 448	529 828
Tajikistan	423	1 769
Turkmenistan	0	2
Ukraine	16 241	136 465
Uzbekistan	4 055	20 262
Europe and central Asia	112 328	1 122 104

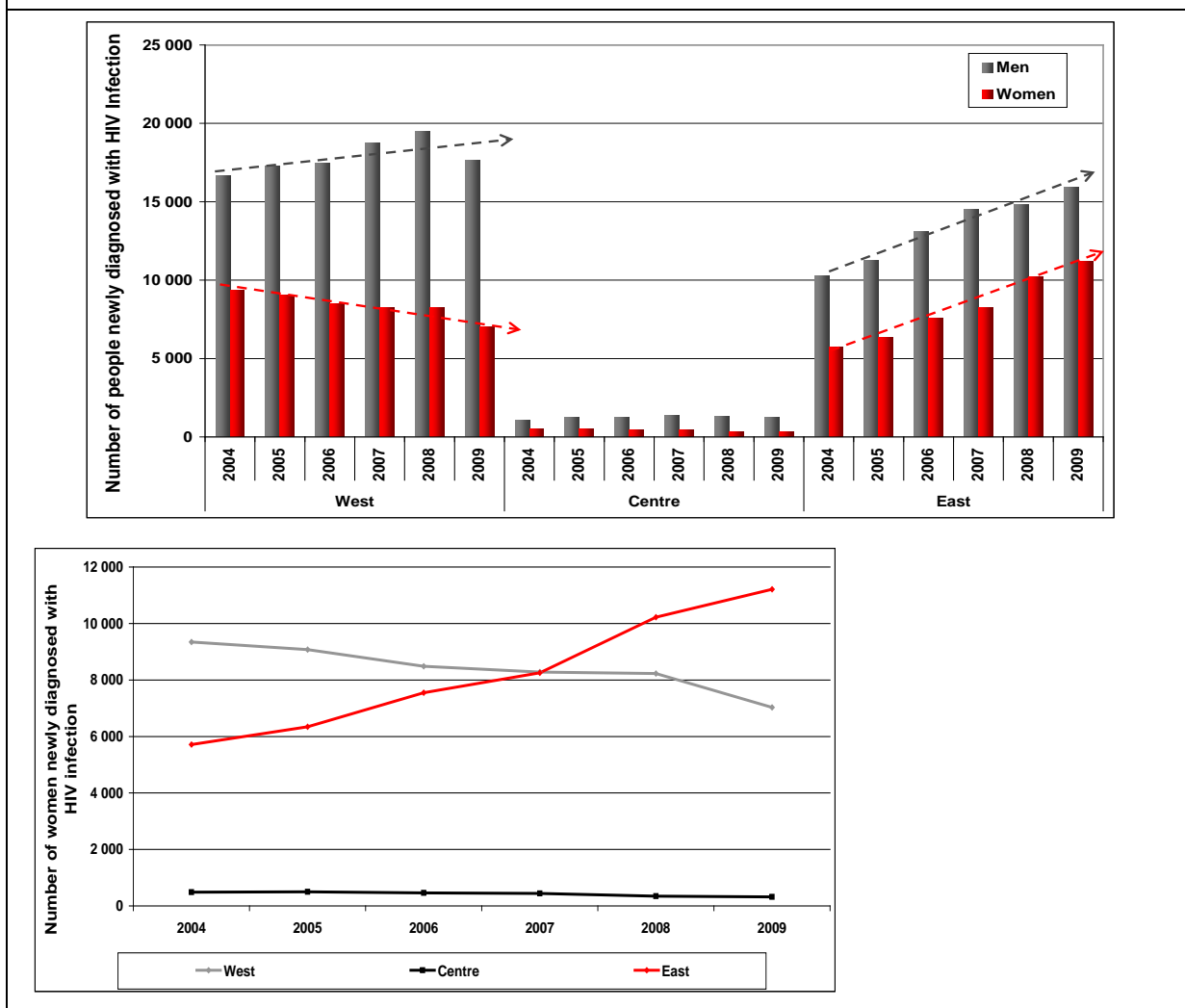
Note: the data in this table are subject to change and reporting delay and may be updated in future rounds of surveillance reporting as new information becomes available (see the surveillance reports published by the ECDC and WHO Regional Office for Europe). In 2009, HIV reporting existed in 15 of 22 regions in Italy and in 15 of 19 autonomous regions in Spain.

Sources: European Centre for Disease Prevention and Control and WHO Regional Office for Europe (2), UNGASS country report data for the Russian Federation (6), data reported to WHO for Turkey; 2006 EuroHIV data for Austria (7).

Gender

The HIV epidemic in Europe and central Asia remains predominantly among males – in 2009, women and girls represented about one third of the overall epidemic: the west of the region 28%, the centre 20% and the east 41% (excluding the Russian Federation) (2).

Fig. 1.5. Number of people newly diagnosed with HIV infection by sex, subregion and year, Europe and central Asia, 2004–2009



The east of the region here does not include the Russian Federation.

Source: European Centre for Disease Prevention and Control and WHO Regional Office for Europe (2).

Epidemic trends among men continue to increase in all subregions, with the steepest increases in the east. However, epidemic trends in the sex ratio are evolving, with marked differences between the subregions. In the west and centre, the absolute number of women newly diagnosed with HIV infection decreased by 33% from 2004 (9834) to 2009 (7348); in contrast, the number in the east has nearly doubled (Fig. 1.5). These trends are consistent with the epidemic growth among key populations at higher risk of HIV infection and will be explored further in the discussion on the modes of HIV transmission.

East of the region

HIV epidemic mainly among men, but women and girls are trending up

Age

Individuals in the region are most likely to be diagnosed with HIV between the ages of 30 and 39 except for some countries, including the Russian Federation, where 59% of people ever diagnosed with HIV were diagnosed when they were younger than 30 (4). In the east, one third of people newly diagnosed with HIV infection are 15–24 years old (2,6). The HIV epidemic in the east is rising across all age and sex categories. More males than females are newly diagnosed with HIV infection, although new diagnoses among adolescent and adult women are increasing at a rate up to three times higher than that for men, especially among those 20–29 years old. The only exception is among children younger than 15 years, where case diagnosis among males is increasing faster (2).

The proportion of women and girls diagnosed with HIV infection has increased in all age categories since 2004 in the east (Fig. 1.6). In 2009, women represented 81% of HIV cases diagnosed among people aged 15–19 years compared with 67% in 2004. Among people 20–24 years old, the proportion of women diagnosed with HIV infection increased from 45% in 2004 to 66% in 2009. These data may reflect that, in contrast to men, most pregnant women are tested for HIV infection.

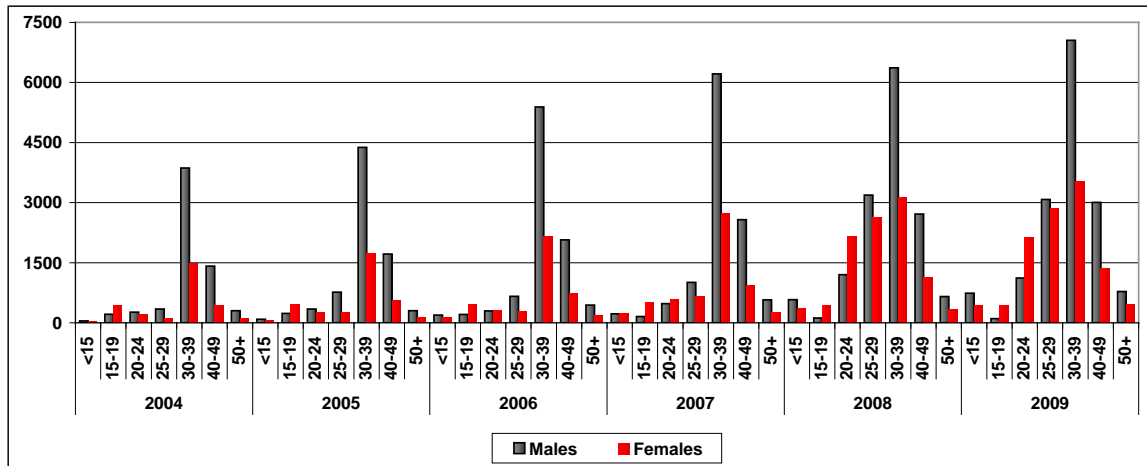
In the west of the region, the proportion of women and girls diagnosed with HIV infection compared with men and boys has dropped in every age category; here, the epidemic is growing among men. Similar to the east of the region, men 30–39 years old continue to comprise the largest age category of men newly diagnosed with HIV infection per year. New diagnoses have declined by 20% in this age group since 2004, whereas diagnoses among men 40–49 and ≥ 50 years old have increased by 11% and 17% respectively. Adolescent and young men represent smaller absolute numbers of people newly diagnosed, but diagnoses are also increasing among men 15–19 years old (by 25%) and 20–24 years (by 32%). The increasing trend among men 15–29 years old in the west is particularly alarming since new HIV diagnoses among women of the same age group have declined an average 45% (Fig. 1.7).

West of the region

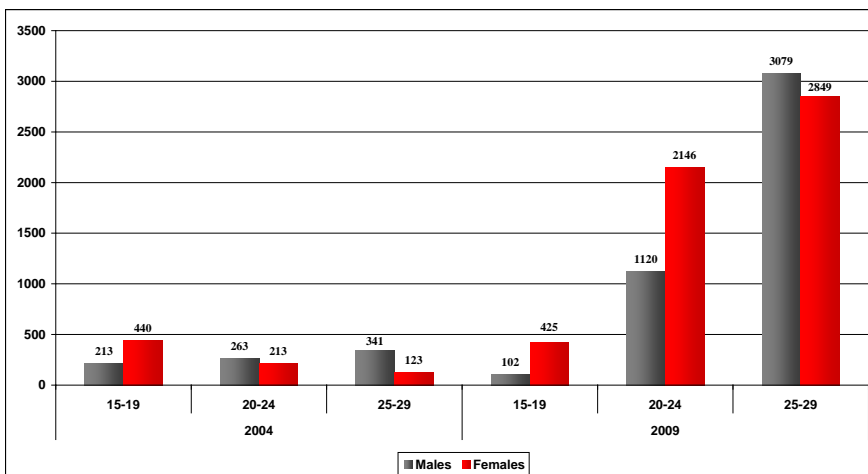
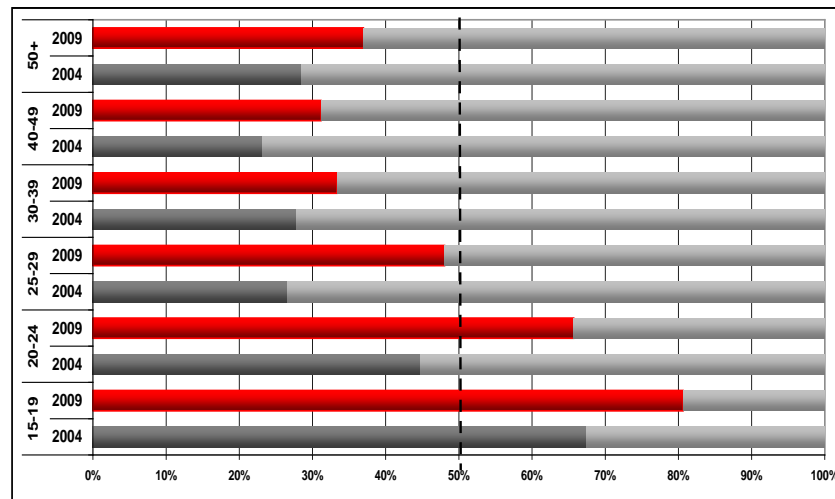
**HIV epidemic among
women and girls
trending down**

Fig. 1.6. Number of people newly diagnosed with HIV infection in the east of the Europe and central Asia region by age and sex, 2004–2009

Distribution of people newly diagnosed with HIV by age and sex



Proportion of women ≥15 years newly diagnosed with HIV infection, 2004 and 2009



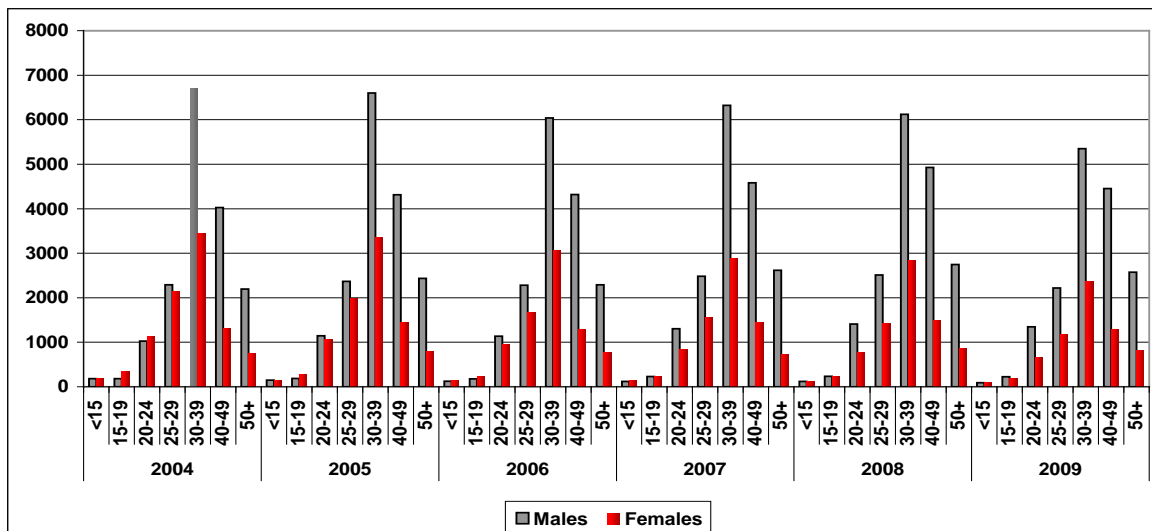
Number of men and women 15–29 years old newly diagnosed with HIV infection

The east of the region here excludes the Russian Federation.

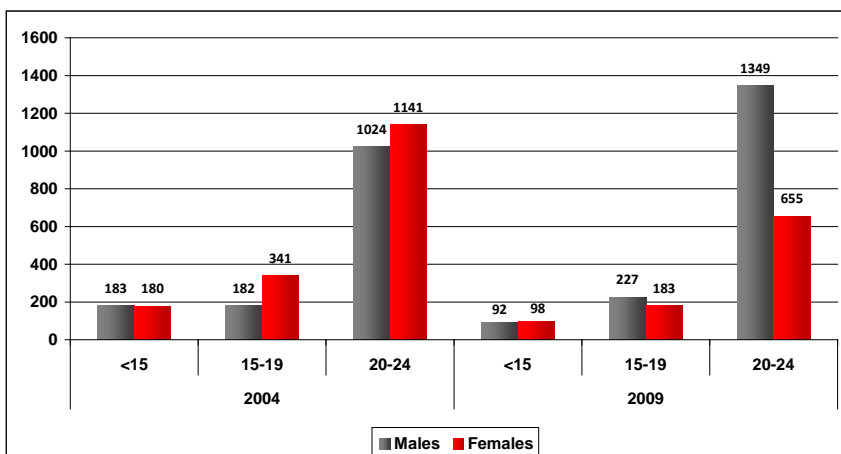
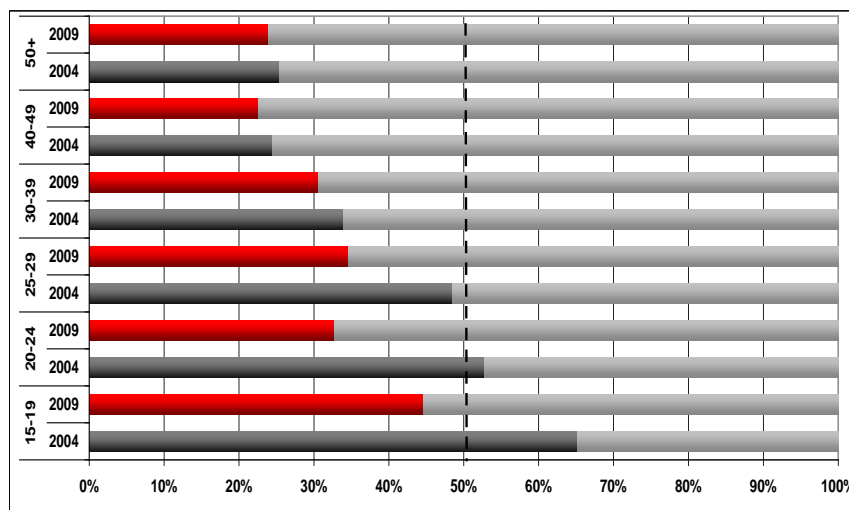
Source: European Centre for Disease Prevention and Control and WHO Regional Office for Europe (2).

Fig. 1.7. Number of people newly diagnosed with HIV infection in the west and centre of the region by age and sex, 2004–2009

Distribution of people newly diagnosed with HIV infection by age and sex, 2004–2009



Proportion of women ≥ 15 years newly diagnosed with HIV infection, 2004 and 2009



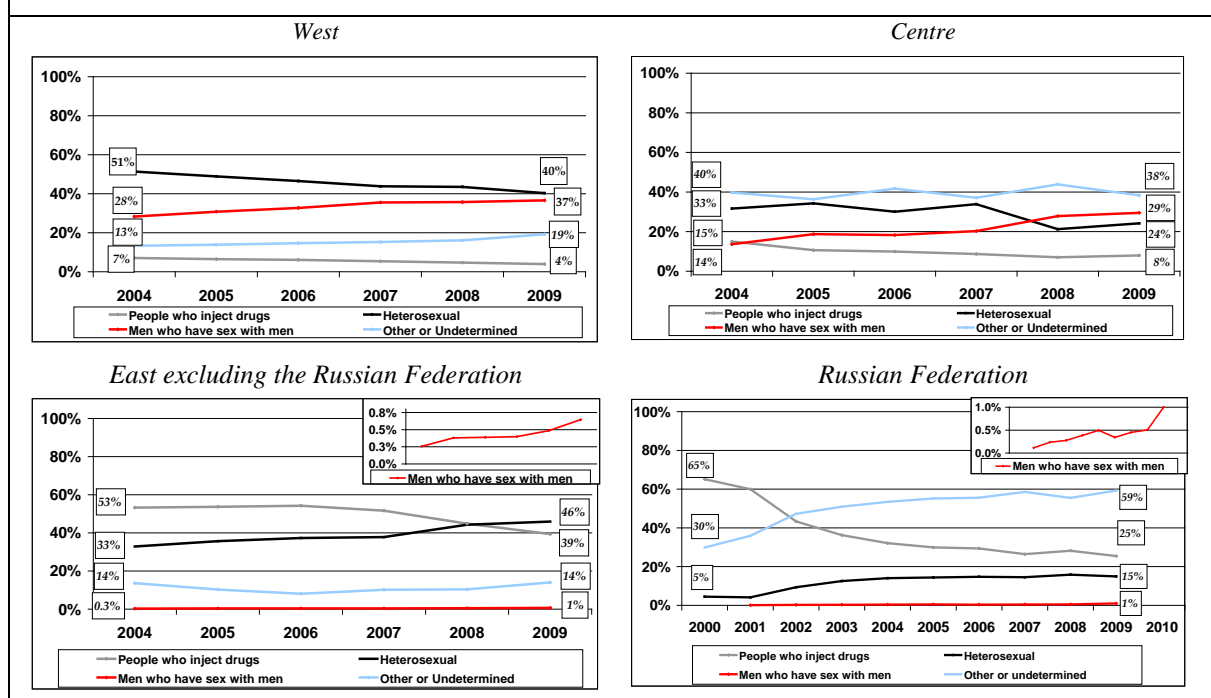
Number of men and women 15–29 years old newly diagnosed with HIV infection

Source: European Centre for Disease Prevention and Control and WHO Regional Office for Europe (2).

Concentrated epidemics related to drug use, sex between men, sex work, migration and imprisonment

Across the region, epidemics remain concentrated in key populations at higher risk of HIV infection (Box 1.1). The HIV epidemics in the east are concentrated primarily among people who inject drugs and their sexual partners. A growing proportion of people with HIV in the east are reported to have been infected by heterosexual transmission, although a large percentage of these cases are suspected to be among those who inject drugs and their sexual partners. People who sell unprotected sex, especially if they inject drugs, also contribute to the epidemic in the east. Men who have sex with men contribute a small number to the overall epidemic, although they constitute a definite increasing trend over the past five years.

Fig. 1.8. Reported routes of HIV transmission (%) among key populations at higher risk by subregion, Europe and central Asia, 2004–2009



Sources: European Centre for Disease Prevention and Control and WHO Regional Office for Europe (2) and [HIV infection information bulletin #34 of the Russian Federal AIDS Center] (4).

In the west and centre of the region, men who have sex with men continue to predominate among people newly diagnosed with HIV infection, although people who inject drugs, people who sell unprotected sex and migrants from high-prevalence countries, especially in parts of Europe, also contribute to the ongoing epidemic. Among people with known geographical origin, those from countries with generalized epidemics accounted for at least 10% of people newly diagnosed with HIV infection and about one third of those who acquired HIV infection through heterosexual transmission in 2009.

The transmission route for many people diagnosed with HIV is unknown, particularly in the Russian Federation, where according to the Federal AIDS Centre the mode of transmission was not identified in 59% of the cases diagnosed in 2009 (4).

Box 1.1 Key populations at higher risk

Key populations at higher risk refers to those most likely to be exposed to HIV or to transmit it.

In Europe and central Asia, key populations at higher risk are: people who inject drugs and their sexual partners; men who have sex with men; transgender people; sex workers; prisoners; and migrants.

The specific populations vary with the epidemic and community and/or country context. Each country should define the specific populations that are key to their epidemic and response based on their own epidemiological and social context.

People who inject drugs

People who inject drugs have a particularly high risk of HIV infection. HIV transmission among this group most often results from sharing contaminated injecting equipment, which can accelerate the growth of an HIV epidemic. People who inject drugs also risk sexual transmission of HIV through unsafe sexual practices.

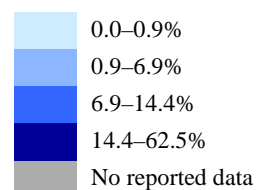
Globally, people who inject drugs comprise 20% or more of the people living with HIV in 24 countries. Seventeen of these are in Europe and central Asia, including 14 from the east of the region (1,2,10). In 2000, the HIV epidemic in central Asia (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) began to accelerate among people who inject drugs (11). HIV prevalence among people who inject drugs is high and has exceeded 60% in subnational samples.

Fig. 1.9. HIV prevalence among people who inject drugs, Europe and central Asia, 2009



Source: AIDSinfo [online database] (1).

The reported number of people who inject drugs acquiring HIV infection in the west of the region declined by 47%, from 1834 in 2004 to 966 in 2009 (excluding non-reported cases diagnosed in regions within Italy and Spain; see the footnote to Table 1.2).



in

This

continued a trend in which HIV epidemics among people who inject drugs in the west of the region

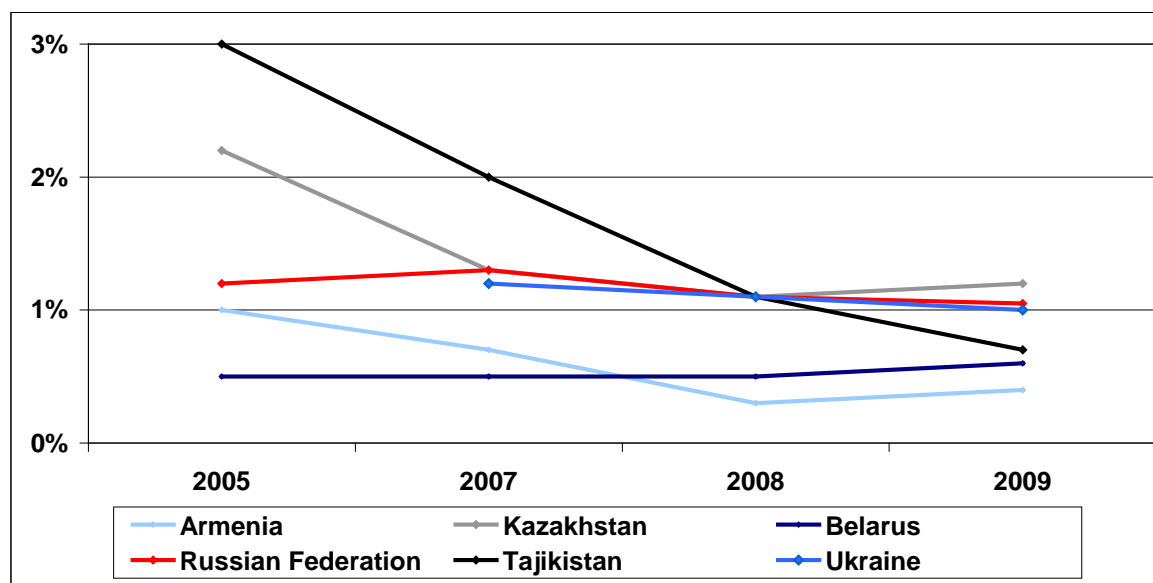
were either averted, using harm-reduction interventions, such as in the United Kingdom, or stabilized and controlled by introducing harm reduction, such as in France, Italy and Spain. Data indicate the number of HIV tests in the west has remained almost stable for the past five years, suggesting the decrease reflects real changes in the underlying epidemic rather than changing testing patterns.

The east of the region is home to some of the largest populations of opioid users in the world (10). The Russian Federal AIDS Center estimates that the Russian Federation has about 1.5 million –2 million people who inject drugs (12). Ukraine has an estimated 290 000 [230 000–360 000] people who inject drugs (13); between 39% and 50% of them are estimated to be living with HIV (5). In 2009, surveys of people who inject drugs found HIV prevalence as high as 55% (in the city of Mykolayiv, Ukraine) (14). A decade ago in Estonia, only a handful of the people diagnosed with HIV were reported to have been infected through contaminated injecting equipment; within a few years, a majority of the people surveyed who inject drugs (72% in one city-based survey) were living with HIV (10). In the Republic of Moldova, the estimated number of people who inject drugs is 25 000 (not including the region of Transnistria), with the HIV prevalence as high as 42% (2009) in Balti, the municipality with the highest HIV prevalence. HIV prevalence has been reported at 16% in the capital city of Chisinau and 14% in Tiraspol, Transnistria (15).

The east has reported a decreasing proportion of people newly diagnosed with HIV infection caused by injecting drug use between 2004 and 2009 (2,4). The share of new HIV cases among this group dropped from 56% to 44% (Fig. 1.5), although HIV testing patterns, including the degree to which testing engages key populations at higher risk, significantly influence these diagnosis rates. The proportion of HIV testing among people who inject drugs is low, and there are indications testing has declined among this group in the region; given the high prevalence of HIV in this group, a reduction in testing would probably affect the number of cases identified among people who inject drugs and could explain the decrease in the share of HIV cases identified among them. In the Russian Federation, for example, about 100 000 fewer HIV tests were performed among people who inject drugs in 2008 and in 2009 compared with 2007 (Fig. 1.10).

Many people who inject drugs also contribute to the rising sexual transmission rates in the east (16). As the epidemic spreads from people who inject drugs, predominantly male, to their predominantly female sexual partners, the proportion of women living with HIV grows. An estimated 35% of women living with HIV reported acquiring HIV through injecting drug use, and an additional 50% may have been infected sexually by partners who inject drugs (7,2).

Fig. 1.10. Percentage of all HIV tests performed on people who inject drugs, selected countries in Europe and central Asia, 2005–2009



Sources: [HIV infection information bulletin #34 of the Russian Federal AIDS Center] (5); [HIV infection in Ukraine] (18); [Report on the analysis of the epidemiological situation of HIV and AIDS in Kazakhstan, 2006–2010] (19); personal communication, National Center for AIDS Prevention, Armenia, 2011; personal communication, National Center on HIV (Monitoring & Evaluation Department), Tajikistan, 2011.

In some countries in the centre and east of the region, injecting drug use is starting at progressively younger ages. A multicountry study of people aged 15–24 years who inject drugs found that respondents reported a mean age of initiation of 15.6 years in Albania, 16.0 years in Romania, 17.5 years in the Republic of Moldova and 18.7 years in Serbia (20). Studies have found that many people who inject drugs become infected with HIV or hepatitis C within their first 12 months of initiating such behaviour (21).

Elsewhere in the region, in Estonia (22), for example, a decrease in HIV prevalence among people who recently began injecting drugs and in the numbers of people initiating injecting drug use coincided with large-scale needle and syringe programmes. HIV prevalence among people who recently began injecting drugs has also declined significantly in Ukraine (13).

The use of amphetamines among young people is growing rapidly, particularly in the centre and east of the region. According to data from Ukraine, the share of stimulant users increased 2.5 times among all people who inject drugs from 2004–2008 and reached 11%. Research from 2009 in 22 cities in Ukraine shows that stimulant drugs could be homemade from ingredients bought in pharmacies (23).

Amphetamine use often involves more frequent injection (compared with opiates) and increased sexual activity. People who use stimulants are often more difficult to engage through outreach. Substitution therapy does not yet exist for stimulant dependence (24).

Among drug users, hepatitis has become the leading cause of death of people with HIV in Europe (26). In the east of the region, the rates of hepatitis C coinfection are high, reaching 80% among people living with HIV and seeking treatment in Estonia and Ukraine, and more than 90% in samples

tested in the Russian Federation (27). Azerbaijan, Kazakhstan and Tajikistan report a prevalence of coinfection exceeding 50% (28).

Men who have sex with men

The HIV epidemic among men who have sex with men is long recognized in the west of the region, and there is strong evidence of resurgence (29). In the east, the picture is less clear because of gaps in surveillance, but increasing evidence indicates a hidden HIV epidemic among men who have sex with men.

Data from 23 countries in the west show that the annual number of men who have sex with men diagnosed with HIV infection rose by 86% between 2000 and 2006 (30). An increase in higher-risk sexual behaviour is associated with this trend. Researchers in Catalonia (Spain), for example, have reported that one third (32%) of men who have sex with men had recently had unprotected anal sex with a casual partner (31), and surveys in Denmark and Amsterdam (Netherlands) have reported similar findings (32,33).

The total of 3160 men who have sex with men newly diagnosed with HIV infection in the United Kingdom in 2007 was the highest reported to that point (34). In France, men who have sex with men account for more than half the men newly diagnosed with HIV infection, and they represent only 1.6% of the country's population (35,36).

National surveillance data also show that the number of men who have sex with men newly diagnosed with HIV infection increased significantly between 2000 and 2005 in Germany, the Netherlands and Spain (37).

HIV infection among transgender people and men who have sex with men is widely recognized as a main mode of transmission in the west and centre of the region and is a hidden epidemic in the east. Men who have sex with men in this subregion are often driven underground by severe stigma, discrimination and even criminalization.

Data on HIV transmission among men who have sex with men in the east of the region are limited, and official surveillance data often do not provide an accurate picture of the epidemic among this population; less than 1% of people newly diagnosed with HIV infection were reported for this route of transmission in 2009 (38).

However, research increasingly suggests transgender people and men who have sex with men in the east are at high risk of HIV infection because of higher-risk sexual behaviour. Surveys in many cities of the subregion suggest HIV prevalence among men who have sex with men is up to 10 times higher than in the general population.

**East and west:
transgender people
and men who have sex
with men are at high
risk of HIV infection**

In 2009, countries in the east reported HIV prevalence among men who have sex with men ranging from 0.3% in Kazakhstan, 1.0% in Azerbaijan and 2.7% in Belarus to 8.3% in the Russian Federation and 8.6% in Ukraine (1). In surveys, Ukraine found rates of prevalence ranging from 4% (Kyiv) to 23% (Odessa).

In Serbia, 22% of men who have sex with men reported their first male-to-male sexual encounter before age 15 and 50% before age 18 (7).

Some men who have sex with men have reported sex work and injecting drug use among the higher-risk behaviour for acquiring HIV infection. For example, countries in the region have reported (to UNAIDS) a prevalence of sex work among men who have sex with men ranging from 6–8% in Croatia to 44% in Turkey. Men who have sex with men may also inject drugs. In small studies, 6% of men who have sex with men in Ukraine and 7% in Georgia reported injecting drug use in the three months before the survey. Similar studies in the Russian Federation reported the prevalence of injecting drug use in the previous year among men who have sex with men: 4–6% in St Petersburg, Krasnoyarsk and Perm, and 11% in Moscow and Nizhniy Novgorod.

Sex workers

The number of sex workers has risen, particularly in the centre and east of the region, with estimates of up to 70 000 in Moscow alone (39).

Most sex workers in the region are women (87%), although men (7%) and transgender people (6%) also engage in such work; the percentages can vary greatly from country to country (40). For example, Austria, Denmark, Estonia, Finland and Lithuania report almost exclusively female sex workers, whereas Poland reports that 15% of its sex workers are male (40). In some countries (Belgium, France, Greece, Italy and Luxembourg), transgender sex workers may comprise as much as 15–25% of all sex workers (40).

HIV prevalence is frequently higher among male sex workers than female sex workers. Men engaging in sex work are about 20 times more likely in Spain and 15 times more likely in Turkey to be living with HIV than women selling sex (41).

In Ukraine, females aged 10–19 years comprised an estimated 20% of the females engaged in sex work

A disturbing proportion of people selling sex in the region are young, including children (7). In Ukraine, females aged 10–19 years comprise an estimated 20% of those engaged in sex work (42). Belarus reported that in a 2009 survey, more than 15% of females engaged in sex work were younger than 19 years (personal communication, UNAIDS Country Office in Belarus, 2011). In the Russian Federation, small city studies have reported that 26% of the sex workers surveyed had started sex work before the age of 18 (43). Among women aged 15–19 selling sex in Ukraine, 19% were living with HIV compared with 1.4% in the general population of young people (42). Young people selling sex and children commercially and sexually exploited through sex work are particularly vulnerable and often the least able to access HIV services.

Female sex workers who do not inject drugs and who use condoms consistently tend to have relatively low rates of HIV infection (see the WHO sex work toolkit at http://www.who.int/hiv/topics/vct/sw_toolkit/en/index.html). Sex workers who inject drugs are among those experiencing the most rapid increases in HIV prevalence because of the dual risk of unprotected sex and needle sharing (44). In the late 1980s, the HIV epidemic in the east of the region spread rapidly among sex workers, with the prevalence reaching as high as 65% in some settings, particularly due to injecting drug use (45).

In the Russian Federation, an estimated one third of sex workers are also injecting drugs, with percentages varying between 25% and 90% geographically (6,46,47). It has been suggested that about 30% of female sex workers in the east of the region inject drugs (48).

“Injecting drug use fuels HIV in sex work, fundamentally amplifying epidemic potential.” (49)

The Republic of Moldova reports that, in 2009, among sex workers surveyed in Chisinau, 47% knew people who used drugs, 30% had used drugs and 9% had injected drugs (50). Injecting drug use within the previous 12 months was confirmed by 3% of respondents. In Balti, 35% of sex workers knew people who used drugs, 22% had used drugs and 7% had injected drugs (29). Injecting drug use within the previous 12 months was confirmed by 2% of respondents. Underreporting of past and/or current drug use is likely. The hepatitis C prevalence among sex workers in Chisinau (16%) and in Balti (23%) indicates a probable larger share of former or current injecting drug users in the sex worker sample than was self-reported. The hepatitis C prevalence is higher in the age group 25 years and older, which may indicate earlier drug use (15,50).

In Ukraine, the HIV prevalence among female sex workers who also inject drugs is 42% compared with 8% among those who do not inject (51).

In the west, as many as 65% of sex workers are migrants. The percentage is much lower in the centre (16–18%) and east of the region (10%) (52). Most migration occurs internally in the Europe and central Asia region. A study of 25 countries in the west and centre of the region found that only 27% of migrant sex workers came from countries outside the region (Africa 12%, Latin America and the Caribbean 11% and Asia and the Pacific 4%), while most came from the east of the region (34%) or the centre of the region (26%). The Russian Federation and Ukraine, the two countries most affected by HIV, are among the top five countries of origin for migrant sex workers in the west of the region, representing 9% and 7% of the total respectively (52).

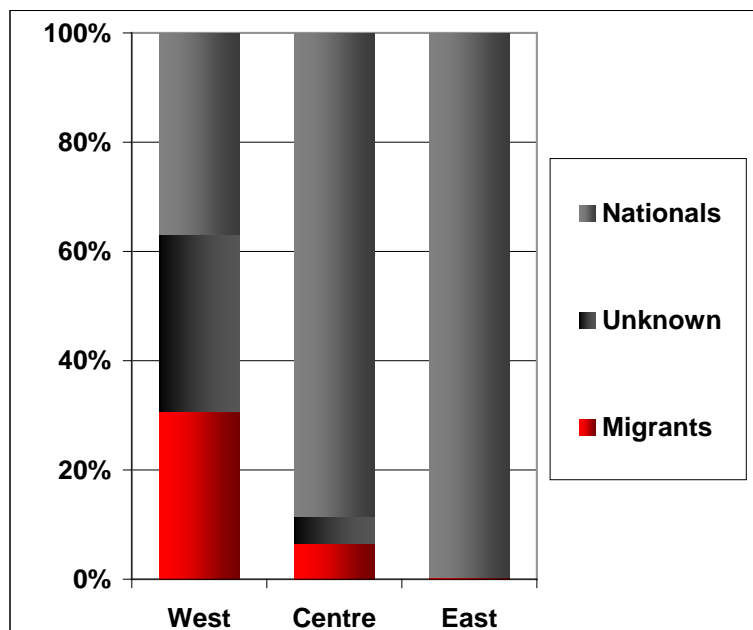
Migrant workers

Migration is a growing feature of the HIV epidemics in Europe and central Asia.

Immigrants or workers migrating to the west of the region tend to move from epidemics with high prevalence from outside the region. In the United Kingdom, about 44% of people newly diagnosed with HIV in 2007 had acquired HIV abroad, mainly in sub-Saharan Africa (33). A review in 2006 in European Union countries plus Norway and Iceland showed that 65% of the migrants newly diagnosed with HIV originated from sub-Saharan Africa (53).

HIV epidemics in the west of the region are concentrated among key populations at higher risk, but many migrants have come from generalized epidemic settings (4,5). In 2010, among people infected heterosexually, 43% originated from a country with a generalized epidemic and 9% reported a partner from a generalized epidemic country (2). As a result, migrants living with HIV constitute a key population that must be engaged through prevention, treatment, care and support programmes.

Fig. 1.11. Proportion of migrants among people reported to be newly diagnosed with HIV infection by subregion, Europe and central Asia region, 2006



East: Estonia, Latvia and Lithuania only.

Source: *Migrant health: epidemiology of HIV and AIDS in migrant communities and ethnic minorities in EU/EEA countries* (56).

In contrast, countries with high prevalence in the east of the region, such as Ukraine and the Russian Federation, are experiencing a large influx of migrant workers from lower prevalent countries in central Asia. Of the Russian Federation's 12 million immigrants, an estimated 5–6 million are considered irregular migrants. Germany (10 million) and (Ukraine 7 million) are third and fourth in the list of countries, headed by the United States, with the highest numbers of immigrants (54,55). The World Bank reports that about 800 000 Tajik workers (nearly 12% of the population of Tajikistan) migrate to other countries in the region to find jobs. According to the International Organization for

Migration, 90% of the Tajik migrants are working in the Russian Federation. An elevated HIV incidence was observed among the wives of Tajik migrant men after they returned home (56, 57). Central Asian migrants returning home also had poor knowledge about the risk of HIV infection. Low socioeconomic status, lack of access to services, separation from family and limited risk awareness all contribute to migrants' vulnerability to HIV infection (58).

In 2009, an estimated 600 000 nationals of the Republic of Moldova were working outside the country. Of these, 500 000 travelled between their work abroad and their Moldovan homes and families. An estimated 63% are employed in the east of the region, and 33% are under 30 years of age (59). It is estimated these migrants represent up to 40% of the working-age population of the Republic of Moldova (60).

An analysis of new HIV cases registered in the Republic of Moldova between 2004 and 2009 indicates that individuals newly diagnosed with HIV infection are more likely to have been a migrant if they live in rural communities (range 41–54%) compared with urban centres (range 31–41%). Further, among people newly diagnosed with HIV infection, 32–41% (range in urban centres) reported having a sexual partner who had been outside the country at some time in the previous five years (Bivol S et al., *Moldova triangulation report 2011*, unpublished).

In a study on male labour migrants in the Russian city St Petersburg (58), nearly one third reported multiple sexual partners during the previous three months. They used condoms only about half the time with casual partners and only 35% of the time with partners described as permanent. Many migrant men had concurrent partnerships with multiple female partners who were considered regular partners.

In 2009, a bio-behavioural survey among labour migrant workers in Ukraine found that the HIV prevalence was 5% among internal labour migrants and 3% among residents returning from work abroad. Workers returning to Ukraine from the Russian Federation had a higher HIV prevalence (17%) than those returning from other countries (61).

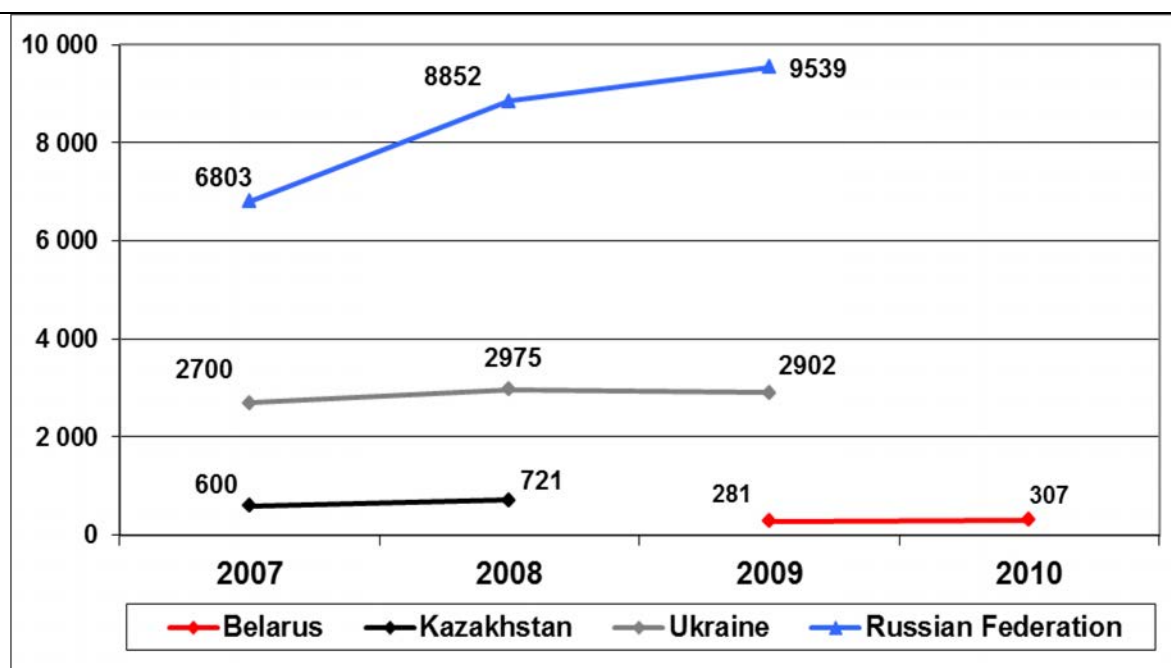
Migrants to the Russian Federation and Ukraine often experience heightened vulnerability to HIV because of increased high-risk behaviour and simultaneous exposure to a population with a higher HIV prevalence. In addition, migrants (especially undocumented migrants) often face legislative and social barriers to accessing health and social support services.

HIV in prisons

Many prison populations in the region have high HIV prevalence, especially among inmates who inject drugs (*International Harm Reduction Association. The Global State of Harm Reduction 2010. London, International Harm Reduction Association, 2010*). An estimated 20 000 prisoners are living with HIV in Ukraine (UNOCD estimate based on: *Ukraine 2012 Global AIDS Response Progress Report. Kiev, State Service of Ukraine on HIV/AIDS and other Socially Dangerous Diseases, 2012, and State Penitentiary Service of Ukraine <http://www.kvs.gov.ua/peniten/control/main/uk/index>*). Five countries report HIV prevalence among the general prison populations at rates greater than 10%: Estonia (9% to 90% at various prisons); Lithuania (Altyus Prison 15%); Romania (13% overall); Slovakia (0% to 34%); and Ukraine (14%) (*ibid*, 62). Authorities in the Russian Federation reported a steady increase in the prevalence of HIV infection in the overall prison population, from 1.2% in 2007 to 1.7% in 2009 (4). According to sentinel surveillance in Tajikistan, HIV prevalence among prisoners exceeded 8% in 2007 (49). In 2009, the Republic of Moldova reported an HIV prevalence rate of 3.5% among its prisoners (16).

Countries acknowledge that prisoners use drugs, and evidence suggests a high proportion of people who inject drugs have a history of imprisonment. In Estonia, 25% of prisoners use drugs; in Latvia, 27% (not specific to injecting drugs); in the Russian Federation, 43% (injecting drugs); in Slovakia, 58%; and in Ukraine 30% (62). An estimated 8% of the prison population in the Russian Federation has been diagnosed drug dependent (62). Other risk factors in prisons include unprotected sex, rape, tattooing and vertical and nosocomial (hospital-acquired) transmission, all highlighting the need for comprehensive prevention programmes.

Fig. 1.12. Number of prisoners diagnosed with HIV infection, selected countries, east of the Europe and central Asia region, most recent year available



Sources: [HIV infection information bulletin #34 of the Russian Federal AIDS Center] (5); [HIV infection in Ukraine] (18); and [Report on the analysis of the epidemiological situation of HIV and AIDS in Kazakhstan, 2006–2010] (19).

Few data are available on the HIV prevalence among prisoners who inject drugs or the transmission of HIV in prisons. A study in St Petersburg in the Russian Federation reported an HIV prevalence of 46% among prisoners who inject drugs, and in the Serbian capital Belgrade, one prison reported rates as high as 50% (62).

Spain has documented HIV incidence rates in prisons since 2000 (see discussion in Chapter 3 on the success of comprehensive prevention programmes among incarcerated populations in Spain; Fig. 3.20). Five countries have documented outbreaks: the Czech Republic, Lithuania, the Russian Federation, Scotland and Ukraine (62,63).

The former Yugoslav Republic of Macedonia reports that hepatitis C is prevalent among prisoners, and the rates are similar to those among people who inject drugs in the country, indicating a strong likelihood of injecting drug use among inmates.

Systematic data are lacking to assess the magnitude of the HIV epidemic in prisons in most countries in the region. However, there is sufficient evidence to indicate a need for more extensive research and tailored prevention programmes.

Nosocomial infections

The transfusion of infected blood and reuse of contaminated catheters and single-use syringes have led to HIV transmission in hospitals and other clinical settings (48). Such nosocomial infections can be widespread without standard precautions.

In the west of the region, nosocomial infection has remained relatively stable at about 0.08% of people diagnosed with HIV. In 2009, the centre of the region reported that 0.10% of people newly diagnosed with HIV were infected nosocomially, representing a steady decline since the early nosocomial outbreaks in the 1980s and 1990s, including the outbreak in Romania that resulted in 10 000 children becoming infected with HIV through blood transfusion from adult donors living with HIV (64). Nosocomial outbreaks of HIV have also been documented in the east.

In 2006, a medical investigation identified tainted blood as the source of an outbreak in Shymkent, Kazakhstan, where 118 children who received transfusions at the hospital tested positive for HIV. Nevertheless, official reports for the entire east of the region recorded only 39 people being diagnosed with HIV infection acquired nosocomially for the same year.

Tajikistan said weak infrastructure had compromised blood safety, stating that 1.4% of its reported HIV cases could be attributed to blood transfusion (65).

Between 2007 and 2008, an HIV outbreak affected 147 children younger than 15 years in hospitals in Namangan city and the Namangan region of Uzbekistan. Uzbekistan reported that by 2010, a total of 1405 children had been diagnosed with HIV, 50% having been infected in health-care settings through unsafe invasive procedures, including contaminated intravenous injections and catheterizations.

HIV and the tuberculosis epidemic

HIV-related tuberculosis (TB) remains a serious problem. People living with HIV are especially vulnerable to the impact of TB and multidrug-resistant TB, which are among the leading causes of death among people living with HIV worldwide. In 2010, there were an estimated 420 000 incident TB cases across Europe and central Asia (66). Among those, the average estimated prevalence of HIV was 5%, with a reported range of 0–25% (1,66). Nine countries have an estimated HIV prevalence of 8% or greater among people newly diagnosed with TB, including Estonia, Latvia, Lithuania, the Russian Federation and Ukraine, where people with TB and HIV had a greater risk of having multidrug-resistant TB than people with TB but without HIV infection (3,66,67).

More than half the countries with a high burden of multidrug-resistant or extremely drug-resistant TB² in the world are located in the east of the region. In *Global tuberculosis control 2011* (66), WHO estimated that 12% of all people newly diagnosed with TB in Europe and central Asia had multidrug-resistant TB, the highest globally where the average is 3.4%, with peaks of up to 26% in some countries (and 28% in some settings). Among people being re-treated for TB, the percentage with multidrug-resistant TB was even higher, estimated at 37% across the region and as high as 65% in some countries (66).

The Russian Federation had an estimated 31 000 (24 000–38 000) cases of multidrug-resistant TB in 2010, the third highest globally. Of the estimated number of cases, 13 692 (44%) were diagnosed in 2010 (66).

The prevalence of active TB increased among women 15–34 years old between 2005 and 2008 (67).

² Armenia, Azerbaijan, Belarus, Bulgaria, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Republic of Moldova, Russian Federation, Tajikistan, Ukraine and Uzbekistan.

In the east of the region, the estimated coverage of antiretroviral therapy among people with both TB and HIV infection is lower than that for all those with HIV infection. Countries in the east have the highest proportions of multidrug-resistant TB worldwide (68,69).

Mother-to-child transmission

Before antiretroviral prophylaxis became available in 1994 to protect against mother-to-child transmission, HIV transmission rates in the region reached as high as 16–30% (70). But after rapid scale up in the west of the region, transmission rates dropped to 8–10% by 1996. Improved drugs and programmes meant mother-to-child transmission rates in the west had dropped to less than 2% by 2002. In the east, rates continue to be about 4–7% (70).

The numbers of infants diagnosed with HIV infection have declined by 42% in the west of the region and 55% in the centre of the region between 2004 and 2009. In the east of the region, reports from the Russian Federation on the number of new infants diagnosed continue to oscillate around an average 370 per year (4); in the remaining countries in the east of the region (Ukraine not included), the number of infants newly diagnosed with HIV infection increased three-fold between 2004 and 2009 (2). Late HIV diagnosis and linkage to care among pregnant women belonging to key populations at higher risk for HIV infection as well as increasing overall numbers of HIV-positive pregnant women delivering is likely contributing to the increasing absolute numbers of infants newly infected in east of the region.

2. National leadership in the HIV response

Strong leadership at all levels of society is essential for an effective response to the epidemic[.]

– *Declaration of Commitment on HIV/AIDS, 2001 (1)*

Introduction

Universal access to HIV services requires strong central action and local, community-based initiatives. An effective national response calls for committed, coordinated leadership from government, civil society and the private sector. Although many governments in Europe and central Asia were late to acknowledge the important role of nongovernmental actors in responding to HIV, the necessity of a multisectoral approach is now generally accepted. In 2004, when countries in Europe and central Asia met in Dublin to formulate a regional action plan in response to the 2001 Declaration of Commitment on HIV/AIDS, the first two actions they agreed to undertake endorsed the goal of universal access and the importance of leadership in all three sectors (2):

1. promote strong and accountable leadership at the level of our Heads of State and Government to protect our people from this threat to their future [HIV], and promote human rights and tackle stigma and ensure access to education, information and services for all those in need; and
2. encourage and facilitate strong leadership by civil society and the private sector in our countries in contributing to the achievement of the goals and targets of the Declaration of Commitment; ...

The United Nations High Level Meeting on AIDS reiterated these commitments in June 2011 when adopting the Political Declaration on HIV/AIDS: Intensifying Our Efforts to Eliminate HIV and AIDS (A/RES/65/277).

Implicit in these promises is an understanding that social change can be achieved by various means: by showing authority, through advocacy and by example (3). Policy- and decision-makers most commonly exercise authority through official structures (see later), although in the history of the HIV response, advocacy and example have proven more significant, especially for civil society.

Advocacy by ordinary citizens can take the form of letter-writing and boycotts, for example. Because most governments have been slow to act, civil society organizations have used these types of tools to force the greatest changes in the response to HIV (see later). Advocacy also includes public commitments by political leaders, which can be critical in catalysing government action and addressing stigma and discrimination. As governments and multilateral agencies have recognized the advantages of including key populations at higher risk in the HIV policy-making process, they have also created spaces for advocacy by representatives of civil society and the private sector, typically through multisectoral bodies such as national coordinating authorities (see later).

Finally, there is leadership by example. Civil society has been exemplary in most of the region since the beginning of the epidemic, pioneering patient-centred care, targeted prevention programmes and

many other elements of a comprehensive response. The private sector has been slow to realize its interests lie in preventing and responding to the epidemic rather than profiting from it – HIV has devastating effects on workers and consumers – though the sector has begun to bring its vast resources to the challenge (see later). Where civil society and the private sector have been weak or inactive, they have typically been discouraged by the national political system, most notably in the 15 countries of the former Soviet Union.

Assessing national leadership on HIV

To measure national leadership on HIV, proxy indicators are often used, such as the presence of a single strategic framework and a single multisectoral coordination body. Most countries in the region now have such frameworks and bodies – two of the “Three Ones” principles (see later). Such frameworks and bodies are necessary but they are not sufficient for effective national leadership, even when they are constructed well (i.e. costed and including an action plan) (4). The test of national leadership is whether a country is making progress towards universal access to HIV services. The scaling up of services for preventing mother-to-child transmission of HIV demonstrates what strong government support can achieve. Nevertheless, supporting mothers and babies is politically safe; supporting sex workers and people who inject drugs requires political backbone, especially in countries where these populations face the most stigma and discrimination. More telling indicators of political leadership would include:

- giving priority to key populations at higher risk of HIV infection and transmission in funding prevention and antiretroviral therapy;
- ensuring universal access to essential HIV prevention, treatment, care and support services for everyone who needs them, especially services that are politically contentious or that engage marginalized groups (such as opioid substitution therapy for people who inject drugs); and
- instituting effective policies regardless of their political popularity.

HIV plans and structures must be translated into action, and a country demonstrates active leadership by focusing on the key populations at higher risk (Fig. 2.1). UNAIDS recently presented this approach as part of its new investment framework (5).

Fig. 2.1. Political leadership is built on action



Source: adapted from *Implementing the Dublin Declaration on Partnership to Fight HIV/AIDS in Europe and Central Asia: 2010 progress report (4)*.

The nature of committed, active leadership varies, reflecting a proactive stance by government in some countries and the outspoken advocacy of civil society in others.

Government leadership

Challenges

- Although national HIV epidemics in Europe and central Asia are concentrated epidemics, HIV prevention efforts are often directed towards the general population rather than the key populations at higher risk that have the highest transmission rates. In the east of the region, only 11% of all investment in HIV prevention focuses on key populations at higher risk (5–7).
- Most key populations at higher risk in the region experience stigma, particularly people who inject drugs, men who have sex with men, sex workers, prisoners and migrants. Engaging these groups in services and resources may be politically unpopular in some countries.

- In the east, human rights for people living with HIV are often compromised by stigma and discrimination, including violations of confidentiality, autonomy and access to health care.
- Many government officials and civil society advocates are unaware of the legal obligations and ethical commitments their countries have made in ratifying human rights treaties and signing international HIV declarations.
- Numerous national and local laws, regulations and policies are at odds with these international commitments. Moreover, the statutory and policy environment in many countries does not adequately support key populations at higher risk and vulnerable populations, including women and young people; instead, it often undercuts equity and presents obstacles to delivering critical HIV services.
- In the east, many policy- and decision-makers are unaware of the evidence base for harm-reduction interventions, such as opioid substitution therapy or needle and syringe programmes. Some do not realize antiretroviral therapy is a highly effective prevention intervention.
- HIV programmes are not always monitored regularly to ensure strategies are translated into action.
- The vertical nature of HIV programmes in many countries in the east hinders access. By integrating HIV and other services – sexual and reproductive health, tuberculosis and primary care services – health systems can reach many people who would otherwise not access them.
- By presenting a less-than-supportive environment for nongovernmental organizations (NGOs) and private actors, some countries in the east deprive their citizens, whether intentionally or not, of the considerable resources these sectors can provide.

The government obligation to respond to HIV

All countries in Europe and central Asia have ratified at least one legally binding treaty that incorporates the right to health, such as the International Covenant on Economic, Social and Cultural Rights, which calls for “the creation of conditions which could assure to all medical service and medical attention in the event of sickness” (8,9). That makes universal access itself a human rights imperative.

In 2001, countries in the region pledged in the Declaration of Commitment on HIV/AIDS to develop and implement national multisectoral strategies and financing plans to respond to HIV (1). They committed to confront stigma, eliminate discrimination and work with civil society and the private sector. Five years later, as members of the United Nations General Assembly, these countries unanimously adopted the Political Declaration on HIV/AIDS, with its ambitious goal of universal access by 2010 (Box 2.1) (10). When most countries proved unable to achieve this goal, the General Assembly passed the Political Declaration on HIV/AIDS: Intensifying Our Efforts to Eliminate HIV and AIDS in June 2011, vowing to redouble efforts to achieve universal access by 2015 (11).

Box 2.1. Universal access in the 2006 Political Declaration on HIV/AIDS

[We c]ommit ourselves to pursuing all necessary efforts to scale up nationally driven, sustainable and comprehensive responses to achieve broad multisectoral coverage for prevention, treatment, care and support, with full and active participation of people living with HIV, vulnerable groups, most affected communities, civil society and the private sector, towards the goal of universal access to comprehensive prevention programmes, treatment, care and support by 2010[.]

Source: United Nations General Assembly, 2006 (10).

In 2010, governments were asked, “Has the country followed up on commitments towards universal access made during the High-Level AIDS Review in June 2006?” Only 4 of the 42 respondents from the region answered no, all from the west of the region. Nevertheless, few of the countries were providing universal access.

Countries in Europe and central Asia have made related commitments through various other international bodies. In 2010, members of the United Nations Economic and Social Commission for Asia and the Pacific³ signed a resolution to increase coverage of “high-impact” prevention, treatment, support and care efforts engaging key populations to 80%, particularly services for people who inject drugs, sex workers and men who have sex with men (12).

Domestic leadership in the government

The 2010 progress report on the Dublin Declaration (4) concluded that there was “strong political commitment” to the HIV response in the region “in those countries that have demonstrated the political leadership needed to address HIV effectively among those populations most affected by the epidemic”. The report did not specify how widespread this commitment was, but the Regional Consultation on Universal Access to HIV Prevention, Treatment, Care and Support in Europe and Central Asia in March 2011 felt that HIV prevention efforts in many countries in the east of the region, particularly for key populations at higher risk of infection, continue to be largely driven by civil society; the political commitment of governments there tends to be weak, jeopardizing the sustainability of efforts (13). Although former Soviet bloc countries have evolved in different ways in the past 20 years, a recent UNICEF study found that HIV programmes and policies in many are still struggling with a political legacy of authoritarianism, often ignoring the lived experience of key populations at higher risk and evidence of which interventions work. According to a UNICEF report (14):

Faced with an epidemic that mostly affects socially excluded populations such as drug users and sex workers, post-Soviet systems and mindsets have found it difficult to tailor inclusive responses to meet the specific needs of marginalized groups and those living with HIV. Rigid social controls have often led to denunciation and blame of those who fail to conform, or who are caught up in systemic failures. In these circumstances, the stigma and discrimination related to fear and ignorance about HIV find reinforcement in official attitudes of intolerance, and in existing public prejudice against those whose behaviour is seen as “anti-social” or “immoral”.

³ Commission members include Armenia, Azerbaijan, France, Georgia, Kazakhstan, Kyrgyzstan, Netherlands, Russian Federation, Tajikistan, Turkey, Turkmenistan, United Kingdom and Uzbekistan.

Nevertheless, in 2010, government officials from the centre of the region rating national political support for the national HIV programme on a scale of 0 to 10 gave it an average score of 8.0; in the east, officials rated political support at 7.2; and officials in central Asian countries, 7.0. Among the political achievements cited were: providing people who have social insurance access to HIV treatment free of charge (Turkey); assuming funding responsibility from the Global Fund to Fight AIDS, Tuberculosis and Malaria (Estonia); introducing methadone substitution therapy (Georgia); and integrating HIV programmes with the health sector. By far the most common political challenge they mentioned was the need to secure sustainable funding for the national response.

As noted, most of these respondents appeared satisfied with their governments' political backing of the national response, and except for Croatia, all said key national officials spoke out in support at prominent domestic forums at least twice a year, and almost all said that subnational officials did so, too. However, political validation was usually absent at the highest level in the centre of the region, where only two of 10 heads of government provided such public support, and in the east, where only four of 12 did.

Although civil society remains fairly weak in many countries undergoing economic and political transition, its effect on government responses has been critical. Civil society representatives from the centre and east of the region, when asked in 2010 to rate their sector's contribution to the political commitment of top leaders to the national HIV programme and policy formulation, gave it an average score of 3.7 on a scale of 0 (lowest) to 5 (highest). While their comments tended to focus on the role of civil society in shaping policy on multisectoral coordinating committees (see later), several respondents also mentioned the role of civil society in strengthening politicians' commitment to national efforts (Czech Republic, Lithuania and the former Yugoslav Republic of Macedonia), participating in parliamentary processes (Armenia, Montenegro and Serbia) and monitoring human rights violations (Montenegro and Turkey).

Protecting rights and combating stigma and discrimination

The various international declarations on HIV issued in the past decade are all grounded in human rights. They recognize that a comprehensive response to the epidemic requires national governments to respect, protect and promote the rights of the people living with and affected by HIV (Box 2.2).

Box 2.2. The centrality of human rights in the 2006 Political Declaration on HIV/AIDS

[We] Reaffirm that the full realization of all human rights and fundamental freedoms for all is an essential element in the global response to the HIV/AIDS pandemic, including in the areas of prevention, treatment, care and support, and recognize that addressing stigma and discrimination is also a critical element in combating the global HIV/AIDS pandemic[.]

Source: United Nations General Assembly (9).

These rights are rooted in what the Universal Declaration of Human Rights calls "the inherent dignity ... of all members of the human race" (15). Freedom from discrimination is central to this

moral and legal obligation of all governments, as Article 2 of the Universal Declaration (15) states unequivocally:

2. Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status.

United Nations treaty bodies have since clarified that “other status” includes HIV serostatus, sexual orientation and gender identity (16,17).

In responding to HIV, confronting discrimination – and the stigma that motivates it – is as much a practical matter as an ethical one. The key populations at higher risk tend to be populations that suffer the greatest stigma and discrimination: people living with HIV, people who inject drugs, sex workers and their clients, migrants, prisoners, transgender people and men who have sex with men. In addition, women and poor people are especially vulnerable. In the east of the region, for instance, people who inject drugs have the greatest need of HIV services, yet government and society most severely restrict their access. The fact that HIV incidence among drug injectors continues to rise testifies to the widespread failure of governments to tackle discrimination, both within government programmes and in society at large.

The first line of attack on stigma and discrimination is legal: ensuring that laws protecting the rights of key populations at higher risk are enforced, and that these people can access legal remedies and legal aid when their rights are violated. That is why, when the countries in Europe and central Asia gathered in 2004 to decide how they would implement the Declaration of Commitment, they all pledged to undertake (2):

... critical review and monitoring of existing legislation, policies and practices with the objective of promoting the effective enjoyment of all human rights for people living with HIV/AIDS and members of affected communities.

Seven years later, however, the Regional Consultation on Universal Access to HIV Prevention, Treatment, Care and Support in Europe and Central Asia was still calling for the same countries to review their policies and regulations in order to align them with international human rights standards and HIV protocols, citing a widespread lack of action. The consultation noted the following specific problems:

- laws and policies that criminalize same-sex sexual activities (in northern Cyprus, Turkmenistan and Uzbekistan) or sex work or that dictate compulsory treatment for people who use drugs (18);
- laws in many countries that criminalize HIV exposure or transmission, even if prosecution is quite rare (19);
- laws, regulations, or policies that present obstacles to access to prevention, treatment, care and support for vulnerable subpopulations;
- laws and policies in many countries in the east of the region do not adhere to international human rights standards and protocols, such as protection and enforcement of confidentiality and against involuntary sharing of medical information;

- drug laws and policies in many countries in the east that interfere with health service delivery, such as laws that interpret information on safer injecting practices as pro-drug propaganda;
- a lack of lawyers in the east who specialize in the rights of people living with HIV, drug users, migrants, sex workers or prisoners, and who can provide them with legal aid; and
- a general lack of systems to monitor and report incidents of stigma and discrimination (13).

Except for Denmark, Greece and Monaco, civil society representatives from every reporting country in the region said in 2010 that their countries had laws prohibiting discrimination against people living with HIV (Tables 2.1 and 2.2). However, the vast majority of these laws are only general antidiscrimination statutes, and few mention HIV status explicitly (one being in Romania).

Table 2.1. Key laws supporting or blocking universal access in countries in the west and centre of the region, July 2010

Countries	Protective laws		Punitive laws					
	A Laws and regulations that protect people living with HIV against discrimination	B Non-discrimination laws or regulations that specify protections for vulnerable subpopulations	C Laws, regulations or policies that present obstacles to access to prevention, treatment, care and support for vulnerable subpopulations	D HIV-specific restrictions on entry, stay or residence	E Laws that specifically criminalize HIV transmission or exposure	F Laws that criminalize same-sex sexual activities between consenting adults	G Laws deeming sex work ("prostitution") to be illegal	H Laws that impose compulsory treatment for people who use drugs and/or provide for death penalty for drug offences
Albania				N	No	No	Yes	Yes
Andorra				Yes		No	Yes	
Belgium	Yes	Yes	Yes	No	No	No	No	
Bosnia and Herzegovina	Yes	Yes	No	No	No	No	Yes	Yes
Bulgaria	Yes	Yes	No	No	No	No	No	
Croatia	Yes	Yes	Yes	No	No	No	Yes	
Cyprus				Yes	No	No	No	
Czech Republic	Yes	Yes	Yes	No	Yes	No	No	Yes
Denmark	No	Yes	No	No	Yes	No	No	
Finland	Yes	Yes	Yes	No	No	No	No	
France				No	No	No	No	
Germany	Yes	Yes	Yes		Yes	No	No	
Greece	No	Yes	Yes	No		No	No	
Hungary	Yes	No	Yes	No	No	No	No	
Iceland				No	No	No	No	
Ireland	Yes		No	No	No	No	No	
Israel	Yes	No	No	Yes		No	No	
Italy				No	No	No	No	

Liechtenstein				No		No	Yes	
Lithuania	Yes	Yes	Yes	Yes	No	No	Yes	
Luxembourg	Yes	Yes	No	No	No	No	No	
Malta				No	Yes	No	Yes	
Monaco	No	No	No	No		No	Yes	
Montenegro	Yes	No	Yes	No	Yes	No	Yes	Yes
Netherlands	Yes	No	Yes	No	No	No	No	
Norway	Yes	Yes	Yes	No	No	No	No	
Poland	Yes	Yes	Yes	No	Yes	No	No	Yes
Portugal	Yes	Yes	No	No	Yes	No	No	
Romania	Yes	Yes	Yes	No	Yes	No	Yes	
San Marino				No		No	Yes	
Serbia	Yes	Yes	Yes	No	Yes	No	Yes	Yes
Slovakia				Yes	Yes	No	No	Yes
Slovenia	Yes	No	No	No		No	Yes	
Spain	Yes	Yes	Yes	No	No	No	No	
Sweden	Yes	Yes	Yes	No	No	No	No	
Switzerland	Yes	Yes	Yes	No	No	No	No	
The former Yugoslav Republic of Macedonia	Yes	No	Yes	No	No	No	Yes	Yes
Turkey	Yes	Yes	Yes	No	No	No	No	
United Kingdom	Yes	Yes	Yes	No	Yes	No	No	

Source: *Making the law work for the HIV response* (18).

Table 2.2. Key laws supporting or blocking universal access in countries in the east of the region, July 2010

Countries	Protective laws		Punitive laws					
	A Laws and regulations that protect people living with HIV against discrimination	B Non-discrimination laws or regulations that specify protections for vulnerable subpopulations	C Laws, regulations or policies that present obstacles to access to prevention, treatment, care and support for vulnerable subpopulations	D HIV-specific restrictions on entry, stay or residence	E Laws that specifically criminalize HIV transmission or exposure	F Laws that criminalize same-sex sexual activities between consenting adults	G Laws deeming sex work ("prostitution") to be illegal	H Laws that impose compulsory treatment for people who use drugs and/or provide for death penalty for drug offences
Armenia	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Azerbaijan	Yes	Yes	Yes	No	Yes	No	Yes	Yes
Belarus	Yes	Yes	Yes	Yes	Yes		Yes	Yes
Estonia	Yes	No	No	No	No	No	No	
Georgia	Yes	No	Yes	No	Yes	No	Yes	
Kazakhstan	Yes	Yes	No	No	Yes	No	No	Yes
Kyrgyzstan	Yes	Yes	No	No	Yes	No	No	
Latvia	Yes	No	No	No		No	No	
Lithuania	Yes	Yes	Yes	Yes	No	No	Yes	
Republic of Moldova	Yes	Yes	No	Yes	Yes	No	Yes	
Russian Federation	Yes	Yes	Yes	Yes		No	Yes	
Tajikistan	Yes	Yes	No	Yes		No	Yes	
Turkmenistan				Yes	Yes	Yes	Yes	
Ukraine	Yes	Yes	Yes	Yes		No	Yes	
Uzbekistan	Yes	Yes	No	Yes	Yes	Yes	Yes	

Source: Making the law work for the HIV response (18).

Of the 26 countries reporting to UNAIDS in 2010, 9 reported that they did not have any antidiscrimination laws or regulations specifying protections for key populations at higher risk. In the remaining 17 countries, the population groups that most often enjoyed some relevant legal protection were women (15 countries), youth (14) and prisoners (13). Fewer than half the reporting countries protected migrants (12 countries), people who use drugs (9), men who have sex with men (9) or sex workers (5). Even where antidiscrimination laws exist, governments may recognize they are too general (Georgia and Ukraine) or they are simply ignored. Enforcement of antidiscrimination laws also varies considerably; national civil society representatives report that they are implemented poorly in Bosnia and Herzegovina and Ukraine and implemented well in Bulgaria and Turkey.

On legal or policy barriers to a comprehensive HIV response for key populations, civil society was much more critical than government officials. In the same 26 countries, government respondents in 9 admitted having laws or policies that presented obstacles to an effective HIV response for key populations, including people who use drugs (7 countries), sex workers (5) and prisoners (3). Civil society respondents found such obstacles in 16 of these countries, including those for people who use drugs in 12, sex workers in 8 and prisoners in 9. This disparity probably arises because people in organizations providing HIV services have more direct experience of stigma and discrimination than government officials, making the former more familiar with relevant laws, discriminatory as well as antidiscriminatory.

In addition, every country had a policy guaranteeing women and men equal access to HIV services, and every country except the Russian Federation had a policy of equal access for key populations at higher risk, although only about half of these policies included approaches tailored to individual populations.

Combating stigma and discrimination requires more than legal and policy measures, however. People must be informed and educated if we are to change the way they think about key populations. In 2010, almost all the countries in the centre and east of the region had programmes to combat HIV-related stigma and discrimination, the reported exceptions being Croatia, Hungary, Latvia and Lithuania. Most countries were running programmes in the mass media and schools.

One stumbling block to effective action is that most governments are unaware of the extent of stigma and discrimination in their countries and the forms they take. One invaluable resource appeared in 2010, when the Council of Europe published a social and legal analysis of stigma and discrimination based on sexual orientation and gender identity in its Member States (20). It documents the considerable but uneven progress made in changing attitudes towards transgender people, men who have sex with men and women who have sex with women and in adopting and enforcing legal protections for them.

Because stigma and discrimination tend to drive people underground, the most effective way to assess them is through peer methods, such as those used in the People Living with HIV Stigma Index (see later).

National leadership on the global stage

Governments have recognized that they have a moral obligation to help countries in need respond to HIV. Accordingly, many countries have provided substantial technical and financial assistance to low- and middle-income countries through bilateral, multilateral and nongovernmental organizations. See later for a brief discussion of this form of leadership within the region.

Civil society leadership

Challenges: civil society leadership (13)

- In many countries in the east of the region, legal, financial and other procedural obstacles and weak government support for civil society efforts jeopardize the sustainability of the national response.
- National funding for civil society initiatives remains low, especially for prevention programmes engaging key populations at higher risk.
- Some countries prohibit the registration of certain NGOs (such as sex worker networks or organizations of men who have sex with men) and otherwise limit the freedom of civil society to access international funding.
- The power of individual NGOs is not adequately harnessed for collective advocacy and regional action.
- The monitoring and evaluation systems of NGOs are often not harmonized with the national systems, or with each other when national systems do not exist, limiting the usefulness of data for planning and advocacy.
- Many civil society groups lack organization, have weak management and accounting systems and limited access to technical assistance.
- Although the representation of people living with HIV on national HIV commissions and country coordinating mechanisms has improved, other key populations at higher risk of HIV infection and transmission remain underrepresented and have little say in policy- and decision-making.
- If countries do not know the extent and nature of the stigma and discrimination experienced by key populations at higher risk, they have difficulty in addressing it. The People Living with HIV Stigma Index (www.stigmaindex.org) provides a useful method for investigating these phenomena for people living with HIV and a model for other key populations at higher risk.

The term “civil society” refers to the nongovernmental and not-for-profit organizations that express the interests and values of their members or others, based on ethical, cultural, political, scientific, religious or philanthropic considerations. Civil society includes community groups, NGOs, labour unions, indigenous groups, charitable and faith-based organizations, professional associations and foundations (21). The most prominent community-based organizations are those that represent people living with HIV and other key populations at higher risk (3).

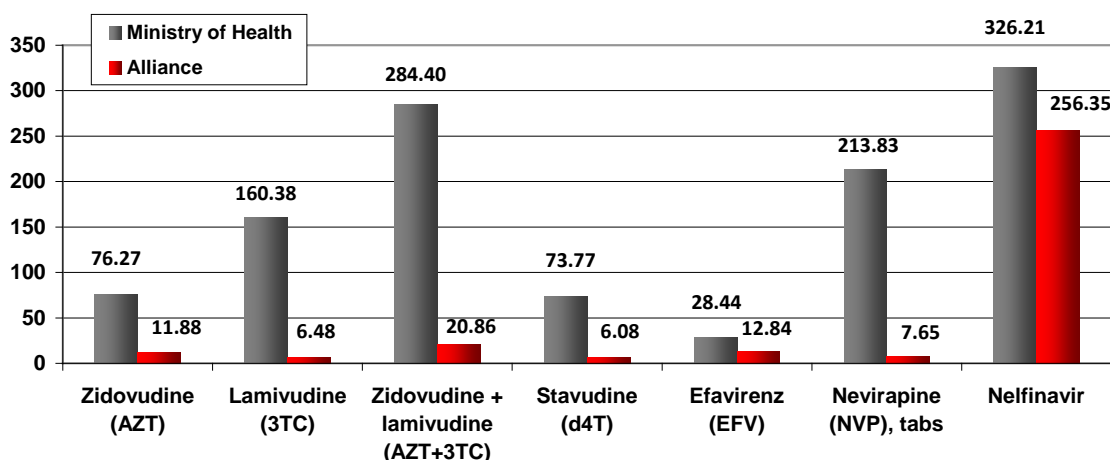
Since the beginning of the epidemic, NGOs have played a leading role in the HIV response by “developing effective interventions, providing care, spearheading prevention efforts, fighting discrimination and stigmatization, educating the public, collecting information and critiquing national and international responses” (3) (Box 2.3).

Europe and central Asia, in particular the west of the region, has been at the forefront of forming innovative partnerships with civil society, including communities of key populations at higher risk of HIV infection, people living with HIV and nongovernmental organizations that advocate for and provide services. Several pan-European networks and organizations have emerged, and the number and size of networks of people living with HIV have increased. Civil society is a key actor in formulating, promoting and delivering change. Community engagement not only increases the effectiveness and scope of implementation efforts but also plays an important part in developing policies and programmes. The users of health services need to shape a patient-centred approach to diseases such as HIV and TB. Civil society is being consulted more often in the European Region, where its involvement in formulating HIV policy and in decision-making has increased in many countries. Civil society throughout the region should be consulted more often and involved in a more meaningful way (22).

Box 2.3. Civil society playing a role in improving procurement and supply management in Ukraine

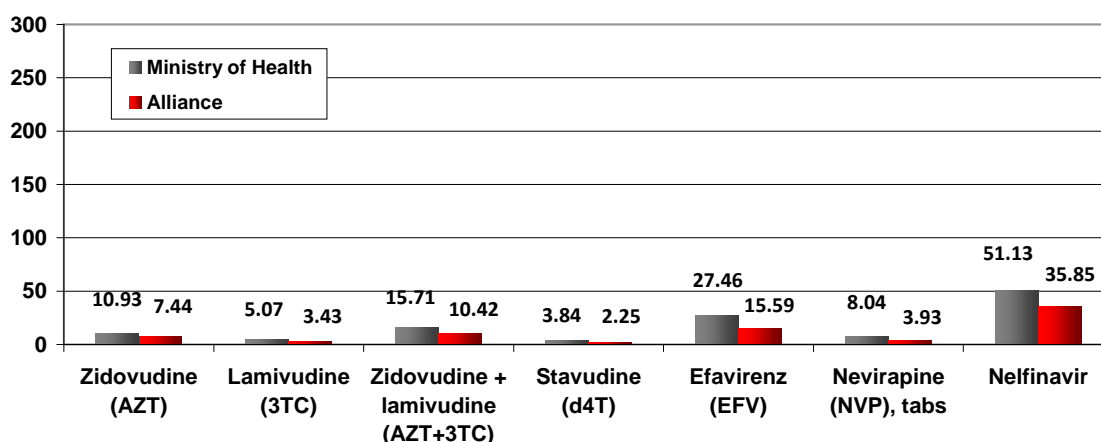
In 2004, the International HIV/AIDS Alliance in Ukraine established its own procurement system to challenge the state monopoly on antiretroviral drug purchases. Using the principles of transparency and open competition, the Alliance was able to procure antiretroviral drugs at a fraction of what the government paid, sometimes for as little as 4% of official prices (Fig. 2.2). In response, the government was able to reduce the price it paid for drugs, although the Alliance succeeded in reducing its prices even more (Fig. 2.3).

Fig. 2.2. Antiretroviral drug prices (in US dollars) in Ukraine per pack (monthly supply) obtained by the Ministry of Health and by the International HIV/AIDS Alliance in Ukraine, 2004



Source: International HIV/AIDS Alliance in Ukraine.

Fig. 2.3. Antiretroviral drug prices (in US dollars) in Ukraine per pack (monthly supply) obtained by the Ministry of Health and by the International HIV/AIDS Alliance in Ukraine, 2008



Source: International HIV/AIDS Alliance in Ukraine.

The All-Ukrainian Network of People Living with HIV and its partners launched an advocacy campaign in 2007 to improve the quality of drugs purchased in Ukraine. The campaign brought together government officials, people living with HIV, doctors and civil society representatives to lobby the ministry to procure high-quality drugs.

From 2009, the Alliance transferred responsibility for more than 6070 people who had been receiving antiretroviral therapy (supported by a five-year grant from the Global Fund to Fight AIDS, Tuberculosis and Malaria) to the Ministry of Health and guided the government procurement and supply management authorities on lowering costs, the importance of WHO prequalification and the advantages of flexible supply management. The state had been operating on an annual tender cycle, which led to systematic delays in delivery of up to a year. The flexibility of the Alliance system, in contrast, allowed it to respond to sudden changes in storage and supply conditions. Civil society remains a vital source of expertise for the government, especially in light of ambitious plans to increase the number of people receiving antiretroviral therapy in the country.

Where civil society has not led the response to HIV, it is generally because the state has discouraged its activities, whether deliberately or not. Without encouragement, local organizations have had to struggle to develop necessary expertise and funding. The former Soviet Union was known for outlawing and repressing NGOs, thereby violating the right of association that forms the basis for a healthy civil society (see Article 20 of the Universal Declaration of Human Rights (15)). Although the dissolution of the Soviet Union has provided civil society with an opportunity to gain a toehold, it has been a slow process, and civil society remains fragile and underdeveloped in many of these countries, where NGOs rely on international assistance for most of their funding, and government actions profoundly affect their ability to operate.

Governments in the east of the region originally regarded with suspicion the creation of NGOs through the support of international donors, concerned that the objective of these organizations was

less to respond to HIV than to undercut government legitimacy. As a multilateral organization, the Global Fund to Fight AIDS, Tuberculosis and Malaria has been able to allay many of these fears and help government and civil society collaborate. In Kazakhstan and Tajikistan, the emergence of outside funders initially encouraged the government to create quasi-NGOs, calculated to win donor support without really operating independently. Other governments have since responded to the outside support of civil society with enthusiasm and support of their own.

Many governments in Europe and central Asia have come to appreciate the work of civil society in the HIV response. With strong urging from the Global Fund, UNAIDS and WHO, most countries in the region now include civil society efforts in HIV action frameworks and civil society representatives on coordinating authorities. Although only half the countries in the region have a single monitoring and evaluation plan, almost all of those countries consulted with civil society when formulating such (see section on the “Three Ones” later). Through these official collaborations, civil society has been able to shift its advocacy efforts inside the system, thereby exercising greater influence on HIV policy- and decision-making, particularly in promoting evidence-informed interventions and human rights-based policy.

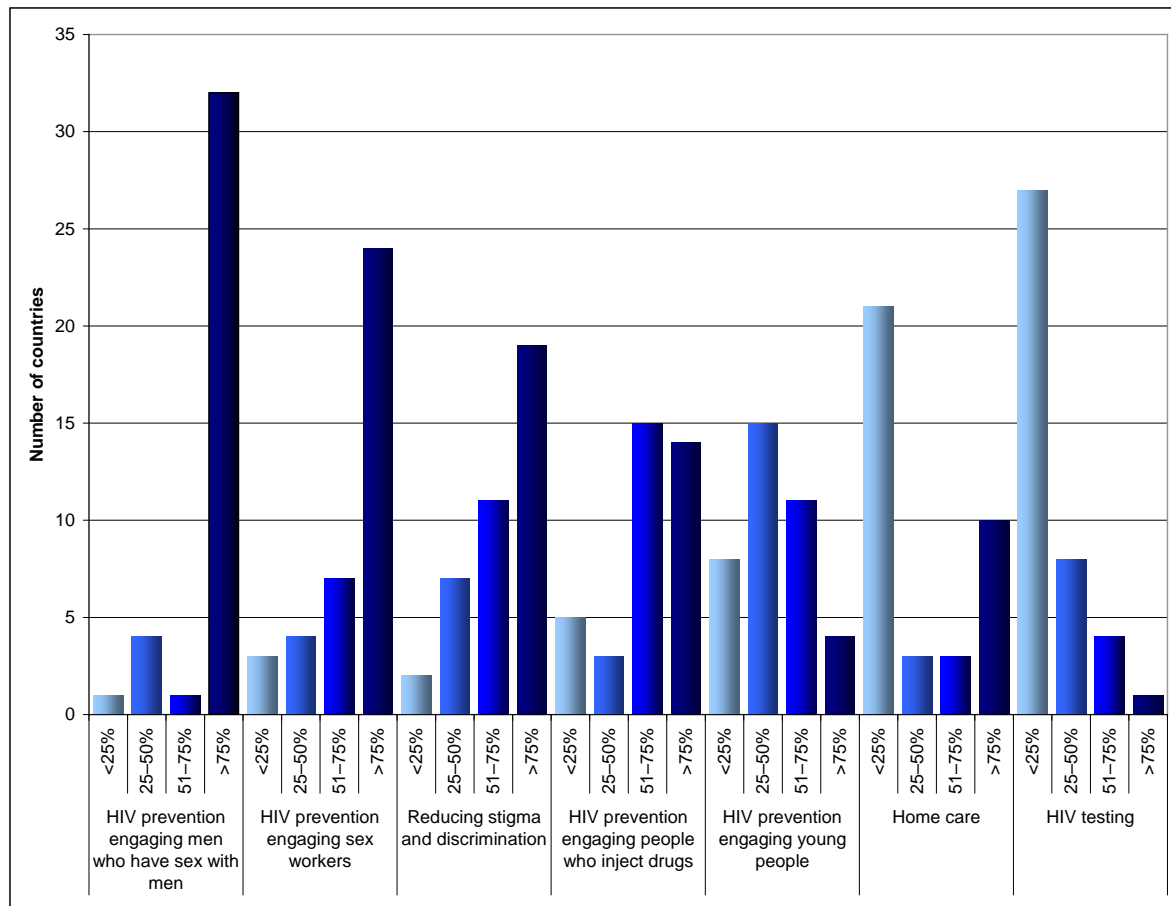
For instance, a study of universal access target-setting and evaluation in the east of the region compared the 2010 national consultation in Belarus with the corresponding one four years earlier and found that the role of civil society had improved considerably, due in large part to its own efforts. Representatives successfully lobbied for greater involvement, and developed concrete positions on five indicators and a strategy on how to present them during the consultation. In three other countries taking part in the study (Georgia, Albania, The former Yugoslav Republic of Macedonia), obstacles to greater civil society influence remained the same as in 2006, according to respondents from that sector (23):

- lack of participants from key populations at higher risk
- lack of geographical diversity among representatives
- insufficient awareness among civil society of the process
- absence of capacity-building activities for civil society participants
- lack of opportunities to provide feedback on key documents
- external selection of civil society participants (by government or a multilateral agency)
- poor dissemination of information materials
- insufficient motivation to participate
- lack of coordination among NGOs.

In 2009, the European Centre for Disease Prevention and Control (ECDC) questioned government officials about the difference civil society made in their national HIV efforts. Many respondents singled out the ability of civil society to work with marginalized groups and provide community outreach for providing prevention, care and treatment services (4). NGOs play a critical role in combating stigma and discrimination, a role that faith-based organizations (such as the Ukrainian interchurch community) are notably beginning to embrace (13). Because stigma and discrimination engender distrust, community-based organizations are more effective than government or multilateral

bodies in monitoring these (see later). Civil society’s estimates of its contributions to the national response also suggest the impressive scope of its efforts (Fig. 2.4).

Fig. 2.4. Percentage civil society contributes to the national HIV response in Europe and central Asia, 2009



Source: AIDSinfo [online database] (5).

Civil society representatives in the region feel their governments’ efforts to increase civil society involvement have stagnated overall. On a scale of 0 to 10, they gave such efforts an average score of 5.2 in 2005 and 6.5 in both 2007 and 2009, with the highest marks going to countries in the centre of the region. Even though governments increasingly recognize that civil society is better able to reach key populations at higher risk and that the epidemic in the region is concentrated among these populations, few governments provide civil society groups with much financing or other resources. Nevertheless, most countries report that their national HIV commissions offer NGOs some form of technical guidance and capacity-building support.

In 2010, civil society representatives from the region rated their overall ability to access sufficient funds for HIV activities at 2.8 on a scale of 0 to 5 and 3.2 for accessing adequate technical support. Smaller NGOs in countries in the east have particular difficulty in obtaining national funding. Some governments will fund only those NGOs that can obtain co-financing, which is especially hard for community-based organizations. The Russian Federation offers NGOs grants through the national priority projects, but funds are available only after a project is completed, which means recipients

must pre-fund their initiatives, and most NGOs lack the resources to do this. NGOs in Azerbaijan and Belarus must register as commercial entities and do not enjoy the tax breaks their counterparts in most of the rest of the world do. Governments that fund NGOs have usually not established clear processes or criteria for making the awards. Some government policies and procedures prevent NGOs from accessing international assistance; by not permitting, for instance, certain kinds of organizations to receive funding from abroad. Although such restrictions do not appear to always be intentional, their existence indicates a lack of government initiative to support civil society activity.

In contrast, Georgia, Kazakhstan and Ukraine have entrusted civil society with outreach to key populations at higher risk and have started to contract with NGOs to provide social services (13). Such social contracting is especially well established in Kazakhstan at national and local levels. In 2010, for instance, national ministries funded 37 NGOs in Kazakhstan for delivering HIV prevention services (24).

For countries outside the EU, most financial assistance comes from the Global Fund to Fight AIDS, Tuberculosis and Malaria (see later). The Global Fund also funds most of the technical assistance for these countries, although such assistance is generally provided by partners that include UNAIDS, the Technical Support Facilities, UNAIDS Cosponsors and a range of NGOs, academic institutions and independent consultants. Three fifths of the active Global Fund grants for the region go to principal recipients or subrecipients from civil society (13). Of the 64 grants it reviewed from the region for HIV, malaria and TB in 2005–2010, the Global Fund found that all those it awarded to civil society principal recipients were performing well (25).

People Living with HIV Stigma Index

The worse the stigma and discrimination a key population experiences, the more they are driven underground, making these phenomena more difficult to monitor and evaluate. Through its emphasis on peer interviewing, the People Living with Stigma HIV Index (26) provides data on HIV-related stigma in a process that empowers participating people living with HIV. Index results have been published for Belarus, the Russian Federation and the United Kingdom (Box 2.4). Additional reports are being prepared for Estonia, Poland, the Republic of Moldova, Turkey and Ukraine. The index would be an invaluable model for other key populations at higher risk wishing to monitor stigma and discrimination.

Box. 2.4. Empowering people living with HIV by investigating stigma: the People Living with HIV Stigma Index in the United Kingdom

In 2009, a partnership of NGOs representing people living with HIV and other key populations at higher risk recruited 35 people living with HIV as researchers to implement the People Living with HIV Stigma Index in the United Kingdom. They interviewed a reasonably representative and diverse sample of 867 people living with HIV about their experiences of HIV-related stigma and discrimination during the previous 12 months. The sample reflected the geographical spread of HIV in the country and included many people who identified themselves as men who have sex with men, asylum-seekers and refugees.

During the previous year, 17% of the respondents reported being denied health services because of their HIV status, 12% reported being physically harassed and 22% being verbally harassed, assaulted or threatened on the same grounds. Thirty-two per cent said they had not received any pre- or post-test counselling when they were diagnosed with HIV. Among respondents identifying as homosexual, 46% reported experiencing stigma or discrimination, and 29% of those who were refugees or asylum-seekers said their immigration status had led to their being discriminated against during the previous 12 months.

The interviews also found that internalized stigma was widespread. A large proportion of the sample stated that during the previous year their HIV status had led to shame (nearly half), feelings of guilt (nearly half), low self-esteem (two thirds) and suicidal feelings (one quarter). Nevertheless, most people living with HIV had also acted to counter HIV-related stigma during this time, with 84% providing support to other people living with HIV and 45% confronting, challenging or educating someone who was stigmatizing or discriminating against them.

In 2010, the interview findings were used to design focus groups for people living with HIV. Six groups met to generate and discuss ideas about health, self and disclosure, and another six concentrated on rights, support and creating change. The resulting observations and suggestions were then collated thematically and published. As with the interviews, participants described the process itself as empowering.

Sources: Give stigma the index finger! (27) and Sharp (28).

Private-sector leadership

Challenges: private-sector leadership

- Few firms realize the pervasive effect HIV has on business or how responding to HIV is an investment in their future. As a consequence, private-sector HIV initiatives are the exception rather than the rule.
- Outreach to business leaders on HIV issues – from government, multilateral organizations or other business leaders – is minimal or nonexistent in most countries.
- Government and multilateral efforts to encourage HIV policies and programmes in the workplace tend to ignore the informal sector and migrant workers.
- Although the monitoring process for the Declaration of Commitment on HIV/AIDS includes indicators for tracking the involvement of civil society, there are no comparable indicators for the private sector.
- There are few national or regional networks of private actors devoted to HIV issues.
- There is no private-sector equivalent of the Code of Good Practice for NGOs Responding to HIV/AIDS (29).

The private sector has vast resources to bring to the HIV response, including the financial capital the other two sectors lack. With its influence over workers and consumers, it is uniquely placed to implement prevention measures and combat discrimination. Private-sector philanthropy plays an increasingly important role, too, albeit one closely resembling the charitable efforts of the other sectors.

Because private enterprise was outlawed or discouraged under Communist regimes, the private sector in countries in the east tends to be much weaker than that in the west of the region. Businesses in the east have greater regulatory burdens, higher administrative costs, fewer property rights and higher capital costs, while the informal economy plays a much larger role. As a result, the private sector in the west of the region is better positioned to address HIV than the private sector in the rest of the region.

Private-sector actors are driven chiefly by the profit motive. Businesses have been justly criticized for HIV profiteering (inflating drug prices), gross discrimination (refusing life insurance to people living with HIV) and inappropriate lobbying (sponsoring HIV meetings of the European Parliament) (3). The private-sector response to HIV must, therefore, be managed as well as encouraged.

A few individual businesses have distinguished themselves by leading by example, engaging in customer and community outreach, HIV-related philanthropy and workplace initiatives. By providing HIV services, information and referrals, employers can play a major role in expanding access to HIV prevention, treatment, care and support (Box 2.5) (30). Nevertheless, such efforts are an exception rather than the rule. Armenia, Kazakhstan, Tajikistan and Ukraine are developing national workplace policies, and Bosnia and Herzegovina is in the process of starting a new project.

Box 2.5. Promoting healthy behaviour and combating stigma in a workplace in the Russian Federation

In 2009, a national priority project entitled Health in the Russian Federation selected five large companies to implement an initiative to prevent HIV and other sexually transmitted infections in the general working population. One of the companies was OJSC Holding Company Barnaul Machine-Tool Plant. Recognizing the importance of dialogue and preventive measures in reducing the social and economic consequences of disease, the initiative sought to raise awareness of HIV, sexually transmitted infections and drug use; promote healthier behaviour; and combat HIV-related stigma and discrimination. In doing so, it hoped to prevent these diseases among workers and their family members.

At the start of the project, OJSC developed a corporate policy to address HIV, drug addiction and sexually transmitted infections. A stakeholder roundtable was built on the experience of the International Labor Organization (ILO) and GBCHealth to provide direction for the initiative. A total of 110 human resource and health service employees were trained in prevention and tolerance, and more than 1600 employees participated in awareness-raising activities, including role-playing and discussions. Connections were also made with local government, regional medical and preventive institutions and NGOs, facilitating referrals and future collaboration.

Anonymous surveys before and after the eight-month initiative showed significantly improved employee knowledge on five UNGASS indicators.

Source: Kopylova et al. (31).

As an advocate, the private sector will inevitably promote the interests of industry. Traditionally adept at lobbying governments through informal means, the private sector is increasingly being given an official role through representation on national HIV bodies, thanks largely to the encouragement of UNAIDS and the Global Fund to Fight AIDS, Tuberculosis and Malaria (itself a public-private partnership).

GBCHealth (formerly the Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria) provides one notable exception to the dearth of private-sector dialogue on HIV. In June 2011, GBCHealth had 77 members working on HIV in Europe and central Asia. They included companies with headquarters spread over 15 countries in the region, concentrated in the west of the region, the Russian Federation and Ukraine. National coalitions include two networks, one Russian and one Ukrainian, called the National Association of Business against AIDS, consisting of local and international companies, business associations and trade unions seeking to foster sectoral dialogue on HIV prevention and to mobilize their respective business communities in responding to HIV.

Although the Global Fund set up dual-track financing in 2008 to encourage civil society and the private sector to apply for grants alongside government bodies, it has awarded only a handful of private organizations. At present, no active Global Fund grants in the region have principal recipients from the private sector.

Clarifying priorities and uniting forces: the “Three Ones”

Challenges: the “Three Ones”

- The “Three Ones” encourage vertically organized HIV programmes. Separating HIV programmes from primary care and sexual and reproductive health services diminishes contact with potential clients and reduces access.
- National coordinating bodies, and the nongovernmental sectors they represent, frequently have no input on government HIV budgets.
- Civil society and key population representatives on multisectoral coordinating bodies often lack experience in communicating with their constituencies, establishing advocacy priorities and formulating strategies to pursue them.

As national HIV epidemics have grown in scale and complexity, the number of actors involved, each with its own agenda and resources, has multiplied, along with the potential for duplicated effort.

Recognizing the need to avoid waste, HIV stakeholders agreed in 2003 on three unifying elements to help optimize a national response (32):

1. one action framework to coordinate the work of all partners;
2. one national coordinating authority, with a broad multisectoral mandate; and
3. one national monitoring and evaluation system.

Since then the “Three Ones” have been widely adopted and highly successful in increasing efficiency and effectiveness while encouraging the diverse approach that a comprehensive response requires. They have fostered dialogue, cooperation, data-sharing and the exchange of best practices among stakeholders, helped them grasp the big picture, identify service gaps and set priorities. In effect, the “Three Ones” serve as a triple-prong mechanism for collaborative leadership by stakeholders from all three social sectors.

A drawback, however, is that the “Three Ones” have encouraged vertically organized HIV programmes with their own funding streams, strategic plans and workforces. In contrast, integrating HIV services with primary care and sexual and reproductive health services saves money and broadens access to all services. Many people only encounter HIV services if they are available in another health-sector setting.

One national framework for HIV action

In 2010, 90% of the reporting countries in the region said they had a single multisectoral strategy or action framework for HIV. Civil society was “fully involved” in developing the great majority of these frameworks. But more than one fifth of the frameworks had no operational plan and more than one fourth no identified funding source, suggesting that, however impressive they may look on paper, some of them are not being translated into action.

One multisectoral coordinating authority for the national HIV response

As discussed earlier in this chapter, civil society and the private sector have a great deal to contribute to a national response. By giving them an official role in HIV policy- and decision-making, governments around the world have been able to access their expertise while securing their support and cooperation. Most governments now realize that involving key populations at higher risk is also critical to the success of national HIV efforts. The United Nations has acknowledged the ethical and practical value of increasing their role in HIV policy- and decision-making. People living with HIV know first-hand about testing, transmission and treatment, and the stigma of living with HIV. As the major transmission vectors, members of groups whose behaviour can put them at heightened risk of being infected with and transmitting HIV – men who have sex with men or people who inject drugs, for example – are ideally situated to determine the best ways to address this behaviour and collect data from their cohorts.

In 2010, 36 of 42 responding countries from the region said they had an officially recognized national multisectoral AIDS coordination body. The six countries that did not were all in the west of the region. Kyrgyzstan was the only country with a coordinating body to say that civil society was unable to influence its decisions (despite having representation). The coordinating bodies in Denmark and Poland did not include any civil society representatives or people living with HIV. Nor did people living with HIV serve on the coordinating bodies in Bosnia and Herzegovina, the Czech Republic or Turkey.

Although the coordinating bodies typically have input into most aspects of the government response, they are often excluded from budgeting. As civil society representatives have observed, “denying

nongovernmental actors a say in HIV financing severely limits their contributions to the national strategy” (3).

One monitoring and evaluation system

An effective, unified monitoring and evaluation system is essential for identifying service gaps and determining how to improve the national response to concentrated epidemics. A single integrated system facilitates effective action by national stakeholders. Although efforts to improve monitoring and evaluation have focused on countries that receive international assistance for HIV – the Global Fund recommends that recipients invest 5–10% of their grant money in monitoring and evaluation (33) – it remains a critical issue throughout the region. In 2009, 26 of 48 countries reported having a single HIV monitoring and evaluation plan, and another 15 said such a plan was being developed (4).

Funding the national response

Challenges

- HIV resource planning and allocation need to be strategically and consistently linked to epidemic priorities. This requires periodic, high-quality analysis of needs and the political will to address the needs of the key populations at higher risk.
- International donors provide more than 70% of the funding for HIV programmes engaging population groups at higher risk, leaving such services vulnerable to the withdrawal of support (13).
- Many prevention, treatment, care and support programmes in countries in the east of the region are highly dependent on external international funding. This makes them vulnerable to changing funding priorities and such dependence is unsustainable in the long term. Of 14 countries in the east of the region, five reported they relied on international funds to finance 50% or more of their total HIV spending in 2009. HIV prevention programmes, in particular, rely on international funding, and prevention efforts for key populations at higher risk remain seriously underfunded in some eastern countries (5,34).
- The global economic downturn led in 2009 to the first stagnation in international HIV funding. Donor funding has begun to increase again but lags behind the increased global need.
- National economic gains may disqualify some countries for future Global Fund grants, restrict the type of grants for which they are eligible or require them to make greater matching investment in the national response.
- Too many countries lack cost-reduction strategies and waste public money using brand-name drugs instead of generics, neglecting to negotiate antiretroviral costs, and undertaking large-scale testing of low-risk populations instead of focusing on populations at higher risk.
- States do not always manage their spending well or clarify their budgetary priorities. Civil society has a crucial watchdog role to ensure the appropriateness and cost effectiveness of public expenditure.

Countries have a legal and ethical obligation to uphold their inhabitants’ right to health, and hence to use all reasonable means to achieve universal access. In the decade since the Declaration of

Commitment on HIV/AIDS was adopted, overall HIV expenditure in Europe and central Asia has risen dramatically. The international community has increased its donations considerably, most notably through the Global Fund, the public-private partnership established in 2002. Countries have also stepped up their investment in the response, with encouragement by civil society advocacy and multilateral organizations. International declarations, with their emphasis on public commitments and nationally determined targets, have played a substantial role in helping countries articulate how they want to respond to HIV and follow through on their commitments.

Table 2.3. National HIV expenditure in US dollars from all sources (domestic and international), selected countries in Europe and central Asia, 2009 or most recent year

Countries	Year	Prevention total	Prevention, key populations ^a	Care and treatment	Social protection and social services ^b	Enabling environment	Programme management	Human resources	Research	TOTAL
West										
Belgium	2008	6 575 813	2 425 897	102 713 235	—	—	2 488 419	—	—	111 777 467
Greece	2008	13 969 020	—	81 231 376	—	—	780 654	77 383	—	96 058 434
Luxembourg	2009	1 660 774	—	4 942 153	—	—	23 223	—	730 346	7 356 497
Spain	2009	21 648 609	—	997 669 513	4 828 692	—	—	—	7 234 221	1031 381 036
Sweden	2009	—	—	—	—	—	—	—	—	19 084 967
Switzerland	2009	4 593 721	992 613	—	...	1 846 722	1 015 697	—	7 386 888	14 843 028
United Kingdom	2009	28 787 878	3 030 303	—	34 848 484	—	—	—	16 666 666	80 303 030
Central										
Bosnia and Herzegovina	2009	—	—	—	—	—	—	—	—	3 584 302
Bulgaria	2009	5 710 280	1 083 956	3 420 679	199 985	160 196	881 362	8 461	320 641	10 701 608
Croatia	2009	2 286 871	869 315	7 562 471	—	366 193	151 652	—	—	10 367 188
Czech Republic	2009	36 831 057	8 309 473	21 536 905	7 256 473	13 157	476 526	6 578	3 190 421	69 311 121
Hungary	2009	2 491 727	6 062	423 036	—	15 706	492 607	27 322	73 298	3 496 376
Montenegro	2009	480 277	196 719	47 990	—	17 907	154 385	—	129 561	830 121
Poland	2009	2 661 054	145 185	51 725 999	—	11 036	24 665	1 096 837	—	55 519 593
Romania	2009	3 372 320	459 080 ^c	54 767 471	24 966 458	403 557	387 776	259 946	98 412	84 255 940
Sub total and central	west	131 069 405	17 580 607	1 326 040 833	72 100 094	2 834 474	6 876 970	1 476 529	35 830 457	1598 870 708
East										
Armenia	2009	893 560	253 287	689 600	—	98 735	305 391	305 342	8 439	2 301 071
Azerbaijan	2009	3 940 069	421 837	916 974	—	356 371	343 123	505 110	—	6 061 650
Belarus	2009	10 056 858	994 837	2 856 149	380 871	255 326	2 369 650	736 126	5 400	16 660 382
Estonia	2008	5 988 777	2 670 702	12 009 910	—	—	374 514	—	—	18 373 202
Georgia	2009	2 994 671	1 533 506	2 794 219	—	198 905	1 278 324	1 016 886	103 709	8 386 714
Latvia	2009	736 370	—	1 494 255	—	—	33 735	—	—	2 264 361
Republic of Moldova	2009	6 564 981	666 983	2 633 680	275 738	699 514	1 081 259	177 984	49 097	11 482 257
Russian Federation	2008	181 901 607	8 082 598	447 312 368	66 255 994	2 715 630	45 272 170	16 913 122	16 650 444	777 021 339
Ukraine	2008	22 808 331	9 687 037	48 799 210	2 633 510	1 953 169	21 256 174	2 224 874	328 957	100 004 227
Central Asia										
Kazakhstan	2009	15,922,896	2 996 409	2 462 925	—	—	4 041 690	344 567	6 000	22 778 078
Kyrgyzstan	2009	6,421,623	2 264 714	781 069	246 208	296 859	1 682 532	553 445	5 000	9 986 737
Tajikistan	2009	2,878,482	793 631 ^d	721 603	17 820	107 849	3 064 878	669 391	18 815	7 478 840
Uzbekistan ^e	2009	3,153,441	13 641 ^c	4 250 385	1 224 873	14 697	4 556 328	2 464 323	275 851	15 939 901
Subtotal, east and central	Asia	264 261 670	30 379 185	527 722 353	71 035 016	6 697 055	85 659 773	25 911 174	17 451 714	998 738 759
TOTAL		395 331 076	47 959 793	1 853 763 186	143 135 111	9 531 529	92 536 744	27 387 703	53 282 171	2597 609 467

— No data reported. This could indicate that US\$ 0 was spent for the given activity or that money was spent but not reported for various reasons.

^a Includes programmes directly engaging people who inject drugs, sex workers or men who have sex with men but not condom programmes for the general population.

^b Includes programmes for orphans and vulnerable children.

^c Includes only programmes for people who inject drugs.

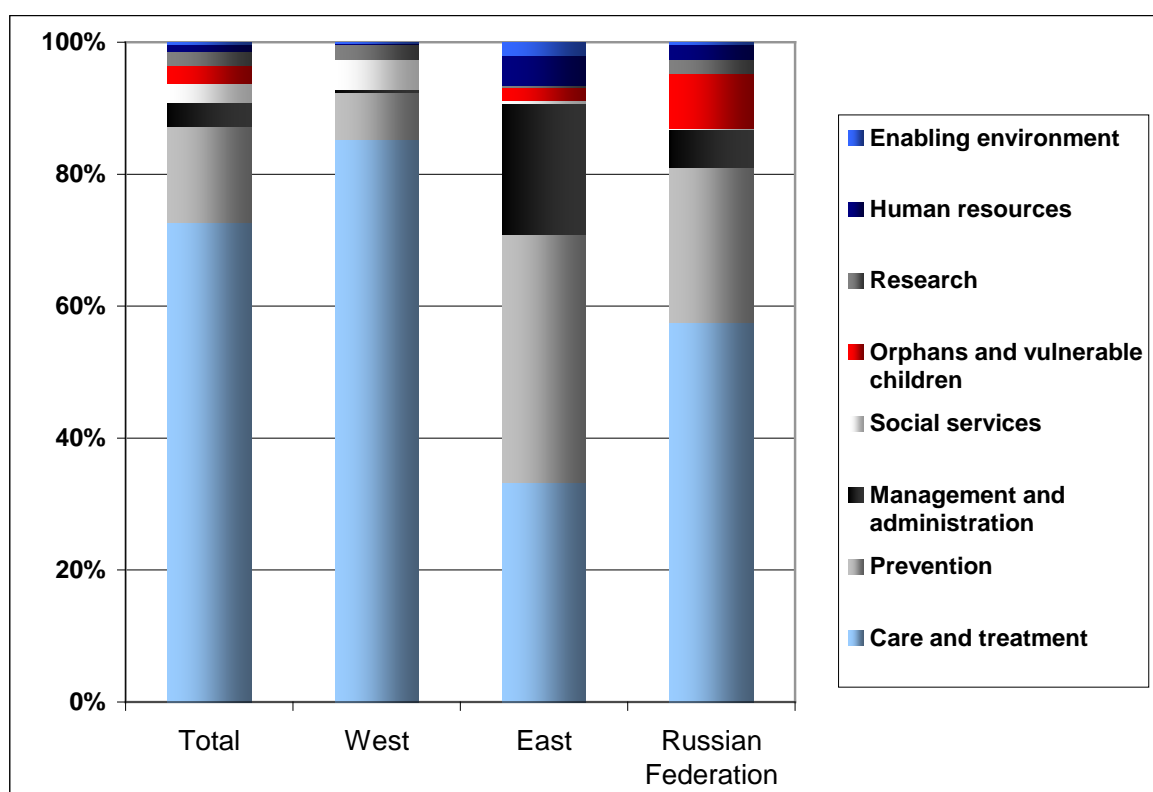
^d Includes only programmes for men who have sex with men.

Source: AIDSinfo [online database] (5).

Funding priorities and efficiency savings

Committing funds is one matter, ensuring they are invested effectively is another. Given the limited funds that countries have at their disposal, it is crucial they set priorities for the interventions and groups to be engaged to provide the greatest value for money. For example, the concentrated epidemics that characterize Europe and central Asia make large-scale testing of the general population a poor use of funds, whereas targeted prevention efforts tend to be an excellent investment (see Chapter 3). Differences in national and subregional priorities, such as those highlighted in Fig. 2.6, may be due to different political realities as much as different epidemiological ones.

Fig. 2.6. HIV programme funding in Europe and central Asia by category, 2008 or 2009

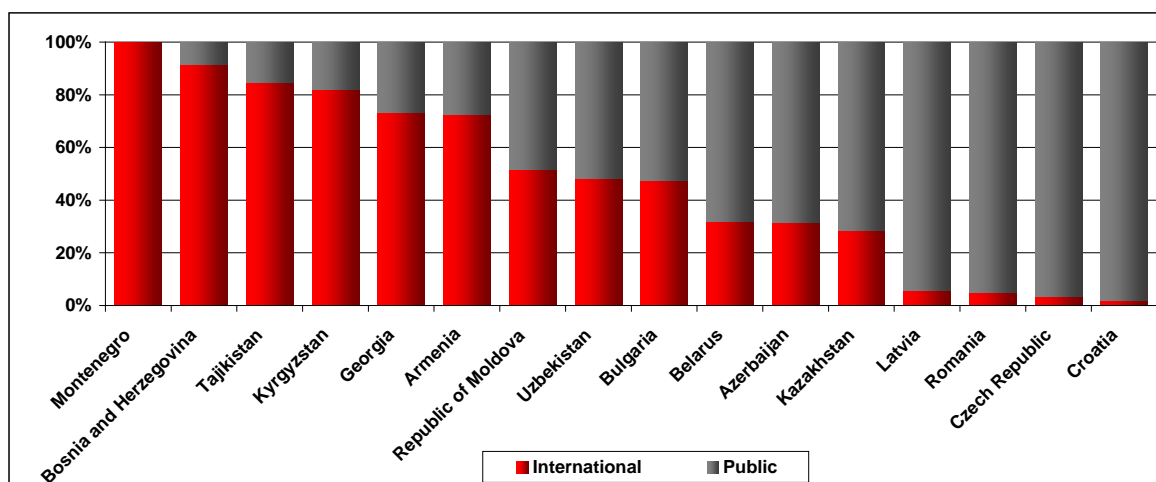


The east of the region here excludes the Russian Federation.

Source: AIDSinfo [online database] (5).

It is crucial for countries to conduct regular budget reviews, increase operational efficiency and eliminate waste. For instance, Box 2.3 describes how, in the absence of a price-reduction strategy and effective supply chain management, the Government of Ukraine spent far too much money on inferior antiretroviral drugs, money it could have used to treat many more people in need. It also shows how NGOs can play a critical watchdog role to ensure a government uses its scarce resources wisely and how technical assistance can reduce costs drastically.

Fig. 2.7. HIV programme source of funding in Europe and central Asia, 2008 or 2009



Source: AIDSinfo [online database] (5).

International contributions to the national HIV response

In 2009, every member of the EU except Bulgaria reported funding more than 90% of its own national response, as did the Russian Federation (7). In the rest of the region, international donors provided the majority of the funding (Fig. 2.7). International donors contributed 91% of the funding for HIV prevention for key populations at higher risk in the east of the region in 2009 (see Fig. 3.17).

The largest international donor to the region is the Global Fund to Fight AIDS, Tuberculosis and Malaria. Between 2002 and the end of 2010, the Global Fund approved US\$ 1.1 billion in HIV funding for 22 countries in Europe and central Asia (25), chiefly in the east of the region; of this, it disbursed US\$ 860 million by mid-2011. Forty per cent of these grants was spent on prevention, notably harm reduction, and 29% on treatment, nearly all of it antiretroviral therapy; another 13% went to supportive environments, 9% to care and support and 9% to health systems strengthening (Global Fund, unpublished data, July 2011). In 2009, Global Fund-supported programmes provided coverage for more than half the estimated number of people who inject drugs in Armenia, Belarus, Estonia, Ukraine and Uzbekistan. In the 14 recipient countries in the region for which there are 2009 data, the Global Fund provided 75% of the international HIV funding, translating to 23% of their overall HIV funding (25). Other major donors to national HIV efforts in the region include the United Nations, UNITAID and a variety of bilateral agencies.

From 2002 to 2008, donor nations' annual contributions to the global response increased steadily, from US\$ 1.2 billion to US\$ 7.7 billion (4). After the global financial crisis peaked in September 2008, contributions decreased for the first time, to US\$ 7.6 billion (7). Today, although the effects of the 2008 financial crisis are still being felt in many countries, international donations appear to be rising again. For instance, the Global Fund estimates that the donor pledges and projections made at its third replenishment in October 2010 will translate into an estimated US\$ 11.7 billion in donations for 2011–2013, a 20% increase from the contributions made in 2008–2010 (33).

Improved economic conditions in some countries in the region have restricted their eligibility for Global Fund grants. Current recipients whose reclassification as upper-middle-income countries makes them ineligible to apply for further grants in 2011 include Bosnia and Herzegovina, Montenegro, Romania and the former Yugoslav Republic of Macedonia. Other countries with improved economies may be required to match a greater proportion of any grant award with a larger investment in the national response. Additional restrictions may also apply. For example, in 2011 Kazakhstan can apply for grants only for health system strengthening; Serbia, only grants focusing on specific interventions for key populations at higher risk; and Bulgaria, only targeted grants submitted by NGOs (35).

National leadership in the global response

International aid is critical to the global HIV response, particularly for low- and middle-income countries. In simple dollar terms, the United States of America was by far the world's leading donor government in 2009, contributing US\$ 4.4 billion in bilateral and multilateral aid to the response in other countries. Countries in the west of the region rounded out the list of the top donors: the United Kingdom (US\$ 780 million), Germany (US\$ 400 million), the Netherlands (US\$ 380 million), France (US\$ 340 million), Denmark (US\$ 190 million), Sweden (US\$ 170 million) and Spain (US\$ 160 million). Other major donors from the region include Norway, Ireland and the EU. Adjusting the figures for population size, Denmark was the most generous country, contributing US\$ 35 per person, followed by Norway, the Netherlands, Sweden and Ireland (7). In contrast, countries in the region spent a median of only US\$ 0.54 per person in recent years on their domestic HIV response, led by Luxembourg with US\$ 5.81 per capita in 2008 (4).

3. Programmatic response

Prevention

Progress and achievements

- During the past 10 years, civil society engagement in developing and implementing prevention programmes has increased, largely with external donor support.
- During the past 10 years, nearly all countries in the region have adopted national HIV strategies and allocated funding to prevent the spread of HIV.

Challenges and opportunities

- Coverage is lacking, both geographically and across all key populations.
- Europe and central Asia is one of the only regions of the world in which the HIV epidemic is still growing, especially among the key populations at higher risk of HIV infection and transmission: people who inject drugs, sex workers and men who have sex with men.
- Access to public health institutions should be the same for all people regardless of legal, residence, insurance and employment status.
- Options to access services anonymously are lacking.
- Identification policies and the practice of recording the full range of a person's data to a central database mean that once a person is registered, information on his or her status is available to all social institutions.
- User-friendly services are lacking; stigmatizing and the judgemental attitudes of service providers limit the uptake of services by key populations at higher risk.
- The vertical nature of HIV programmes results in missed opportunities for HIV prevention, testing, counselling, treatment, care and support.

In countries without laws to protect sex workers, drug users, and men who have sex with men, only a fraction of the population has access to prevention. Conversely, in countries with legal protection and the protection of human rights for these people, many more have access to services. As a result, there are fewer infections, less demand for antiretroviral treatment, and fewer deaths. Not only is it unethical not to protect these groups: it makes no sense from a public health perspective. It hurts us all.

*– Ban Ki-moon, Secretary-General of the United Nations
(addressing the XVII International AIDS Conference, Mexico City, Mexico, 3 August 2008)*

Efforts to promote and support combination HIV prevention are producing impressive results around the globe, including significant decreases in HIV incidence in many countries between 2001 and 2009. However, this is not the case in Europe and central Asia, where the epidemic is still growing in the east of the region, especially among people who inject drugs and their sexual partners. The epidemic has grown also in some countries in the west of the region, most notably among men who have sex with men. Between 2004 and 2008, the number of reported cases among this population increased by 19% (1). Across Europe and central Asia, indicators measuring behavioural outcomes and programme access suggest that programmes, in general, are not sufficiently designed or scaled to mitigate the epidemic among the key populations at higher risk (2).

Prevention programmes engaging young people show mixed results

Despite knowledge of risk, young people are engaging in multiple sexual partnerships, but they are also more likely to use condoms to protect themselves from HIV transmission

Preventing sexual transmission – general population and young people

The most recent data show in nearly all reporting countries a relatively high percentage of young people responding correctly to questions on how to protect against HIV infection, with few differences between males and females and between the age groups of 15–19 and 20–24 years (Table 3.1). However, although information on HIV prevention is reaching and being retained by young people, this information is often incomplete and does not always come from reliable evidence-informed sources (3).

Table 3.1. Young people: knowledge about HIV prevention	Correct response Average (range among countries in the region)
Can you reduce the risk of transmission by using a condom every time you have sex?	81% (44–94%)
Can the risk of HIV transmission be reduced by having sex with only one uninfected partner?	73% (42–100%)

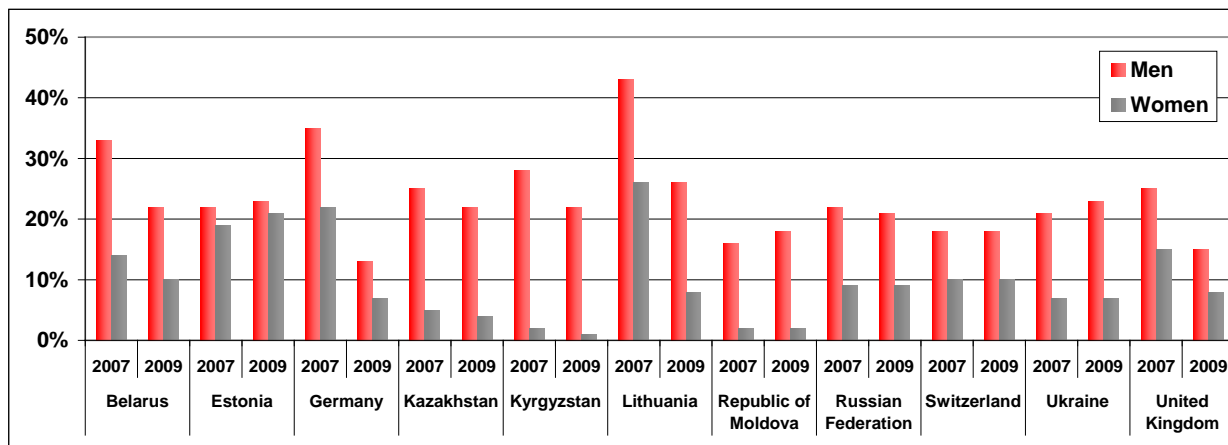
Condom use is rising in Europe and central Asia, and young people lead by example. Correct and consistent condom use is known to be effective in preventing HIV, other sexually transmitted infections and unplanned pregnancy. In the period between the past two UNGASS reporting rounds, condom use increased by 10% among people with more than one sexual partner in the reporting year. Slightly more than half the countries providing data on condom use⁴ reported that at least 60% (range 26–93% among the countries) of men or women aged 15–49 years used a condom the most recent time they had high-risk sex (3).

Among these same countries, people 15–24 years old were more than 30% more likely than people 25–49 years old to use a condom when engaging in multiple partnerships, but the former age group is twice as likely to engage in multiple partnerships, known to be high-risk sexual behaviour. Although the trends in condom use are encouraging, the levels are still not high enough to interrupt sexual transmission, especially among those engaged in higher-risk sexual behaviour. Correct and consistent

⁴ Countries reporting in 2010: Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Estonia, Germany, Greece, Hungary, Kazakhstan, Kyrgyzstan, Lithuania, Malta, Portugal, Republic of Moldova, Russian Federation, Serbia, Sweden, Switzerland, Tajikistan, Ukraine and United Kingdom.

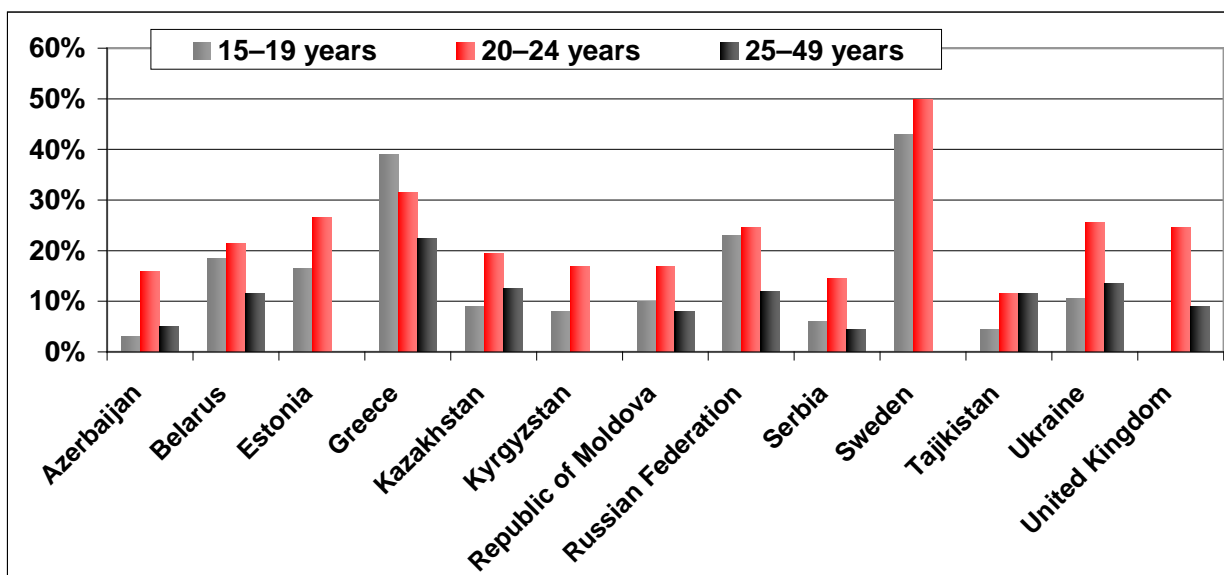
condom use rates of at least 80% are required for effective prevention within the sexually active population (3).

Fig. 3.1. Percentage of men and women 15–49 years old reporting having had sexual intercourse with more than one partner in the past 12 months, selected countries in Europe and central Asia, 2007 and 2009



Source: AIDSinfo [online database] (3).

Fig. 3.2. Percentage of adults and adolescents by age group who have had sex with more than one partner in the previous 12 months, selected countries in Europe and central Asia, 2009



Source: AIDSinfo [online database] (3).

In nearly all reporting countries,⁵ people 20–24 years old reported having had multiple sexual partnerships more often than older (25–49 years old) age groups (Fig. 3.2) (*WHO Regional Office for Europe and German Federal Centre for Health Education (BZgA). Standards for Sexuality Education in Europe. A framework for policy-makers, educational and health authorities and specialists. Cologne, BZgA, 2010*). On average, the proportion of men who reported having had sex with more than one partner in the previous year was 50% higher than among women. There may be some gender-based reporting bias, but men may be more likely to travel and to engage in casual sex or to purchase sex (3).

Since young people are more likely to have multiple partners, it is essential that countries provide comprehensive sexuality and reproductive health education (which is still lacking in many countries in the region) to all young people before sexual debut; affordable, good quality male and female condoms and lubricants; and access to youth-friendly sexual and reproductive health services, without the need for parental consent. Further efforts, especially with boys, are required to change attitudes towards the demand for unprotected sex and to instil gender-sensitive, non-discriminatory attitudes to reduce gender-based violence.

⁵ Countries reporting in 2010: Belarus, Bulgaria, Czech Republic, Estonia, Germany, Greece, Kazakhstan, Kyrgyzstan, Lithuania, Malta, Portugal, Republic of Moldova, Russian Federation, Serbia, Sweden Switzerland, Tajikistan, Ukraine and United Kingdom.

Key populations at higher risk for HIV infection and transmission

Progress and achievements

- Comprehensive approaches to HIV prevention have reduced the incidence among key populations at higher risk, and regional examples show a reduction in HIV infection among people who inject drugs.
- Evidence confirms the effectiveness of the comprehensive approach to HIV prevention.

Challenges and opportunities

- Existing laws, policies and regulations create major obstacles to preventing HIV and other sexually transmitted infections.
- National standards, protocols and guidelines for programmes targeting key populations at higher risk are lacking.
- Political commitment to prevention programmes for key populations at higher risk is lacking.
- Sex workers are seldom included as a target group within national action plans for HIV prevention.
- Representatives of key populations at higher risk have limited involvement in planning and decision-making.
- Services lack the flexibility to address the specific local needs of key populations at higher risk.
- Key populations at higher risk lack trust in public health institutions because of common experiences of exclusion and stigmatization.
- The needs of prison inmates, including key populations at higher risk, are often neglected due to lack of interest and political will.
- Consistent methods are lacking to monitor and evaluate the reach of essential services and how they affect key populations at higher risk.

As noted previously, the HIV epidemic in the region is primarily concentrated among key populations at higher risk of acquiring and transmitting the virus, not in the general population. A notable proportion of the people newly infected with HIV are people who inject drugs and their sexual partners, sex workers, clients of sex workers and men who have sex with men.

Sustainability of programmes

Untenable funding and reluctance to focus resources threatens HIV prevention programmes for key populations at higher risk

Regional data on the impact of programmes engaging key populations at higher risk are limited. The extent and types of programmes available to people who inject drugs, sex workers and men who have sex with men can be described relatively well. Assessing how these programmes have affected the epidemics in the region is more difficult, although case examples of the effects on an epidemic can

be seen in countries where a comprehensive package of services has been scaled up to a threshold level (see the Ukraine example (Box 3.3 p.78) (4)).

Although key populations at higher risk have access to services in nearly every country in Europe and central Asia, not all countries provide a comprehensive package of services that satisfy international

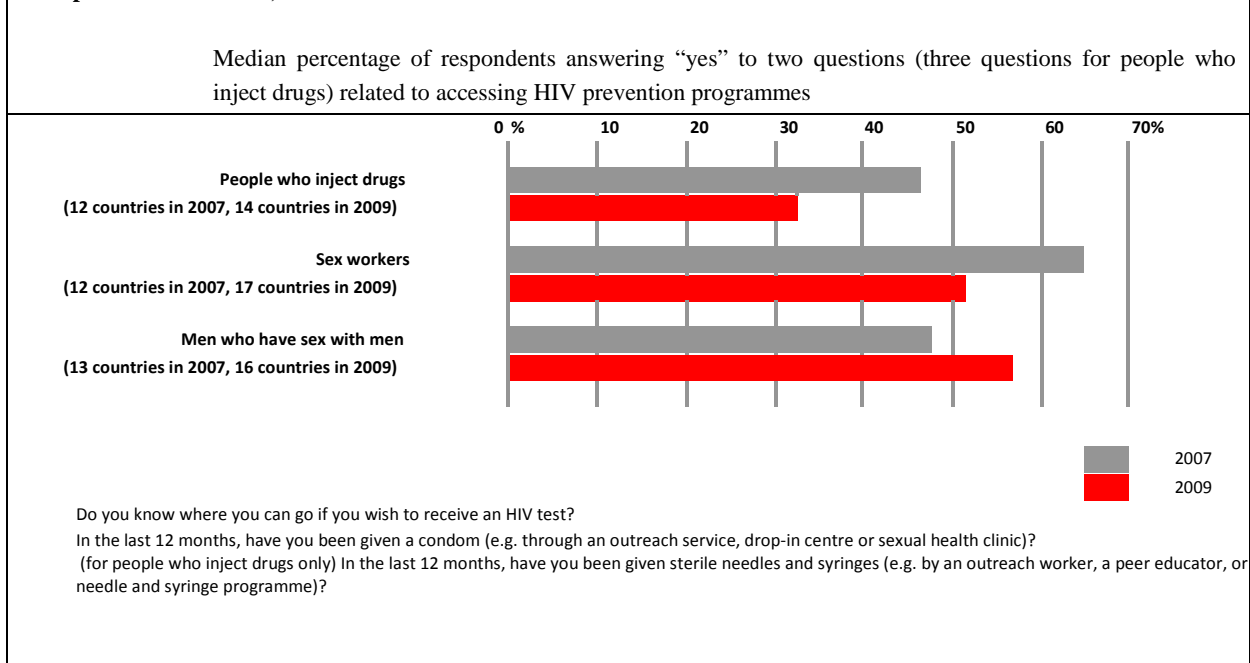
standards and guidelines. Where services do exist, they may not be available at a sufficient scale to have significant effects. Lack of coverage, lack of user-friendliness and the prevailing discriminatory attitudes of service providers can hinder access. In addition, many HIV prevention programmes do not adequately address the broader societal issues that lead to vulnerability, including violations of human rights, stigma and discrimination. This is reflected in the relatively small gains in condom use among the key populations at higher risk (Fig. 3.4).

The sustainability of HIV prevention programmes for key populations at higher risk is threatened by the untenable funding by international donors, lack of government investment and the reluctance of planners and implementers to focus prevention efforts on key populations at higher risk. These concerns are reflected in the decline in coverage for key populations at higher risk across the region (Fig. 3.3).

As the programmes that engage key populations at higher risk are scaled down, gains made in condom use, safer injecting behaviour and other preventive behaviour are in danger of regressing. Because these concentrated HIV epidemics are interconnected and relatively new, sexual transmission is now increasing to the sexual partners of both drug users and the clients of sex workers. If the epidemics among key populations at higher risk are not controlled with evidence-informed interventions, there is increasing future risk to the broader general population.

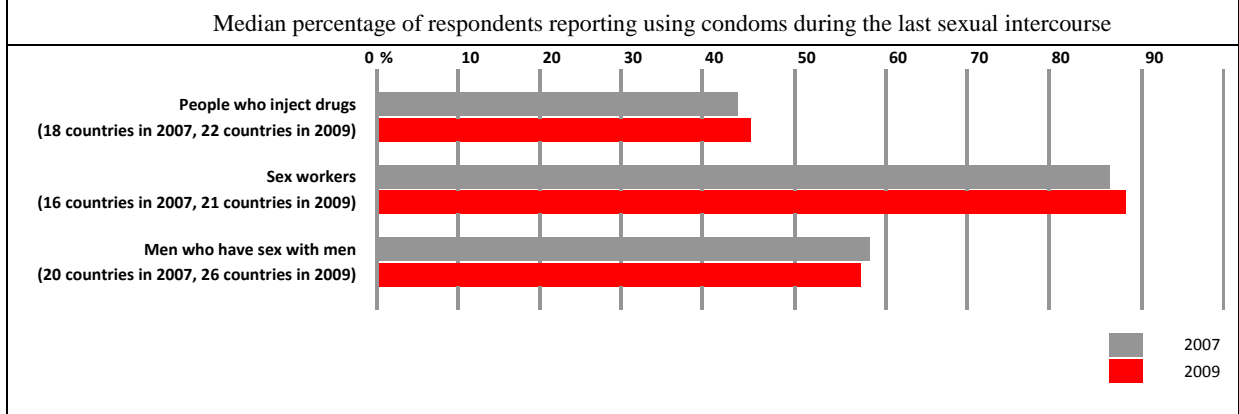
Additional research, consistent survey methods and good estimates of the size and geographical spread of the key populations at higher risk are essential to understanding the epidemic.

Fig. 3.3. Coverage of HIV prevention programmes among selected key populations at higher risk, selected countries in Europe and central Asia, 2007 and 2009



Source: AIDSinfo [online database] (3).

Fig. 3.4. HIV behaviour change among selected key populations at higher risk in selected countries, 2007 and 2009



Source: AIDSinfo [online database] (3).

HIV prevention efforts focused on people who inject drugs

Progress and achievements

- Evidence demonstrates that comprehensive prevention for people who inject drugs helps to stabilize the epidemic.
- In the west of the region, access to comprehensive harm-reduction programmes, including needle and syringe provision and opioid substitution therapy, is high because of the political commitment.
- In many countries in the region's east, these programmes are on a small scale, often on a pilot level; opioid substitution therapy still remains unavailable in the Russian Federation, Turkmenistan and Uzbekistan.
- Evidence indicates harm reduction helps to stabilize the epidemiological situation.
- Antiretroviral therapy is provided for people who inject drugs.

Challenges and opportunities

- In some countries, programmes are not being scaled up to the national level.
- Drug users have poor access to antiretroviral therapy.
- Existing HIV prevention strategies that focus on people who inject drugs do not adequately address the sexual transmission of HIV.
- Outreach to the sexual partners of people who inject drugs is poor.
- Standardized national protocols and guidelines are lacking.
- Negative attitudes among law enforcement agencies hinder outreach.

Studies have shown a comprehensive approach (Table 3.2) to HIV prevention among people who inject drugs can control the rapid spread of the disease. In the west of the region, as a result of strong political commitment and civil society involvement, people who inject drugs have access to comprehensive programmes; more than 75% have access to needle and syringe programmes and 60%

Highly effective evidence-informed programmes have been successfully implemented in the west of the region for preventing HIV infection among people who inject drugs

are in opioid substitution therapy programmes (5). The 47% decrease between 2004 and 2009 in new cases of HIV among people who inject drugs in the west of the region is a strong indication that “large-scale” harm-reduction programmes can have a positive effect on the HIV epidemic among people who inject drugs (6).

In the east of the region, similar programmes are being piloted, and civil society's involvement has increased during the past 10 years.

Fig. 3.5. Safe injection behaviour among people who inject drugs, selected countries in Europe and central Asia, 2007 and 2009

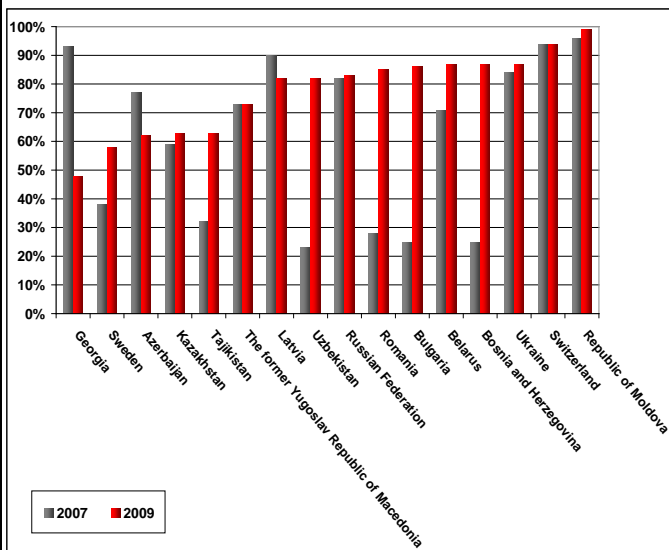


Fig. 3.6. Sexual and injecting high-risk behaviour among people who inject drugs, selected countries in Europe and central Asia, 2009

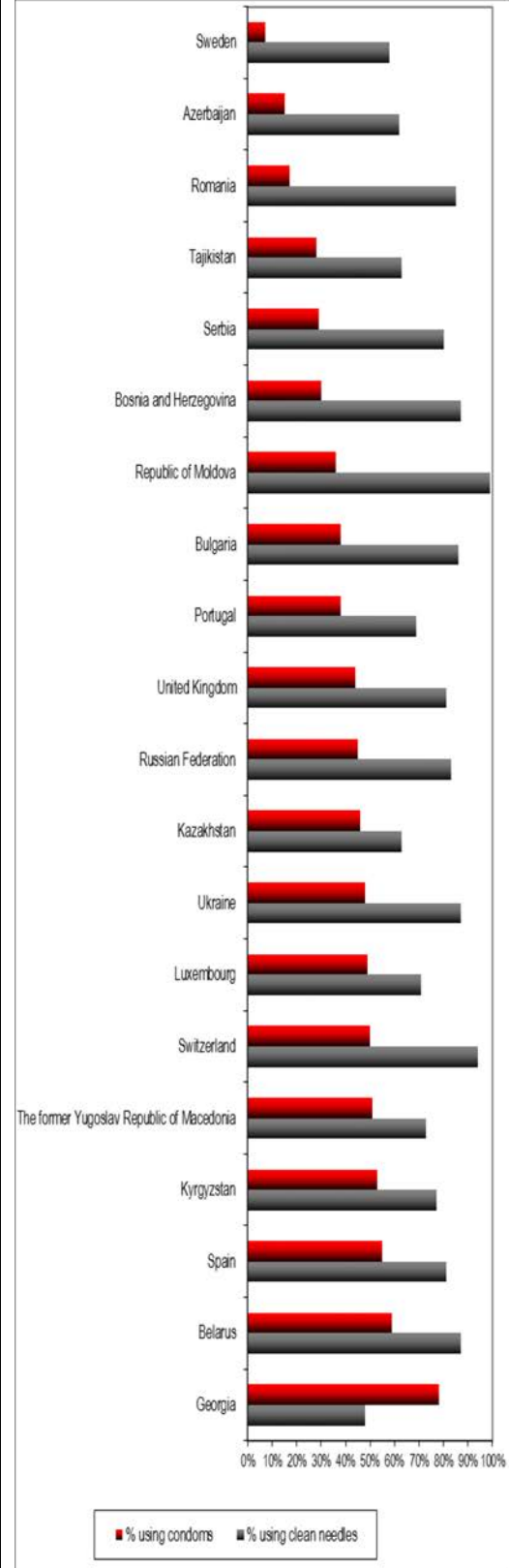
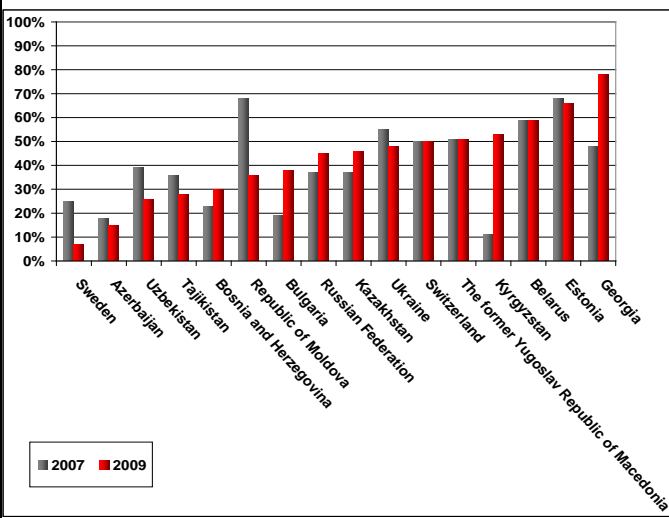


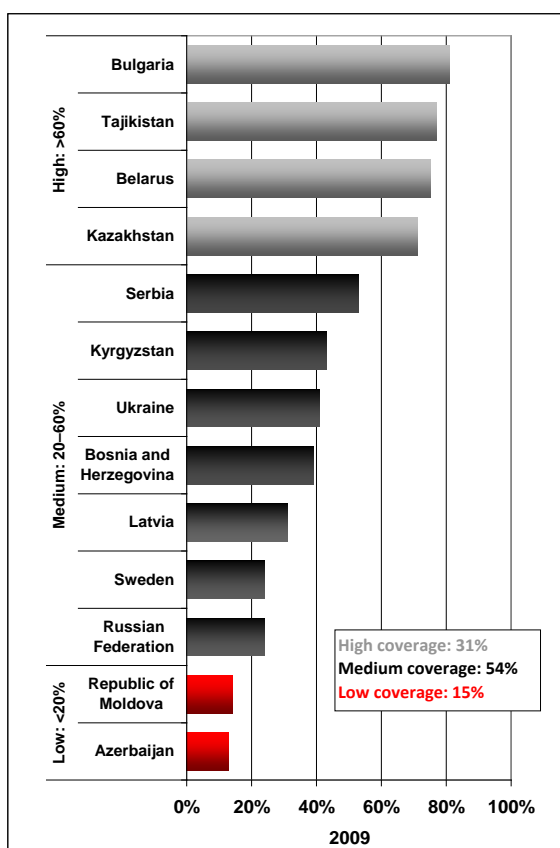
Fig. 3.7. Percentage of people who inject drugs and use condoms, selected countries in Europe and central Asia, 2007 and 2009



Source: AIDSinfo [online database] (3).

There is developing evidence that comprehensive HIV prevention for people who inject drugs is helping to stabilize the epidemic in the east of the region. In the region as a whole, reports of safer injecting behaviour are high. Thirteen of the 20 countries that reported data on the use of safe injection equipment in 2009 estimated that 80% or more of the people who inject drugs had used a sterile needle at their most recent injection. Six of these countries (Belarus, Lithuania, the Republic of Moldova, the Russian Federation, Ukraine and Uzbekistan) are in the region's east, where the HIV epidemics are primarily driven by injecting drug use (3). However, in Belarus, only 21% of people who inject drugs surveyed reported "never" sharing needles, and 38% reported occasional sharing (7), indicating the "use of sterile equipment at last injection" does not provide a full picture of behaviour. In some countries, coverage can be overestimated. Sometimes this is the result of "convenience sampling". For instance, it is easier to survey hard-to-reach populations when they are already in programmes. It is, therefore, critical that countries develop response-driven and other means of surveillance as outlined in the newly published *WHO/UNAIDS surveillance guidelines: WHO and UNAIDS. Guidelines on surveillance among populations most at risk for HIV*. Geneva, World Health Organization, 2012. (<http://www.who.int/hiv/pub/surveillance/en/>). As they move towards these other forms of sampling, the quality of the data is likely to improve.

Fig. 3.8. Percentage coverage of HIV prevention programmes for people who inject drugs



Source: AIDSinfo [online database] (3).

In another indication that programme information and education campaigns are reaching their intended audiences, 80% (range in countries: 44–94%) of people surveyed who inject drugs knew where they could obtain an HIV test (3).

In the 2010 UNGASS reporting, the median percentage of people who inject drugs being offered a sterile needle or syringe by an outreach worker, peer educator, drop-in centre, sexual health clinic or needle and syringe programme was 41% (range in countries: 13–81%).⁶ This represents a decrease in the median coverage of sterile needles and syringes of 37% from

2007. The Russian Federation was among the countries reporting decreased coverage. In

Condom use is low

The sexual partners of people who inject drugs are vulnerable to HIV infection whether or not they also inject drugs

Ukraine, various data sources provide conflicting evidence: while the addition of new locations to the sentinel surveillance sample affected coverage rates, indicating an artificial decrease, programmatic

⁶ Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Kazakhstan, Kyrgyzstan, Latvia, Republic of Moldova, Russian Federation, Serbia, Sweden, Tajikistan and Ukraine.

monitoring data indicates the number of people receiving services had increased (3).

There are indications of successful behaviour change in the region, but the decline in the percentage coverage of HIV prevention programmes for people who inject drugs in many countries between the 2008 and 2010 UNGASS reports could negate these positive trends.

Injecting drugs with non-sterile equipment, infected with HIV, is the most efficient means of transmitting the virus. For this reason, programmes engaging people who inject drugs have given priority to increasing safer injection behaviour. However, HIV prevention programmes for people who inject drugs should also focus on high-risk sexual behaviour.

Table 3.2. Comprehensive package of interventions to address injecting drug use and HIV

- 1 Needle and syringe programmes
- 2 Opioid substitution therapy and other drug-dependence treatment
- 3 HIV testing and counselling
- 4 Antiretroviral therapy
- 5 Prevention and treatment of sexually transmitted infections
- 6 Condom programmes for people who inject drugs and their sexual partners
- 7 Targeted information, education and communication for people who inject drugs and their sexual partners
- 8 Vaccination, diagnosis and treatment of viral hepatitis
- 9 Prevention, diagnosis and treatment of tuberculosis

Source: WHO, UNODC and UNAIDS (8).

The sexual partners of people who inject drugs may or may not inject drugs themselves, but they are still at significant risk of acquiring HIV infection. Condom use among people who inject drugs is significantly lower than among any of the other key populations at higher risk of HIV infection. Few programmes for people who inject drugs provide outreach to non-injecting partners.

In 2009, the median percentage of people who inject drugs who were offered a condom by an outreach worker, peer educator, drop-in centre, sexual health clinic or needle and syringe programme was 39% (range in countries: 3–70%).⁷ Kyrgyzstan and the Russian Federation were among countries reporting decreased levels of coverage on both measures. For Ukraine, again, data provided by sentinel surveillance and programmatic monitoring diverge: methodological inconsistency in bio-behavioural research over years (inclusion of new sites) led to an artificial decrease in coverage trends, while programmatic monitoring data indicated the number

of people who inject drugs receiving condoms increased. Overall, the inadequate focus on preventing sexual transmission of HIV among people who inject drugs is of particular concern in the east of the region, since this key population at higher risk comprises nearly 60% of the epidemic (3).

The dynamics among people who inject drugs and their sexual partners highlight the need for scaling up comprehensive, evidence-informed and human rights-based programmes accessible to all people who inject drugs. Such scale-up would include: needle and syringe programmes; opioid substitution therapy and other drug-dependence treatment, integrated with programmes to reduce TB and hepatitis coinfection; condoms for people who use drugs and their sexual partners; increasing access to HIV treatment; and ensuring laws and policies serve HIV prevention efforts. It is critical to identify young people and others at risk for drug injecting in order to develop effective prevention interventions, and

⁷Albania, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Kazakhstan, Kyrgyzstan, Latvia, Republic of Moldova, Russian Federation, Serbia, Sweden, Tajikistan, Ukraine and Uzbekistan.

to prevent unsafe injecting and sexual behaviour among those who do begin injecting. Many of the prevention interventions available to people who inject drugs require parental permission for minors to access them or are otherwise limited to adults. Other common obstacles include laws on aiding and abetting that assign the same harsh penalties for providing information to minors on safer injecting or harm reduction as for providing them with actual drugs (9). Access to services should not be restricted by age, sex, citizenship, employment status, confinement to a facility, health insurance status or drug use (8).

Opioid substitution therapy. A comprehensive approach includes opioid substitution therapy. By reducing the likelihood of injection episodes, the number of people acquiring HIV can also be lowered.

Programmes providing opioid substitution therapy exist in 92% of the region's countries, although coverage rates vary drastically. Coverage rates in the west (7–424 opioid substitution therapy sessions per 100 people who inject drugs⁸) are significantly higher than in the east (from <1 to 20 opioid substitution therapy sessions per 100 people who inject drugs) (5).

In the east, many opioid substitution therapy programmes are producing impressive results, though they have not been scaled up beyond the pilot stage.

Belarus introduced substitution therapy with methadone in 2008 and has successfully expanded from one pilot clinic to a network of centres within the state's health system, serving more than 450 people in 8 cities. This success prompted a national policy change; the Ministry of Health has decreed that every person who wants to stop injecting drugs can enter a substitution therapy programme (10).

An evaluation of 151 people enrolled in opioid substitution therapy in Ukraine between November 2006 and February 2007 showed that the use of illegal opioids dropped significantly after a six-

Box 3.1. Local government and civil society working together to establish methadone maintenance treatment centres in Korca, Albania

In early 2009, local government and health officials in Korca engaged communities of people who inject drugs to identify their needs and concerns. Thanks to this collaboration, authorities collected the information they needed to enable people who inject drugs to get the services in their own town; many previously had to travel to Tirana, the capital of Albania, to receive basic drug treatment.

The methadone maintenance treatment centre in Korca opened on 17 June 2009. By June 2011, 84 people who inject drugs were receiving methadone maintenance treatment. The clinic was collocated with other essential services for people who inject drugs, increasing access for this group to treatment and HIV counselling and testing. The centre and the voluntary counselling and testing closely collaborate to provide a full package of services, including harm reduction, distributing information materials for people who inject drugs and other drug users, outreach work (by methadone maintenance treatment), testing for sexually transmitted infections, HIV and TB, and counselling.

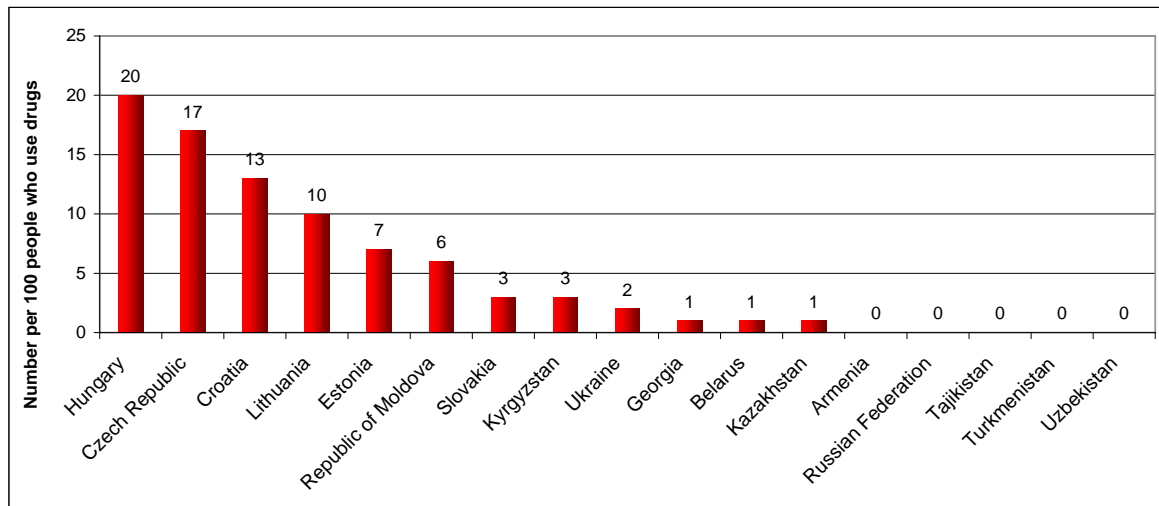
⁸ Not all opioid-dependent people (or recipients of opioid substitution therapy) inject, and not all people who inject drugs are opioid dependent. Since the number of opioid-dependent people who inject drugs was not available for each country, coverage estimates are based on the number people who inject drugs, irrespective of the type of substance. In some cases where non-injectors receive opioid substitution therapy, the estimates of coverage per 100 people who inject drugs may therefore exceed 100.

month treatment period; all HIV-associated risk behaviour was reduced; illegal income and criminal activity in the previous 30 days was massively reduced; and social integration increased (the number of working days per month doubled). In addition, these people reported significant reductions in depression, anxiety, aggression and suicide attempts (11).

By the end of 2010, Ukraine had made good progress, enrolling more than 6000 people who inject drugs into opioid substitution therapy at 127 clinics, though this group represented a small fraction of the estimated 53 000 people who inject opiate drugs (12).

In 2010, Tajikistan began to deliver opioid substitution therapy through the Narcological Institute in Dushanbe, where 30 clients were enrolled in August 2010 (13).

Fig. 3.9. Number of opioid substitution therapy recipients per 100 people who inject drugs, selected countries in Europe and central Asia



Source: Mathers (5).

Countries in the west of the region have achieved almost universal access to opioid substitution therapy in prisons, with 85% reporting availability, although services may not be available in 100% of prisons. In the centre and east of the region, 41% of countries offer opioid substitution therapy in prisons (see the section on HIV programmes in prisons later for additional discussion).

Antiretroviral therapy is also a crucial part of a comprehensive prevention package, and proven to protect the sexual partners of people living with HIV; it may also reduce transmission among people who inject drugs and share needles.

Antiretroviral therapy coverage for eligible people living with HIV who inject drugs (CD4 count <350 cells per mm³) is still generally low, primarily as a result of stigma and discrimination. In December 2010, 22 697 people in Ukraine were receiving antiretroviral therapy (3); about 11% were people infected through injecting drug use, whereas this group represent about 60% of the registered people diagnosed with HIV (Table 3.7). Low coverage of antiretroviral therapy for people who inject drugs is especially common in the east of the region, where the need is greatest. (See discussion later on antiretroviral therapy among the key populations at higher risk.)

Countries in the east of the region are moving towards a more comprehensive approach to HIV prevention for people who inject drugs, but are hindered by a lack of political commitment and guidelines

The availability of services does not ensure that people in need will access them. Outreach to people who inject drugs and their sexual partners is needed to increase the coverage of services. NGOs and other civil society organizations are uniquely positioned to provide outreach to people who inject drugs. However, in many countries in the east of the region, outreach workers face significant barriers, often resulting from negative attitudes among law enforcement agencies and repressive drug policies.

Despite reports of high levels of safer injection behaviour, people who inject drugs still represent a significant proportion of the people newly diagnosed with HIV infection each year. This emphasizes the need for a comprehensive approach to HIV prevention, with strong outreach services to ensure that everyone who needs them has access to essential services that can mitigate the spread of HIV through unsafe injecting practices as well as high-risk sexual behaviour.

Table 3.3. Percentage of countries with HIV prevention programmes for people who inject drugs providing needles and syringes or opioid substitution therapy by subregion, Europe and central Asia

Europe and central Asia (n = 49)		
	<i>n</i>	%
Needle and syringe programmes	48	98
Opioid substitution therapy programmes	45	92
Needle and syringe programmes in prisons	10	20
Opioid substitution therapy in prisons	29	59
West (n = 20)		
	<i>n</i>	%
Opioid substitution therapy in prisons	17	85
Needle and syringe programmes in prisons	5	25
Centre and east (n = 29)		
	<i>n</i>	%
Needle and syringe programmes in prisons	5	17
Opioid substitution therapy in prisons	12	41
Needle and syringe programmes, opioid substitution therapy or both are offered in prisons	15	52
<i>Source: Global state of harm reduction 2010 – at a glance (14).</i>		

Evidence set out in *The Lancet* in July 2010 and in the UNODC/WHO/UNAIDS technical guide for interventions to prevent HIV transmission among people who use drugs shows that a package of harm-reduction measures, as outlined in table 3.2 and the sections above, can significantly reduce the incidence of transmission for this key population.

Impact can be maximized if national HIV strategies: involve law enforcement, narcology services, civil society and local communities in delivering programmes; expand the definition of HIV prevention for people who inject drugs to include a comprehensive approach and ensure that standard protocols and guidelines are used; and reduce barriers to outreach work.

Box 3.3. Significant strides in protecting Ukrainians who use drugs from acquiring HIV infection

For many years, Ukraine has had the most severe HIV epidemic among people who inject drugs in Europe and central Asia. However, four years of comprehensive funding for evidence-informed harm-reduction programming has helped reduce HIV incidence among this group. Data from multiple sources, including behavioural surveillance, sentinel surveys and programmes serving people who inject drugs, all indicate HIV transmission appears to be declining significantly. In eight cities, the median prevalence of HIV infection among people who started injecting drugs in the previous two years (and are more likely to be newly infected with HIV rather than acquiring it much earlier) declined from a peak of 30% in 2004 to 11% in 2008 (16).

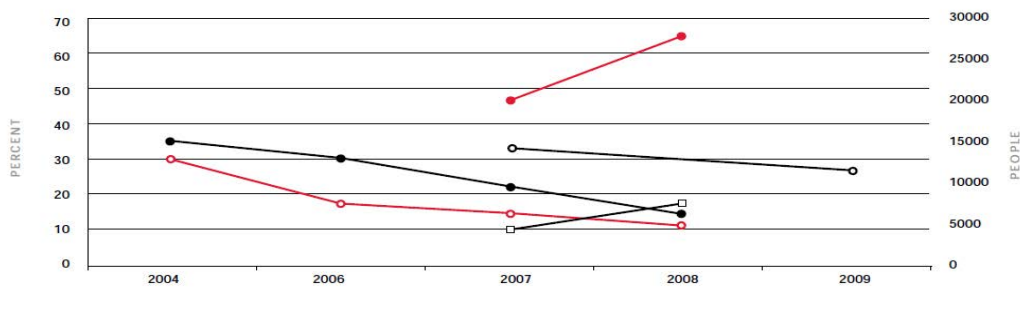
Behavioural surveillance shows that people who inject drugs are increasingly adopting key HIV risk-reduction measures. The percentage of people who inject drugs who report using sterile injecting equipment at the most recent injection rose from 80% in 2006 to 86% in 2008. By the end of 2010, more than 6000 people who inject drugs were accessing opioid substitution therapy at 127 clinics nationwide (12). Although the HIV epidemic among people who inject drugs in Ukraine has stabilized, this group remains at high risk of acquiring HIV. Sharing contaminated equipment and the sexual transmission of HIV from people who inject drugs to their partners remain high-risk behaviours.

Harm reduction programmes and HIV prevalence in Ukraine

Association between harm reduction programmes and HIV prevalence in Ukraine, 2004–2009.

Sources: Country Progress Reports 2010. M Mahy, C Chhea, T Salluk, O Varetka, R Lyeria (2010). A proxy measure for HIV incidence among populations at increased risk to HIV Vol 2(1):8. *Journal of HIV/AIDS Surveillance and Epidemiology*.

- Recent Initiators
- Young IDUs (15-24) HIV prevalence
- IDUs HIV prevalence (15 cities, mean)
- Coverage of harm reduction sites (right axis)
- Coverage of harm reduction sites (15-24) (right axis)



Sources: AIDSinfo [online database] (3) and Mahy et al. (16) and reproduced from UNAIDS Report on the global AIDS epidemic 2010 (4).

HIV prevention for the people involved in commercial and transactional sex

Progress and achievements

- Overall, a high percentage of sex workers and clients use condoms.
- Female sex workers who use condoms and do not inject drugs have a relatively low HIV prevalence.
- Legal rights for some sex workers have been addressed in many countries, although migrant sex workers are often neglected.

Challenges and opportunities

- Prevention programmes for sex workers, their clients and noncommercial partners lack focus and commitment.
- Lack of communication and collaboration between sex-work projects and drug harm-reduction services, and access to drug treatment and rehabilitation services.
- Young people engaged in transactional sex are not sufficiently addressed, though they are less likely than older people to use condoms, receive an HIV test or have knowledge about HIV prevention.
- Access to health-care services for undocumented and uninsured (migrant) sex workers is lacking.
- Ethnic minorities lack comprehensive and targeted support and services, and access to health-care services.
- Police violence and interference in prevention programmes exacerbate risk and reduce programme effectiveness.

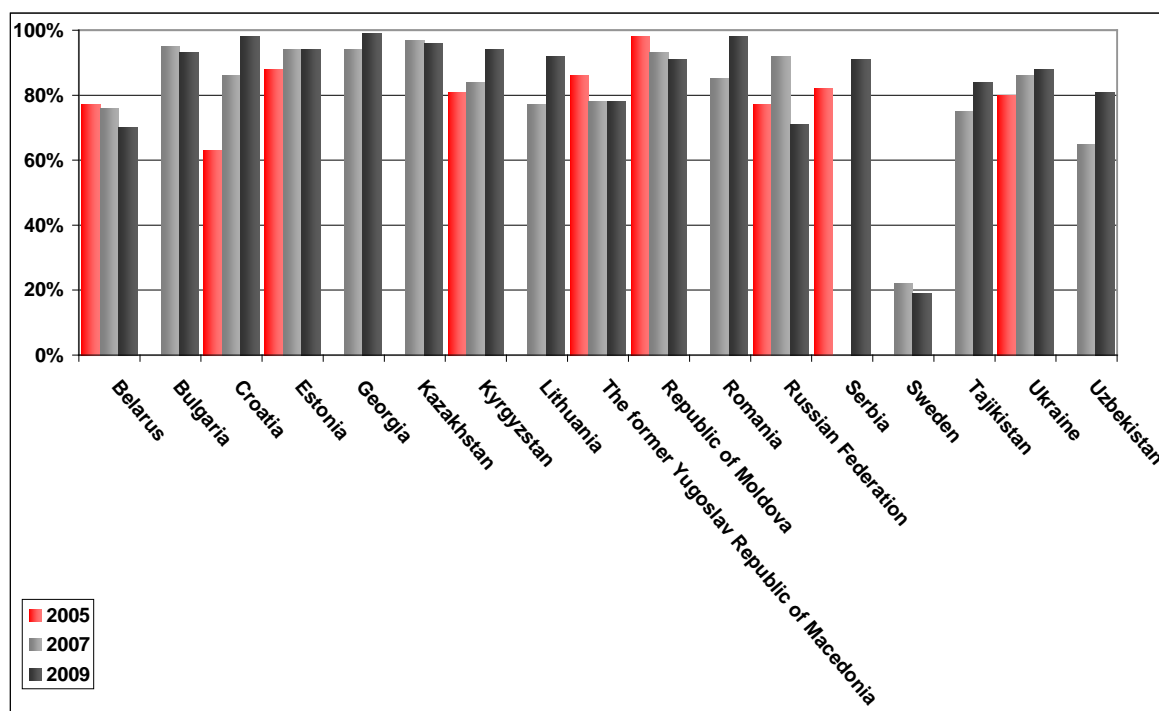
In many countries in Europe and central Asia, reported condom use by sex workers reached by prevention programmes remains high. Of the 22 countries reporting in 2010,⁹ 10 said that 90% or more of sex workers used a condom with their most recent client, with another 8 reporting condom use of 70–90% (Fig. 3.10).

In a 2007 survey in three cities in the Russian Federation (St Petersburg, Krasnoyarsk and Tomsk), 640 female sex workers were interviewed, 302 (47%) of them clients of HIV prevention projects. Among the interviewees, 91% of those reached by prevention projects reported always using a condom in the previous 30 days, whereas only 28% of those not reached by prevention projects reported they always used a condom (17).

These high rates of condom use for sex workers reached by prevention programmes are not necessarily mirrored when looking at subgroups involved in sex work, especially the most vulnerable, including young people selling sex, people who inject drugs and migrants.

⁹ Countries reporting in 2010: Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Estonia, Georgia, Germany, Greece, Kazakhstan, Kyrgyzstan, Lithuania, The former Yugoslav Republic of Macedonia, Montenegro, Republic of Moldova, Romania, Russian Federation, Serbia, Sweden, Tajikistan, Ukraine and Uzbekistan.

Fig. 3.10. Percentage of condom use among sex workers, selected countries in Europe and Central Asia, 2005, 2007 and 2009



Source: AIDSinfo [online database] (3).

Condom use remained relatively high for sex workers reached through prevention programmes between 2007 and 2009, but the percentage of sex workers who reported receiving a condom through an outreach, drop-in centre or sexual health clinic dropped from a median of 71% to 57%, highlighting a decrease in the coverage of sex workers by HIV prevention programmes that threatens to reverse positive behaviour trends.

Although condoms are easily available in most countries in the region – in Ukraine, most clients (94%) can always buy condoms when they need to (18) – availability does not ensure use. Prevention programmes seeking to reduce high-risk sexual behaviour must understand the motives and barriers that prevent condom use (the cost, dislike) and seek to mitigate these barriers.

Young people who sell sex and the commercial sexual exploitation of children

Many people begin selling sex while young, including children (defined as people younger than 18 years). The commercial sexual exploitation of children through sex work violates United Nations conventions and international human rights law (19).

Several small studies from selected cities show not only that a disturbing number of young people are involved in sex work but also that children are being sexually exploited through sex work and are particularly vulnerable to acquiring HIV infection.

- In Bucharest, Romania, a survey found girls younger than 18 being sexually exploited by their involvement in sex work and that they exhibited higher-risk sexual behaviour. They

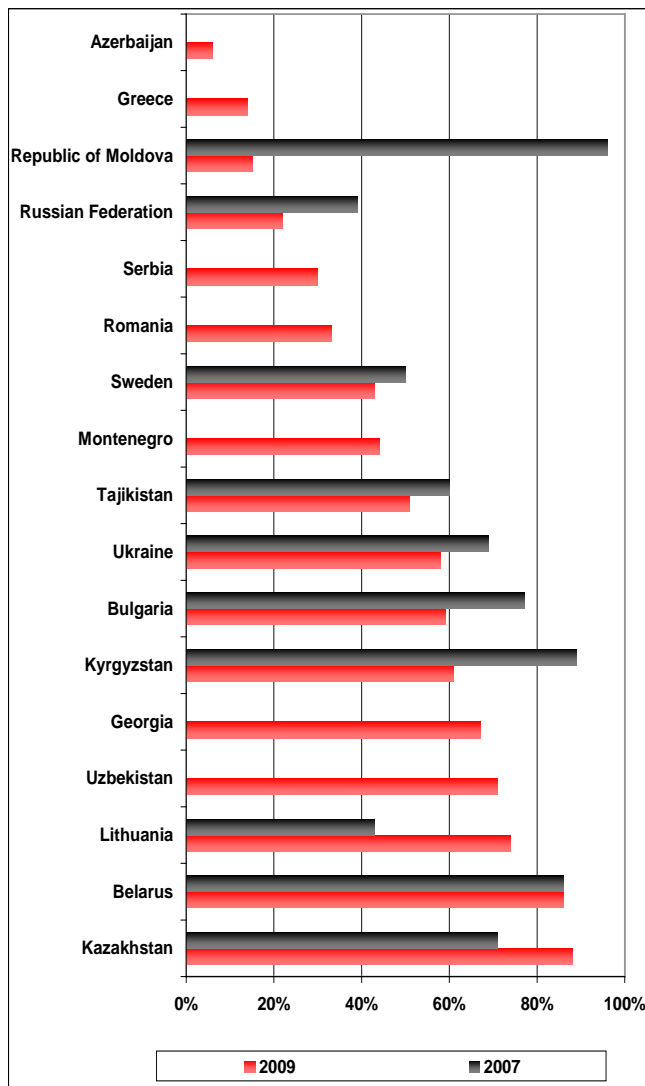
were also less likely to use condoms with commercial or casual partners, less likely to have had an HIV test and less knowledgeable about HIV transmission (20,21).

- In three cities in the Russian Federation, 26% of the sex workers surveyed had become involved in selling sex before the age of 18. Women aged 18–19 selling sex had more partners than did older sex workers (17).
- In Georgia, a 2009 survey indicated that younger and more economically disadvantaged boys may support themselves by selling sex, and this same group tended to have the most limited knowledge of correct condom use and the least access to HIV testing and counselling (WHO, UNDP, UNAIDS and UNFPA, unpublished data from a review of 30 countries).

In addition, people younger than 25 years engaged in sex work were 30% less likely than older age groups to have been tested for HIV, according to official UNAIDS reports (3).

Children and young people must be protected from being recruited into sex work from desperate living situations, and from the health risks should they become involved in selling sex. Educational and work opportunities must be provided for young people, family and social breakdown addressed, and awareness raised of the increased health and other risks associated with selling sex. There should be social safety nets (including those required to mitigate the effects of HIV and AIDS), stricter legislation and targeted and evidence-informed implementation to stop child trafficking, and the elimination of all forms of child labour. HIV prevention programmes for sex workers must consider the special needs of children with whom they may come into contact.

Fig. 3.11. Percentage of sex workers given condoms by an HIV prevention programme, selected countries in Europe and central Asia, 2007 and 2009



Source: AIDSinfo [online database] (3).

vulnerability by preventing the negotiation of condom use or reducing access to services because of fear of harassment by law enforcement authorities or ill treatment by service providers (24). Sex workers, especially street-based sex workers, are sometimes forced to exchange unpaid and unprotected sex with law enforcement authorities to escape arrest or harassment, obtain release from prison or avoid being deported (22).

Sex workers who inject drugs

Sex workers may inject drugs, and people who inject drugs may exchange sex for drugs or money, creating dual risk factors for HIV infection: shared injecting equipment and unprotected sex. Groups that both inject drugs and sell sex are among those experiencing the most rapid increases in HIV prevalence (22).

Migrant sex workers

Female migrants without work permits may turn to sex work, and usually in the worst conditions. In the west of the region, as many as 65% of sex workers are migrants. Migrant sex workers face the same risk environment as other sex workers, including stigma, discrimination and violence associated with sex work, but these issues are exacerbated for undocumented migrants, who face the prospect of deportation and may not be able to access the legal, social and health-care services available to non-migrants (23).

The constant threat of arrest and expulsion make migrant sex workers especially vulnerable and extremely difficult to reach.

Stigma, discrimination and violence

For many sex workers, violence, stigma and discrimination are daily realities that increase

Violence undermines HIV prevention efforts, and prevention programmes rarely consider this

I get detained because I don't have a passport ... they photograph you and ask for money; if you don't give it, [the police] demand a *subbotnik* [unprotected and unpaid sex] ... it's like that for me every time, and if I don't agree, then I get beaten, with fists, and they're vulgar with me ... once they took me by the hair and pushed me into their car, saying: if you tell anyone, we'll plant drugs on you.

– *Sex worker, 22 years old, central Asia (23)*

In central Asia, police routinely arrest and may be violent with sex workers, who are often forced to bribe arresting officers with money or sexual services (25).

Sexual and physical violence undermine HIV prevention efforts but are often considered outside the scope of HIV programmes. NGOs engaged in prevention programmes often do not have the expertise to combat such violence (18).

Multiple risk factors require a multi-pronged, comprehensive approach to prevention

Prevention programmes engaging sex workers must be mindful of the factors that make sex workers vulnerable to HIV: frequency of sexual contacts and a high number of sexual partners; drug use; sexual and physical violence; stigma and discrimination; and issues particular to migrants. Programmes must also address local and national legal environments; behaviour change through peer outreach; condom promotion; needle and syringe provision; tailored sexual and reproductive health services, including contraception, HIV testing and counselling; and crisis services for people who experience violence, including rape.

Progress and achievements

- In 2010, more than 150 government and civil society representatives from 15 countries in the east of the region met to develop recommendations for realizing the UNAIDS action framework for transgender people and men who have sex with men.
- Successful models of intervention exist, tailored for the context and implemented by NGOs.
- New 2011 guidelines on preventing and treating HIV infection and sexually transmitted infections for transgender people and men who have sex with men, devised by WHO, the United Nations Development Programme (UNDP) and UNAIDS, could support national planning and implementation.

Challenges and opportunities

- The epidemic overall is resurging in the west of the region, with an increase in higher-risk behaviour.
- Epidemics in the east are hidden due to a lack of data, political commitment and resource support, and low-scale programmes.
- Stigma and discrimination against men who have sex with men, and people who are lesbian, gay, bisexual and transgender, are widespread.
- HIV prevention for men who have sex with men is absent from (or a low priority within) national AIDS programmes in the east of the region.

HIV prevention for men who have sex with men

Programmes addressing HIV among transgender people and men who have sex with men, including youth, have not achieved universal access to services for these key populations at higher risk. The number of men who have sex with men accessing HIV prevention programmes and services has increased in the past two years. Nevertheless, services focusing on the special needs of men who have sex with men remain inadequate overall to induce needed behaviour change and ensure universal access to other essential prevention services, including HIV testing and counselling, testing and treatment for sexually transmitted infections, and antiretroviral drugs to prevent HIV.

In addition, in some parts of the region, men who have sex with men experience such severe stigma and discrimination that outreach to them has been extremely limited, resulting in little reliable statistical or even anecdotal information about how HIV infection affects them (25).

Stigma, discrimination, widespread homophobia, hate crimes and human rights violations remain the most important barriers to engaging men who have sex with men in the east of the region

Most men who have sex with men surveyed know that correct and consistent condom use can protect them from HIV, but that knowledge does not necessarily translate into using a condom during anal sex with a male partner (Fig. 3.13). Likewise, access to condoms free of charge does not appear to make it more likely that men who have sex with men will use condoms regularly. The reasons for this may be a lack of specific tailoring of programmes for this key population at higher risk (Fig. 3.14).

In 2009, more than 90% of men who have sex with men surveyed in 17 countries¹⁰ answered correctly that condoms can protect them from HIV infection. In addition, 58% had access to free condoms, an increase of 10% from the previous reporting round in 2007. Countries reaching 80% coverage of men who have sex with men through condom programmes include Belarus, Greece, Romania and the United Kingdom (3).

However, even with these positive indications that prevention programmes are engaging men who have sex with men, condom use among that group has decreased in some countries in the period between the past two reporting periods (Fig. 3.12).

¹⁰ Azerbaijan, Belarus, Bulgaria, Czech Republic, Estonia, Georgia, Greece, Hungary, Kazakhstan, Lithuania, Norway, Romania, Serbia, Sweden, Ukraine, United Kingdom, and Uzbekistan.

Fig. 3.12. Percentage of men who have sex with men reporting using condoms, selected countries in Europe and central Asia, 2005, 2007 and 2009

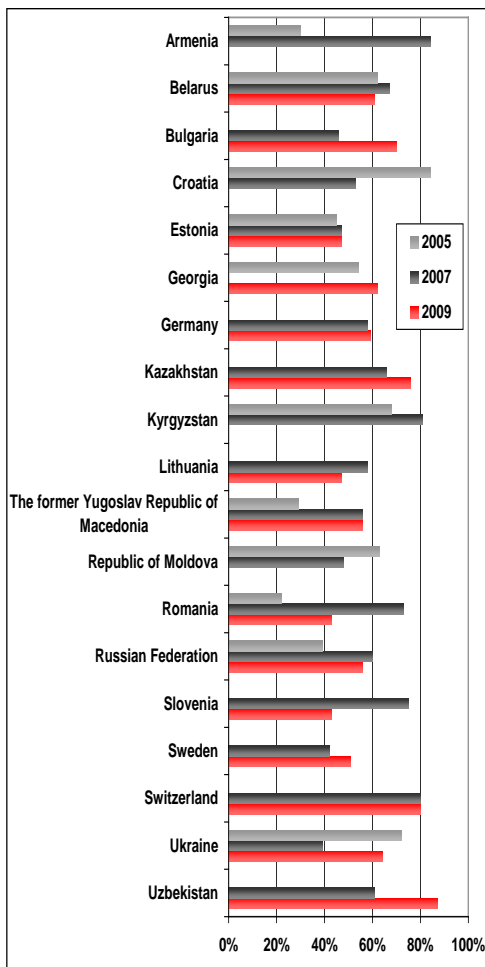


Fig. 3.13. Knowledge versus condom use among men who have sex with men, selected countries in Europe and central Asia, 2009

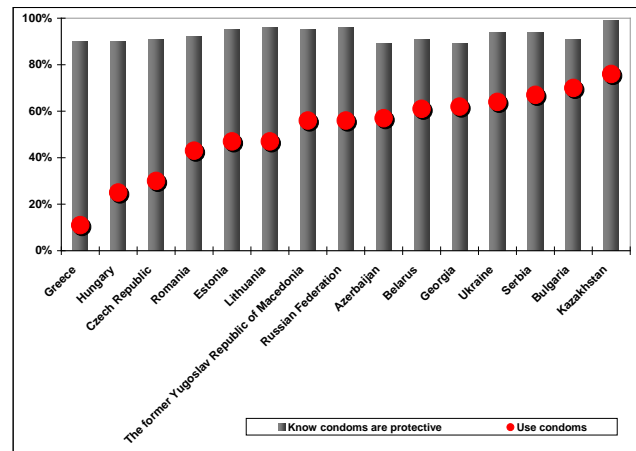
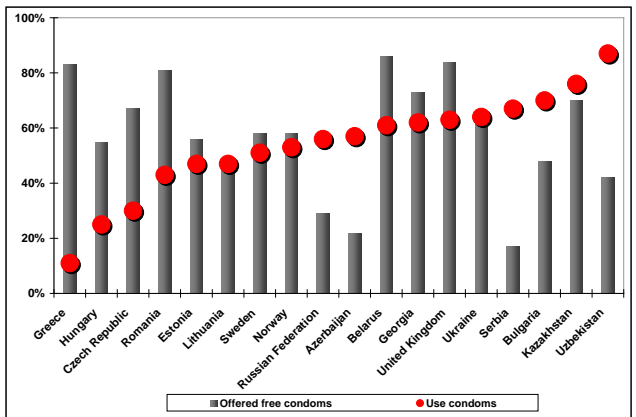


Fig. 3.14. Proportions of men who have sex with men offered condoms free of charge and using condoms, selected countries in Europe and central Asia, 2009



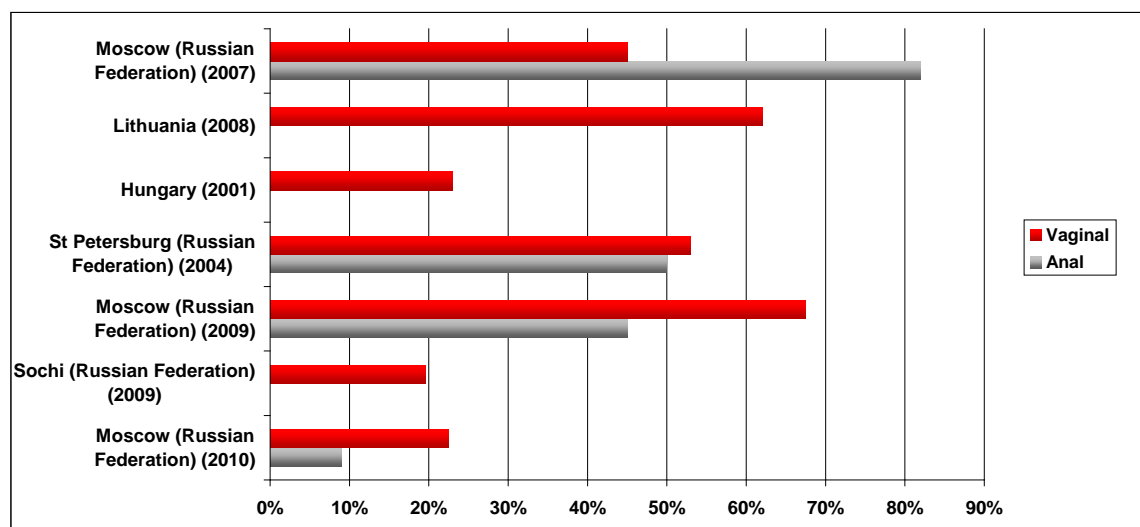
Source: AIDSinfo [online database] (3).

In 27 countries in Europe and central Asia,¹¹ about 57% of men who have sex with men reported using condoms the last time they had sex with a male partner. Countries reporting in the west and centre of the region (20) had a lower median proportion of condom use (51%) and a wider range (11–80%) in the rate of condom use among men who have sex with men compared with 7 countries reporting in the east of the region (61%, range 56–87%) (3).

¹¹ Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Czech Republic, Denmark, Estonia, Georgia, Germany, Greece, Hungary, Kazakhstan, Latvia, Lithuania, Norway, Portugal, Romania, Russian Federation, Serbia, Slovenia, Spain, Sweden, Switzerland, The former Yugoslav Republic of Macedonia, Ukraine, United Kingdom and Uzbekistan.

Several studies in the Russian Federation between 2001 and 2007 found that 14–45% of responding men who have sex with men had sex also with women in the previous year. Studies examining men who have sex with men who had sex with a woman in the previous six months reported 10–20% in the Czech Republic and Republic of Moldova, and 35–45% in Bulgaria and Uzbekistan. In eight countries with data available, the proportion of men who have sex with both men and women ranged from less than 10% to 35%. Condom use is limited among men who have sex with men who also have sex with women, and varies according to the type of female partner (spouse, regular partner or casual

Fig. 3.15. Proportion of men who have sex with men using condoms with female partners by vaginal and anal sex, various surveys, Europe and central Asia, 2001–2010



Source: WHO, UNDP, UNAIDS and UNFPA, unpublished data from a review of 30 countries.

partner). Data from some of these same cities in the Russian Federation on condom use among men who have sex with men with female partners showed that reported use varied widely between surveys and between anal and vaginal sex within the same survey (Fig. 3.15) (WHO, UNDP, UNAIDS and UNFPA, unpublished data from a review of 30 countries).

Services must be tailored to the needs of men who have sex with men. This includes providing services in appropriate venues, often where the sexual activity takes place, using appropriate communication, increasingly the Internet, and applying behaviour-change interventions, including individual and group counselling on HIV, sexually transmitted infections and sexual health. Men who have sex with men should be offered testing and counselling for HIV and sexually transmitted infections, and referred for treatment and care.

Lubricants should also be promoted and provided in conjunction with condoms to prevent the latter breaking during anal sex (26).

Widespread stigma and discrimination make many men who have sex with men hide their sexual orientation. Interventions should be designed to reach these men and help them accept their sexuality. Consistently enforcing anti-discrimination laws and regulations is essential to an enabling environment for successful interventions.

Multiple risk factors for key populations at higher risk

The interplay of transmission risks associated with key populations at higher risk, including people who inject drugs, sex workers and men who have sex with men, can accelerate the spread of HIV. At least 30% of sex workers in the Russian Federation, for example, have injected drugs (27), and the high percentage of sex workers in Ukraine who are living with HIV (14–31% in various studies) is almost certainly caused by the overlap of paid sex with injecting drug use (3,4). Some men who have sex with men also inject drugs or engage in sex work. In interviews in the Russian Federation, 4–6% of men who have sex with men in the cities of St Petersburg, Krasnoyarsk and Perm, and 11% in Moscow and Nizhniy Novgorod, reported having injected drugs in the previous year (WHO, UNDP, UNAIDS and UNFPA, unpublished data from a review of 30 countries). The percentage of men who have sex with men engaging in sex work varies from 6–8% in Croatia to 44% in Turkey (WHO, UNDP, UNAIDS and UNFPA, unpublished data from a review of 30 countries). A recent study among men who have sex with men found that in Georgia “the [men who have sex with men] who have the most limited knowledge of correct condom use and access to HIV testing and counselling are those who support themselves through sex trading” (WHO, UNDP, UNAIDS and UNFPA, unpublished data from a review of 30 countries).

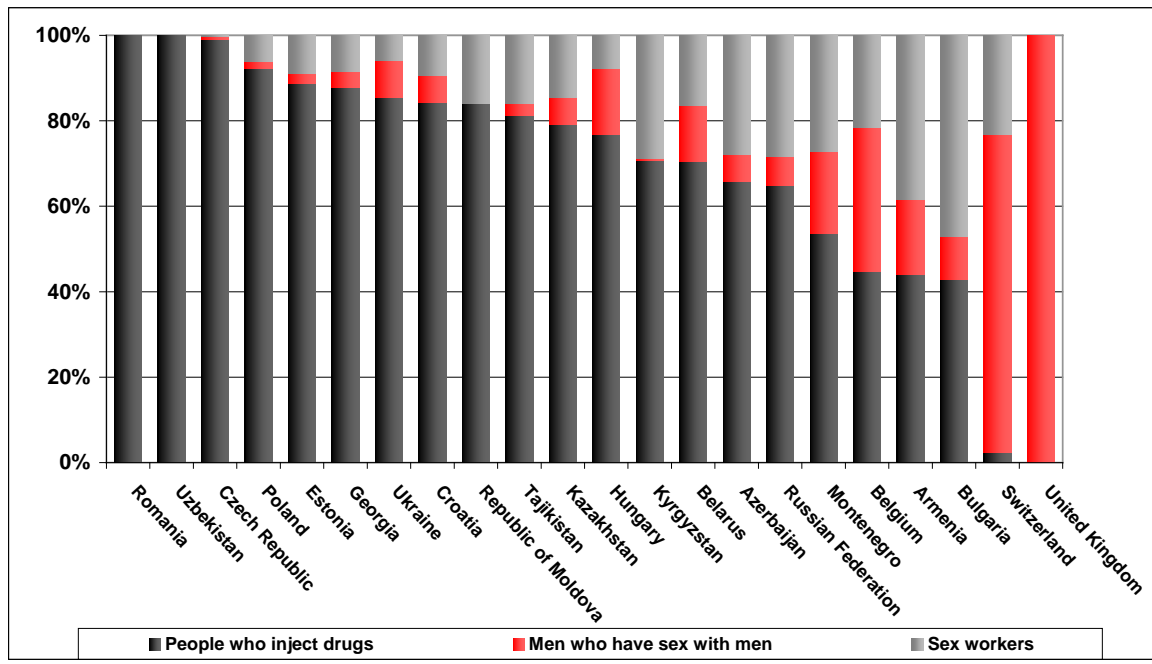
That many people within these key populations at higher risk are often young (younger than 25 years) adds another dimension of risk. Young people using drugs, selling sex and engaging in same-sex relations are often less exposed to HIV information, less able to access preventive and other services and more likely to be abused, manipulated and coerced into risky behaviour and situations (21).

Financing HIV prevention programmes for key populations at higher risk

Significant progress has been made in expanding HIV prevention, treatment, care and support services, but key populations at higher risk, such as sex workers, people who inject drugs and men who have sex with men, often remain underserved. Resources directed towards the needs of these populations, including support for claiming and exercising their rights, often do not match the degree to which they are affected by the epidemic.

Strengthening the response to the epidemic has been hampered by the reluctance of planners and implementers to focus prevention efforts on interventions for key populations at higher risk, where they have potential to produce the maximum impact. In many countries, programmes engaging key populations are primarily funded by international sources. This is not the case in the west and centre of the region, where domestic public expenditure funds 90% of such prevention efforts. In the east, this figure is only 10%, as the Global Fund to Fight AIDS, Tuberculosis and Malaria provides almost all the funding for these programmes (Fig. 3.17).

Fig. 3.16. Proportions of HIV prevention funding (all reported sources) for engaging key populations at higher risk, selected countries in Europe and central Asia, 2009



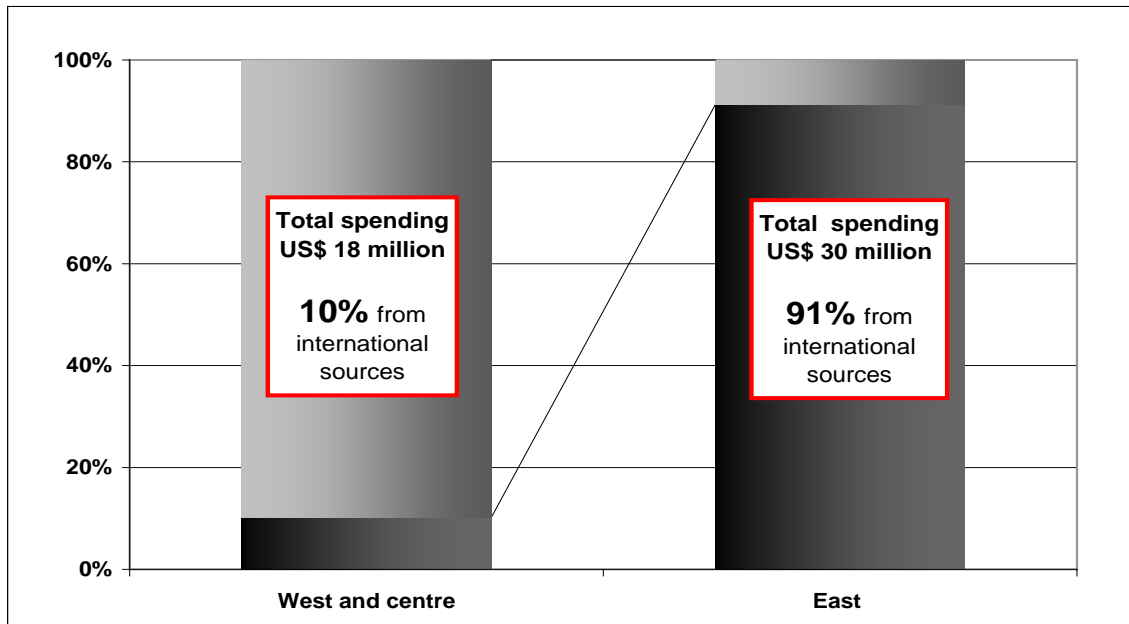
Source: AIDSinfo [online database] (3).

Determining the proportions to be invested in HIV prevention for key populations at higher risk and in HIV prevention and education among the general population is another key consideration. In Europe and central Asia, a region experiencing primarily concentrated epidemics, 87% of investment in HIV prevention is not focused on the people at higher risk of transmission (although regional spending must be interpreted cautiously, given that more than 50% of all reported prevention funding in Europe and central Asia is reported from the Russian Federation). In the Russian Federation, although people who inject drugs comprise about 60% of newly diagnosed cases, only 4.4% of HIV prevention expenditure is devoted to programmes for people who inject drugs, sex workers, clients of sex workers and men who have sex with men. In comparison, the west of the region focuses about 20% of its funding on specific interventions for these key populations at higher risk, and in the east (excluding the Russian Federation), 27% (Fig. 3.18). Many countries in the region have significantly increased funding for programmes engaging key populations at higher risk. In Ukraine and Georgia, where people who inject drugs comprise 34% and 57% respectively of the people newly diagnosed with HIV infection, the funding appears to be following the epidemic needs, with 42% and 51% respectively of total HIV prevention budgets going to support programmes for key populations at higher risk (3).

Investment strategies must also balance the need for HIV prevention interventions among all young people and the special needs of adolescents most at risk of acquiring HIV infection, including those who engage in drug use or sell sex. HIV programming for youth in the region has largely focused on prevention education aimed at the general population of young people. Many of these mainstream interventions fail to address the specific risk behaviour and environments of more vulnerable adolescents (21).

In summary, evidence-informed advocacy is needed to draw the attention of national policy-makers and funders to agreements made by countries in the region on domestic support for programmes engaging key populations at higher risk. All countries are signatories to the resolution of the United Nations High Level Meeting on AIDS in 2011 that prioritizes HIV prevention within key populations at higher risk. Many countries in the region are also members of the United Nations Economic and Social Commission for Asia and the Pacific and have signed resolutions 66/10 and 67/9 on the need to scale up HIV services to these groups.

Fig. 3.17. Percentage of HIV programme spending on people who inject drugs, sex workers, and men who have sex with men originating from international funding sources by subregion, Europe and central Asia, most recent year available

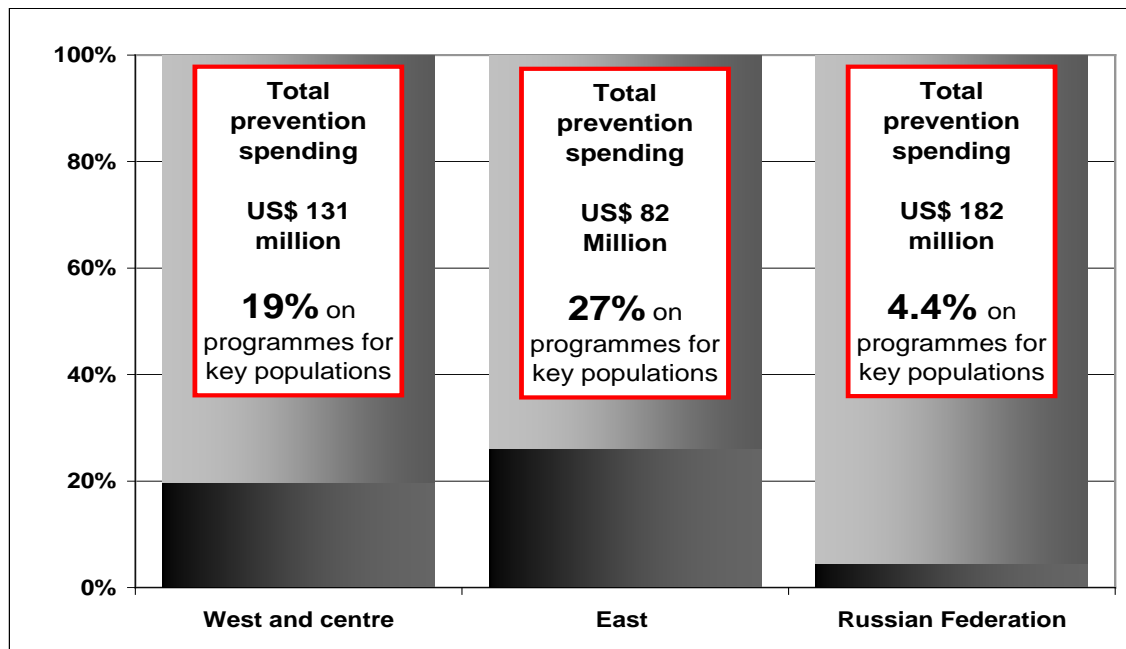


West and centre: Belgium, Bulgaria, Croatia, Czech Republic, Hungary, Montenegro, Poland, Romania, Switzerland and United Kingdom.

East: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Russian Federation, Tajikistan, Ukraine and Uzbekistan.

Source: AIDSinfo [online database] (3).

Fig. 3.18. Domestic spending on HIV prevention for people who inject drugs, sex workers, and men who have sex with men as a percentage of all HIV prevention spending by subregion, Europe and central Asia, most recent year available



West and centre: Belgium, Bulgaria, Croatia, Czech Republic, Hungary, Montenegro, Poland, Romania, Switzerland and United Kingdom.

East: Armenia, Azerbaijan, Belarus, Estonia, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Tajikistan, Ukraine and Uzbekistan.

Source: AIDSinfo [online database] (3).

Structural approaches to HIV prevention

In many countries in the region, drug use, sex work and sex between men are considered illicit or deviant behaviour, and the people practising these behaviours are socially marginalized, highly vulnerable and disadvantaged. Historically, the main systems that deal with these groups are the police, the criminal justice system, juvenile correctional systems, drug rehabilitation and psychiatric clinics. Repressive police practices are common and are a barrier to establishing relationships of trust with vulnerable groups, particularly young people. These practices discourage individuals from seeking contact with HIV prevention, treatment, care and support services.

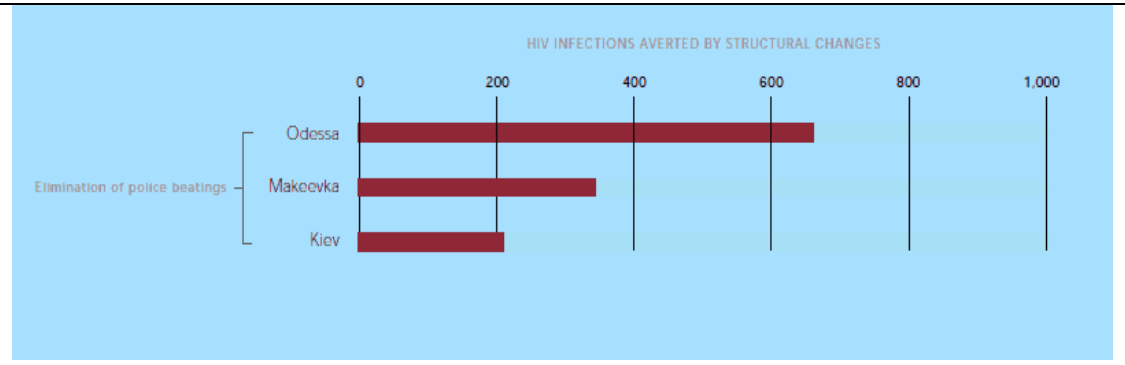
In the west of the region, aligning national legislation and policies with internationally recognized standards, enforcing protective laws, and protecting the human rights of key populations at higher risk have strengthened the response to the HIV epidemic. In other parts of the region, some laws and regulations that hindered the response to HIV have been addressed. For example, sexual relations between people of the same sex have been decriminalized in all except two countries, and laws to address HIV-related discrimination in the workplace and travel restrictions have been revised to protect people living with HIV in many countries. Today, most countries in the region explicitly address or reflect human rights in their national AIDS strategies. Nevertheless, implementing the laws remains a considerable challenge (4,28).

In addition to traditional interventions to reduce high-risk sexual behaviour and injecting practices, changes in the social, economic and policy environment can also significantly reduce HIV morbidity, mortality and incidence. Reducing the violence faced by people who inject drugs is one example of social change that could potentially lower the number of people acquiring HIV infection. In Ukraine, an association has been observed between police violence against people who inject drugs and specific types of higher-risk behaviour, such as using preloaded syringes. Building on this association, recent modelling has estimated that eliminating police violence against people who inject drugs could prevent many people from acquiring HIV infection (Fig. 3.19).

In the east of the region, adolescents at higher risk are also fearful of violence and affected by systems that are meant to protect but in practice often punish and fail to defend their rights. Police dealing with youth engaged in illicit behaviour make frequent raids in which minors are caught, registered, monitored and, in certain cases, sent to detention centres (WHO, UNDP, UNAIDS and UNFPA, unpublished data from a review of 30 countries).

Tackling the social and structural causes of HIV risk and vulnerability, including further enforcing protective laws across the region and increasing efforts to protect the human rights of key populations at higher risk, will strengthen the response to the HIV epidemic.

Fig. 3.19. Estimated number of people who could avoid acquiring HIV infection by eliminating police beatings of people who inject drugs in three cities in Ukraine



Sources: Strathdee et al. (29) and UNAIDS (4).

HIV in prison populations

Progress and achievements

- Comprehensive programmes implemented in prisons in select countries demonstrate the effectiveness of these strategies.
- Health care exists in prisons; it is funded, monitored and reported.

Challenges and opportunities

- Prison health-care staff lack training on issues relating to HIV.
- The prevalence of HIV, TB and hepatitis C is high among the two million inmates in Europe and central Asia.
- Few countries support the implementation of comprehensive HIV programmes in prisons, including screening for hepatitis B and C and vaccination for hepatitis B.
- Provision of antiretroviral therapy for prisoners living with HIV is inadequate and untimely.
- Lack of continuity of care and linkage with mainstream health care has implications for HIV prevention and treatment retention.
- Funding for prison-based programmes is limited.

Prisons are extremely high-risk environments for HIV transmission, morbidity and mortality. This is caused by overcrowding, poor nutrition, limited access to health care, continued drug use, unsafe injecting practices and tattooing, unprotected sex, extremely high levels of stigma, discrimination and violence against inmates from the prison administration and staff as well as between prisoners, especially against people living with HIV, drug users and men who have sex with men.

Many inmates come from marginalized populations, such as people who inject drugs, and are already at an elevated risk of HIV. The HIV situation in prisons is exacerbated by high rates of TB (often multidrug-resistant), sexually transmitted infections and hepatitis B and hepatitis C.

To address these issues, HIV programmes in prisons must provide a comprehensive package for HIV and TB treatment and care as well as prevention services that address all three routes of HIV transmission (sexual, blood and from mother to child). Programmes must be gender sensitive and based on human rights and take into account the capacity-building needs of prison staff (30). In addition, to ensure continuity of service, prison health care must not be isolated from public health care.

Comprehensive package

A comprehensive package includes the following:

- access to information, education, communication and peer prevention
- access to voluntary counselling and testing
- prevention and treatment of sexually transmitted infections and programming of condoms
- access to safe injection and tattooing equipment
- access to evidence-informed drug-dependence treatment, including opioid substitution
- access to antiretroviral drugs for treatment and post-exposure prophylaxis
- prevention of mother-to-child transmission

- staff access to protective equipment
- prevention of sexual violence, and the provision of conjugal visiting rooms
- universal standard precautions
- prevention, diagnosis and treatment for hepatitis B and C
- prevention and treatment of TB and HIV and TB collaborative programmes
- throughcare.

Despite the risk of HIV transmission in prisons and in communities when prisoners are released, HIV in prisons continues to be a neglected area. Legal and policy frameworks in many countries do not support the implementation of comprehensive HIV programmes for prison populations, funding is insufficient and projects often rely on support from international donors.

Antiretroviral therapy programmes are limited in coverage and lack continuity with the public health system, which can result in interrupted treatment. In the Russian Federation, once a person living with HIV is put into pretrial detention, he or she receives an HIV test. However, the results are often delayed by several days and antiretroviral therapy may not begin for a month. Quality assurance and monitoring are virtually absent (30).

Antiretroviral drug supply in prisons and to ex-prisoners must be addressed. In many countries in the east of the region, released prisoners do not have access to treatment for several months until they re-establish their social status.

Countries across the region have different HIV policies on prevention services for people who inject drugs in prison. Only 10 of 49 countries (20%) offer needle and syringe programmes in prisons, with little variance between the west, centre or east of the region. In most of these countries, such projects are limited and remain pilot projects despite strong evidence of the positive effects of harm reduction and other HIV prevention services in prisons (3).

Opioid substitution therapy has wider support in prisons, particularly in the west of the region, where 85% of countries report availability. As a result, HIV and hepatitis C infection in prisons has decreased (31). Spain introduced opioid substitution therapy into prisons in 1995 and needle and syringe programmes in 1997; the programme reached full scale in 2002. Strong harm-reduction policies, comprehensive prevention services in prisons and good coordination between the National Plan on AIDS and National Plan on Drugs have had a remarkable impact in Spain. HIV incidence among inmates has dropped from 0.7% in 2001 to 0% in 2010 and hepatitis C from 5.1% to 1.6% in the same period. The prevalence of HIV infection and hepatitis C has also dropped significantly (32).

The positive impact of the comprehensive programme implemented in prisons in Spain is clear, as is the reverse in the absence of such services (Fig. 3.20).

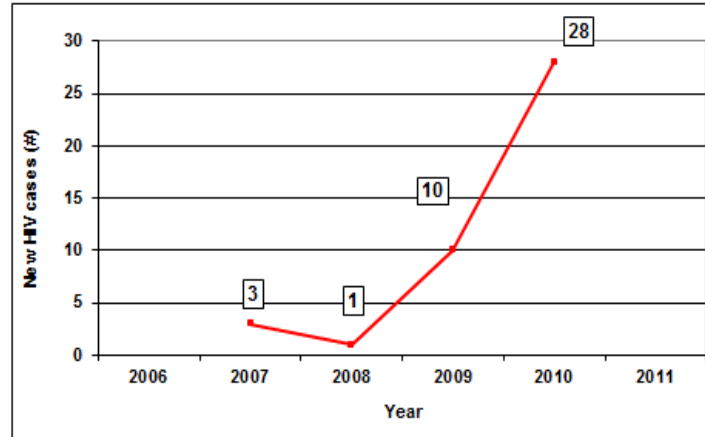
In the centre and east of the region, 41% of countries are using opioid substitution therapy in prisons (Table 3.3). However, in most countries HIV programmes are available in some but not all prisons.

Fig. 3.20. Associations between comprehensive prevention programmes and HIV epidemics in prisons in Lithuania and Spain

Prisoners in Lithuania newly infected with HIV in the absence of prevention services

Intervention	Availability
Needle and syringe programme	No
Opioid substitution therapy	No
HIV testing	Yes
Antiretroviral therapy	18%
Harm reduction education	5 pilot projects

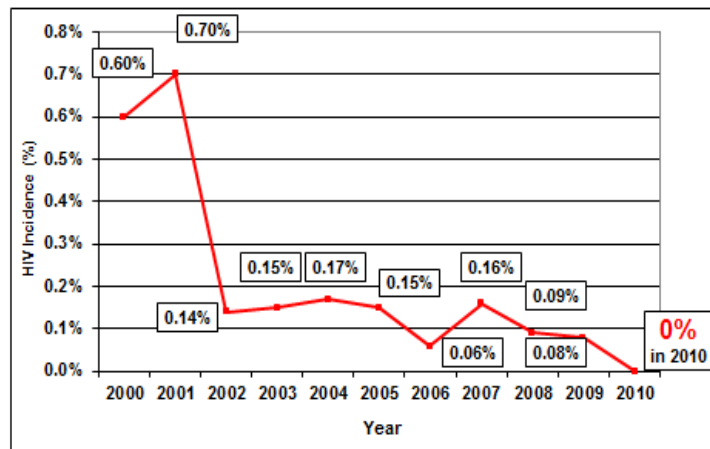
Number of prisoners newly infected with HIV in Lithuania



Prisoners in Spain newly infected with HIV in the presence of prevention services

Intervention	Availability
Needle and syringe programme	Yes, 30 Prisons
Opioid substitution therapy	10.2% of inmates (6429 in 2010)
HIV Testing	76%
Antiretroviral therapy	64.6% (2668 in 2010)
Harm reduction education	100%

Percentage of prisoners newly infected with HIV in Spain



Sources: personal communications, Signe Rotberga, UNODC, Tallinn and Enrique Acín García, Head, Public Health Department, General Secretariat of Penitentiary Institutions, Ministry of the Interior, Spain.

Only in a few countries are services available in all prisons. Needle and syringe programmes are available universally in all prisons in only 7 countries, opioid substitution therapy in 12 countries and condoms in 18 countries (14). Estonia is one example of opioid substitution therapy having been implemented in all prisons as well as in police stations.

In the Russian Federation, drug use in prisons is common. The response in the Russian Federation to the HIV epidemic in prisons has been significantly strengthened in recent years. However, it does not

match the scale and pace of the constantly evolving epidemic, and drug treatment programmes and HIV and TB treatment programmes are limited or unavailable in most prisons.

Case management and transitional case management approaches have been developed and introduced in some countries. Tajikistan has established client management services designed to ensure a smooth transition from prison back into society and to continue and expand the work of peer-counselling services, harm reduction and treatment of sexually transmitted infections both inside and outside (for ex-inmates) of prisons (13).

The failure to implement in prisons comprehensive programmes known to reduce the risk of HIV transmission and to promote the health of prisoners living with HIV often stems from a lack of political will, concerns about security and mistaken assumptions that such programmes will encourage injecting drug use and high-risk sexual behaviour. In addition, many governments lack the resources and technology to meet the overwhelming need. NGOs are the major service providers in prisons for HIV and TB prevention and treatment programmes, and funding in the east of the region comes primarily from international donors.

Lack of access to such programmes places prisoners and the general population at increased risk of HIV infection. It also places prisoners living with HIV at increased risk of declining health, coinfection with TB and viral hepatitis, and ultimately death.

Preventing and eliminating mother-to-child transmission

Progress and achievements

- Coverage of effective regimens of antiretroviral drugs for preventing mother-to-child transmission estimated at 80%.
- Political commitment to implement services to prevent mother-to-child transmission is high.
- Many countries in the region have models for integrating services to prevent mother-to-child transmission in maternal, newborn and child health and reproductive health services.
- Nearly all countries provide universal coverage of HIV testing during pregnancy.

Challenges and opportunities

- Access to services to prevent mother-to-child transmission is limited among key populations at higher risk (sex workers and people who inject drugs) and HIV is often diagnosed late in pregnancy.
- A comprehensive approach is lacking for services to prevent mother-to-child transmission.
- Coverage of family-planning services is low, especially for women living with HIV.
- Involuntary or coerced abortions are frequent among pregnant women living with HIV in the east of the region.

Mother-to-child transmission of HIV can be virtually eliminated. This is defined as less than 2% of infants becoming infected in non-breastfeeding populations and less than 5% in breastfeeding populations. Programmatically, reaching this goal is a challenging task in countries with epidemics concentrated among people who inject drugs and where women who inject drugs have limited access to antenatal-care services, even in settings with universally available services and high coverage of services for preventing mother-to-child transmission.

In the west of the region, significant progress has been made towards eliminating mother-to-child transmission, with rates of less than 1% widely reported. In the east, mother-to-child transmission rates remain higher, in part reflecting the use of abbreviated prophylaxis for preventing such transmission, although there have been impressive declines in some countries. The Republic of Moldova has reported a cumulative percentage of mother-to-child transmissions of less than 2%; Belarus, the Russian Federation and Ukraine report a cumulative percentage of 4–7%, though regional estimates show mother-to-child transmission rates may reach as high as 12%.

According to UNAIDS estimates, 28 000 infants avoided acquiring infection through programmes for preventing mother-to-child transmission in the east of the region between 1996 and 2010 (3). Nevertheless, the annual number of children newly diagnosed with HIV in the east increased steadily from 51 in 2004 to 180 in 2009 (data from Russian Federation and Ukraine not included) (ref 6, ECDC/WHO (6) despite increasing coverage of services for preventing mother-to-child transmission, most likely reflecting the rising number of pregnant women living with HIV who are delivering.

Rapid progress has been made in addressing mother-to-child transmission of HIV, especially by integrating HIV prevention into maternal, newborn, child and adolescent health services. In 2010,

80% of all pregnant women living with HIV in the east of the region received effective regimens of antiretroviral drugs for preventing mother-to-child transmission. In comparison, the global average for low- and middle-income countries was 49% (2,3).

Belarus, Kazakhstan, Lithuania, the Republic of Moldova, the Russian Federation and Ukraine have significantly expanded services for preventing mother-to-child transmission through routine testing and counselling and close links with HIV services (36).

A large majority of women living with HIV who access services for preventing mother-to-child transmission do so as a result of high antenatal-care attendance and universal HIV testing during pregnancy. As a result, a high proportion of pregnant women living with HIV are assessed for their treatment needs and subsequently receive antiretroviral drugs to protect their infants from HIV and to benefit their own health.

There are still major barriers, however, to achieving further declines in mother-to-child transmission rates:

- up to 40% of women attending antenatal care are prescribed suboptimal prophylaxis with only zidovudine monotherapy;
- 10–20% of women living with HIV, often those who are the most vulnerable and difficult to reach, have late presentation or miss antenatal care and receive suboptimal antiretroviral prophylaxis;
- 10–20% of women living with HIV who present to antenatal care do not get HIV testing, or those who test HIV positive miss comprehensive evaluation and referrals (WHO clinical stage, CD4 status and viral load when available);
- 10–20% of pregnant women who test HIV positive do not receive antiretroviral prophylaxis during pregnancy;
- safe elective caesarean section for preventing mother-to-child transmission is not provided to many women living with HIV who could benefit from this intervention, even when there is the capacity to do so (36).

In the east of the region, 47–69 infants acquire preventable HIV infection per 1000 deliveries among women living with HIV (3).

Late presentation to services, which occurs among 19% of women, contributes to 30% of infants acquiring HIV infection. A shift from the use of zidovudine as the sole drug in prophylaxis to potent combination antiretroviral drugs would result in a 22% reduction in the number of infants acquiring HIV infection. Improving access of women from key populations at higher risk of HIV infection (notably women who inject drugs and female sex workers) to prevention of mother-to-child services can significantly increase coverage of key interventions and consequently contribute to decreasing rates of mother-to-child transmission. Actively involving civil society is essential in removing barriers and improving access to services for these population groups.

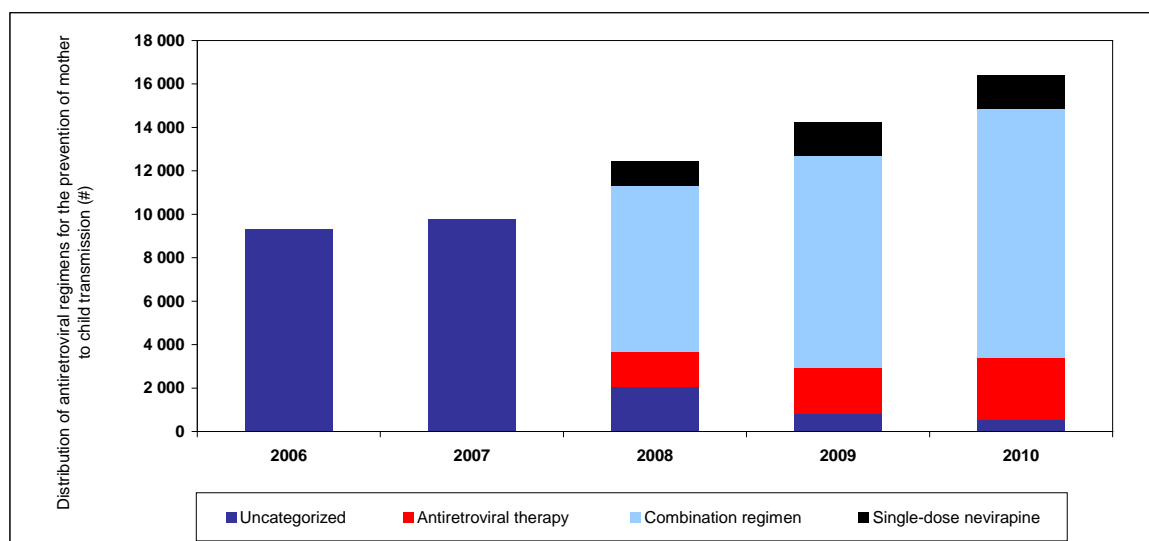
To reach the target of a mother-to-child transmission rate of less than 2%, countries in the region, particularly in the east, need to increase combination antiretroviral prophylaxis with three drugs for all pregnant women living with HIV, and limit the use of zidovudine monotherapy to women who cannot tolerate combination prophylaxis (Fig. 3.21). Increasing pregnant women's early access to services for preventing mother-to-child transmission is essential. Late presentation must be reduced by making services more sensitive to the needs of pregnant women who inject drugs or sell sex, as well as for

illegal migrants and prisoners. Future programme services for preventing mother-to-child transmission should focus on these hard-to-reach populations.

Pregnant women living with HIV who use drugs are a group of specific concern in the east of the region. They have more than a twofold risk of transmitting HIV to their infants compared with women living with HIV who have never used drugs (36). Their life circumstances may result in high rates of abandonment of children (whether voluntary or involuntary). These women have a high risk of premature delivery, coinfection with hepatitis C and sexually transmitted infections, and often have poor access to services for preventing mother-to-child transmission. Although most countries in the east have established opioid substitution therapy programmes, many are still in a pilot phase with limited coverage. Moreover, links with services for preventing mother-to-child transmission generally remain weak, and regional expertise in pregnancy complicated by substance use is lacking.

Scaling up prevention of HIV from and among people who inject drugs can contribute towards eliminating mother-to-child transmission by reducing the further transmission of HIV and by preventing unintended pregnancies among women at higher risk of HIV infection.

Fig. 3.21. Estimated number of pregnant women living with HIV receiving antiretroviral prophylaxis and the distribution of antiretroviral regimens for the prevention of mother-to-child transmission, Europe and central Asia, 2006–2010



The countries included are Armenia, Azerbaijan, Belarus, Bulgaria, Czech Republic, Georgia, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Poland, Republic of Moldova, Romania, Russian Federation, Tajikistan, Ukraine, and Uzbekistan.

Data by type of regimen not available in 2006 or 2007.

Uzbekistan did not report data for the years 2006 and 2007.

The Russian Federation has not reported disaggregated PMTCT Antiretroviral regimen data for 2010, although the data was available for 2009. The same regimen distribution reported in 2009 was assumed for 2010.

Source: AIDSinfo [online database] (3).

Management of HIV infection among pregnant women

All countries in the region have adopted national guidance, protocols and standards for the prophylaxis of mother-to-child transmission that include the use of combination antiretroviral regimens to prevent the transmission of HIV from mother to child. Combination antiretroviral therapy for preventing mother-to-child transmission is becoming increasingly common, and the percentage of pregnant women living with HIV in the region who received it increased from 60% in 2008 to 69% in 2009. There is not sufficient data by regimen type to determine whether the positive trend continued into 2010 (Fig. 3.21). The use of single-dose nevirapine is primarily restricted to women who do not receive antenatal care and present for the first time at delivery (36).

In the Russian Federation and Ukraine, the most recent available data indicate that single-dose nevirapine was provided to pregnant women in 12% and 6% of cases respectively.

Progress in assessing pregnant women living with HIV for eligibility for HIV treatment (based on clinical status and/or CD4 count) has been uneven, with some countries achieving 90% assessment levels and others achieving less than 10% (36).

Despite having these policies to prevent mother-to-child transmission, pregnant women diagnosed with HIV in the east of the region may be coerced to terminate pregnancy. Many health-care providers still have entrenched stigmatizing and judgemental attitudes, failing to provide informed choices for pregnant women living with HIV and their infants. Sensitizing health workers and training them in rights-based management of people living with HIV, including pregnant women, remain priorities.

For HIV-exposed infants, virological testing, although available in many settings, is not widely used for early HIV diagnosis in the east of the region, and traditional antibody testing at 18 months remains the main approach to diagnosis. Nevertheless, some countries have achieved high coverage of virological testing for HIV-exposed infants, including Kazakhstan, with 95% by age two months (35). Dried blood spot testing is still not being used as a strategy for decentralizing diagnostic services in the east of the region.

Family planning for women living with HIV

Several countries have policies for providing contraception free of user charges to women living with HIV, although implementation in the east of the region appears to be weak. The high rates of infant abandonment (whether voluntary or involuntary) by mothers living with HIV in some settings underscore the need to address fragmented approaches to preventing unplanned pregnancies among women living with HIV.

Several challenges remain in sexual and reproductive health for pregnant women living with HIV. Unacceptably high proportions of women living with HIV use ineffective or unreliable family-planning methods, or use none and risk future unintended pregnancy. A study in Ukraine indicated that, in the first year after delivery, more than 40% of women living with HIV risk unintended pregnancy and that one sixth of women in HIV-discordant couples are not using barrier methods and risk transmitting HIV to their partners (37). Unintended pregnancy among women living with HIV in the east of the region may elevate the risk of mother-to-child transmission and infant abandonment, especially among marginalized women (such as people who inject drugs and illegal migrants) who may not receive antenatal services, antiretroviral therapy or services for preventing mother-to-child transmission, or have access to safe abortion.

In summary, despite the progress achieved in services for preventing mother-to-child transmission in most countries in the east of the region, antenatal-care services “miss” many women or they present for services late – mostly in labour or at delivery. These women tend to be those who are at higher risk and most vulnerable to HIV infection, missing the chance to benefit from prophylactic interventions that would reduce the risk of transmitting HIV infection to their infants. Throughout the region, prejudice and stigma surrounding drug use, and the resulting fear of discrimination, tend to push women who inject drugs into concealing their drug use from health-care providers and/or to seek services rather late in pregnancy. Ethnic minorities, migrant women, refugees, sex workers, trafficked women and, in some settings, prisoners may face similar difficulties. Eliminating vertical transmission requires concerted efforts to reach and provide services and support to the most marginalized women while respecting their rights and dignity. Evidence shows that building strong links between health-care facilities and NGOs addressing the needs of marginalized women improves case-finding and access to primary care and other health care, and facilitates referrals to specialist care. Further integrating services by involving civil society is the way forward to eliminate the mother-to-child transmission of HIV in the east of the region.

Blood safety

Progress and achievements

- Political commitment to blood-safety programmes is high.
- In the west of the region, the percentage of people acquiring HIV infection nosocomially through blood is stable at 0.06% per year, and nosocomial rates have improved drastically in the centre of the region during the past two decades.
- National strategies include blood-safety protocols.

Challenges and opportunities

- Surveillance of nosocomial infections is incomplete in some countries in the east of the region.
- High turnover and little continuing education of health-care personnel leads to poor commitment to standard precaution procedures.

National strategies for blood safety aim to ensure the safe use and disposal of equipment in health-care settings to prevent the transmission of HIV and other bloodborne infections such as hepatitis B and C. This includes ensuring that all units of blood are screened for transfusion-transmissible infections, including HIV, and that only non-reactive units on screening tests are released for clinical use.

In 2008, 27 countries reported to WHO that they had national strategies for safe blood supply¹². During this same reporting period, Tajikistan was the only reporting country that had not yet implemented its strategy (38), though it has since done so.

Standardized procedures for screening blood imply a certain level of quality assurance, including the uniformity, reliability and consistency of performance to keep blood safe. In the region, 31 of 36 reporting countries¹³ state that 100% of donated units of blood are screened in a quality-assured manner. Countries not yet reaching this goal include Kyrgyzstan (52%), the Russian Federation (79%), Serbia (49%), Tajikistan (97%) and Uzbekistan (82%), although Serbia does screen 100% of samples based on a standardized national protocol (3).

Following nosocomial outbreaks in 2007–2008, Uzbekistan issued two presidential decrees recognizing the need to prioritize infection control. The decrees proposed modifying the health system with a focus on strengthening systems for procurement and supply, blood safety and quality of haematological services, safety standards in medical facilities and an established surveillance system for reporting nosocomial infections and needle-stick injuries. The decrees also recommended a gradual transition to using disposable commodities for medical procedures involving contact with blood. In addition, a list of items and instruments prohibited from being reused was also approved (39).

¹² Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Estonia, France, Georgia, Germany, Hungary, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Malta, Montenegro, Netherlands, Poland, Republic of Moldova, Romania, Serbia, Spain, Switzerland, Tajikistan, The former Yugoslav Republic of Macedonia, Ukraine and Uzbekistan.

¹³ Albania, Armenia, Austria, Azerbaijan, Belarus, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Luxembourg, Norway, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tajikistan, Turkey, United Kingdom and Uzbekistan.

Although national strategies have been developed and implemented, and quality-assured screening has been improved to ensure a safe blood supply, outbreaks caused by the transmission of HIV-infected blood or unsterile equipment such as catheters are still a concern in central Asia. In these countries, high staff turnover, inadequate continuing education, low availability of single-use needles and gloves, disinfectants, sharp waste boxes, medical waste disposal bags and blood collection bags, and inadequate medical waste management, lead to an insufficient commitment to standard safety and precautionary regulations during routine health-care procedures.

In addition, the propensity to perform invasive health-care procedures in the east of the region, including intravenous injections and catheterizations, where non-invasive procedures are a sound and viable option, increases the exposure to potentially contaminated equipment, thereby increasing the risk of transmitting HIV and other bloodborne viruses, particularly among children.

HIV testing and counselling

Progress and achievements

- HIV testing programmes have helped people living with HIV gain access to treatment.
- HIV testing among pregnant women is a strong example of integrating provider-initiated HIV testing into the general health-care system.

Challenges and opportunities

- Many countries have mandatory, compulsory policies and practices for HIV testing.
- Many people living with HIV are not aware of their HIV status, missing opportunities to access treatment, care and support.
- Diagnosis is often late.
- Key populations at higher risk are often not targeted for HIV testing and counselling.
- Outreach to the sexual partners of people living with HIV and people who inject drugs for HIV testing and counselling is limited.
- There often a lack of confidentiality
- HIV testing and counselling is not always linked to HIV prevention, treatment, care and support services.
- Access to HIV testing and counselling for couples is limited.

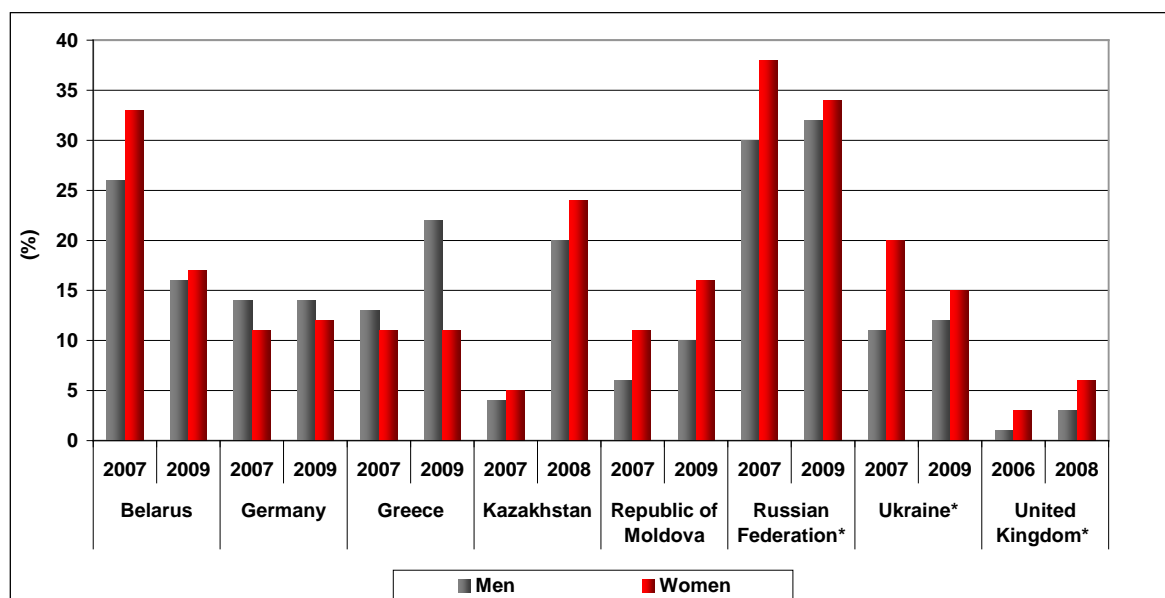
HIV testing is the entry point for HIV prevention, treatment, care and support services, yet many people living with HIV have never been tested. UNAIDS estimates 26% [18–34%] of people living with HIV across the region are unaware of their HIV-positive status. More than 60% of people with HIV remain undiagnosed in some countries in the east of the region (40).

In 2009, 18 countries in Europe and central Asia reported a total of 21 022 facilities providing HIV testing and counselling services. Thirteen countries reported nearly four million people having received an HIV test in the previous 12 months (2). This figure does not include the Russian Federation, which officially reports that more than 25 million tests were conducted in 2010 (41). In the 11 countries for which data are available for 2008 and 2009, the median number of tests performed per 1000 population increased from 30 in 2008 to 44 in 2009 (2).

HIV testing and counselling services are expanding, especially in health-care settings, but it is not always clear which populations are tested and whether the increase in the number of tests results in better access or service coverage for the populations most in need of HIV testing and counselling and other HIV services.

In the Russian Federation, about 61% of the people newly diagnosed with HIV in 2009 acquired it because of unsafe injection practices. The number of HIV tests performed among people who inject drugs is low – 277 000 tests versus an estimated 1.8 million people who injected drugs in 2009 – and has declined from previous years. The Russian Federation now emphasizes HIV testing among people with clinical signs and symptoms. Such testing has resulted in a reported increase of nearly 20% in the number of people newly diagnosed with HIV infection. While not engaging specific key populations at higher risk, such testing is still likely to increase diagnosis rates among those most likely to acquire HIV infection (41).

Fig. 3.22. Percentage of men and women aged 15–49 years who received an HIV test in the previous 12 months and who know the result, selected countries in Europe and central Asia, 2007 and 2009



*National methods not harmonized with UNGASS guidelines in one or more years.

According to another national data source, the Russian Federation reports HIV testing of 15–18% of women and men per year (25 million tests per year).

Source: AIDSinfo [online database] (3).

On average, 76% (range for countries 55–98%) of sex workers in the region were able to identify where they could obtain an HIV test, and 6 of 15 reporting countries noted that at least 80% of sex workers knew this information. The percentage of sex workers with knowledge of HIV testing has remained constant since 2007, although in 2009 only 47% were tested for HIV and learned their result (3).

WHO recommends that people at higher risk for HIV infection be tested and counselled at least annually. HIV testing should always be accompanied by counselling and have links to care and treatment (42).

In many countries in the region, HIV testing and counselling during antenatal, childbirth and postpartum services are an excellent example of the integration of provider-initiated HIV testing into the general health-care system. Most countries in Europe and central Asia have achieved near-universal antenatal HIV testing (recommended for all women), mostly with an opt-out policy. Antenatal testing coverage rates are reported to exceed 95% in many countries.

Although provider-initiated HIV testing is increasingly available in the east of the region, progress has been uneven. Concerns remain about the quality of testing and counselling, and the need for adequately trained health-care workers. Expanding provider-initiated HIV testing services into other health-care settings – for people with TB, viral hepatitis B and C and seeking services for sexually transmitted infections, and individuals with specific high-risk histories, such as in drug treatment – is

recognized throughout the region as an essential next step in scaling up services. In eastern European countries the level of HIV/hepatitis C coinfection is very high (up to 90% in some settings) due to unsafe injecting practice. Therefore, offering provider-initiated HIV testing to patients with viral hepatitis (B and C) is therefore important.

Many countries noted during national universal access consultations the need to expand provider-initiated HIV testing. They also noted that such testing is a component often missing from HIV testing policies. To optimize HIV testing and counselling services, policies should prescribe a combination of service delivery models, including provider-initiated and client-initiated HIV testing and counselling, and other models, such as community-based testing and counselling among hidden populations based on local needs and realities (42).

The consultations also noted the need to consider and include rapid HIV testing technologies (and for people who inject drugs, rapid hepatitis C and hepatitis B virus testing) in national HIV testing strategies, including community-based and outreach programmes. Rapid testing is being used increasingly in Europe and central Asia, although it is far from universally available. WHO-recommended and EU-approved rapid tests are sensitive, specific and simple to use. Rapid testing ensures individuals receive their test results and that they can be linked directly to prevention, treatment, care and support services at the time of testing. The immediate availability of test results is crucial for programmes engaging key populations at higher risk who may otherwise be lost to follow-up care.

Integrating provider-initiated and rapid testing strategies requires increased access to and uptake of HIV testing and counselling for key populations at higher risk. In 2009, only a handful of countries reported achieving recommended coverage of HIV testing and counselling for these populations, and evidence indicates a decreasing trend in such services. (Fig. 3.23 and 3.24). In the Russian Federation, people who inject drugs and sex workers are less likely than the general population to have been tested in the past 12 months (Fig. 3.22 and 3.24), suggesting an inefficient approach to testing.

Expanding beyond clinical settings and involving civil society and community-based organizations as providers is crucial for scaling up HIV testing and counselling services.

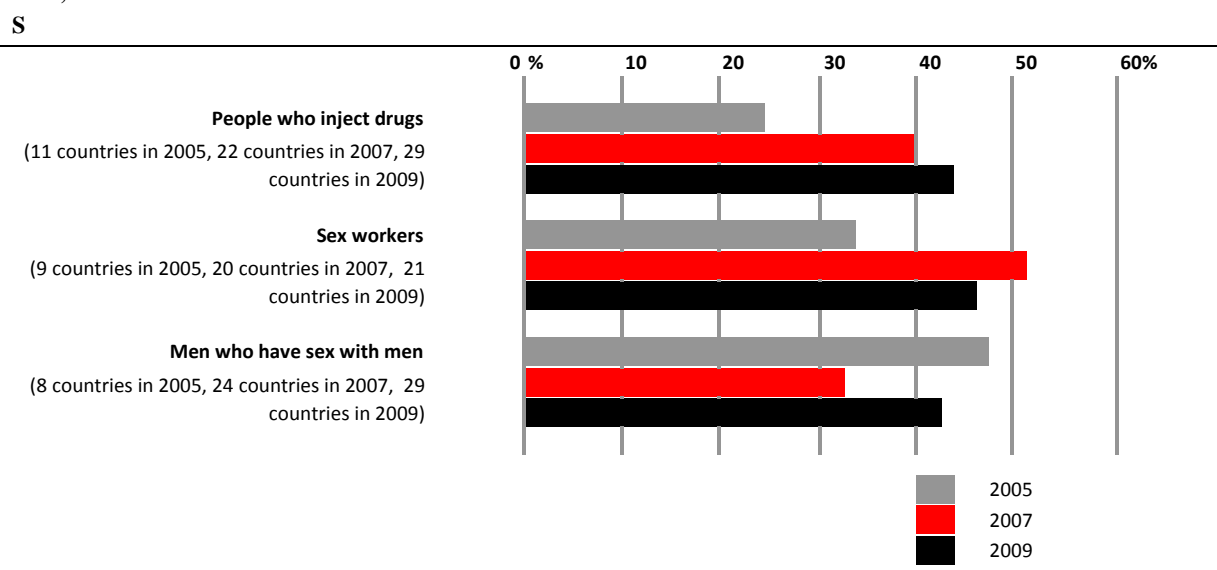
The primary objective of HIV testing and counselling is not simply to increase the number of tests performed but to increase access to and the uptake of essential HIV services for the people who need them.

Sexually active young people also encounter barriers to HIV services, including HIV testing and counselling. Often they are required to obtain parental consent before HIV testing and/or experiencing negative and judgemental attitudes among service providers. With many members of key populations at higher risk being young people and increasing numbers of young people engaging in multiple sexual relationships, there is a particular need to increase free and unencumbered access to testing for young people.

In 2010, the WHO Regional Office for Europe released a policy framework (40) noting that scaling up HIV testing and counselling in Europe and central Asia was an essential programme component to achieving universal access to HIV prevention, treatment, care and support. The expansion of HIV testing and counselling should be planned alongside a similar scaling up of prevention, treatment, care and support interventions (40,42).

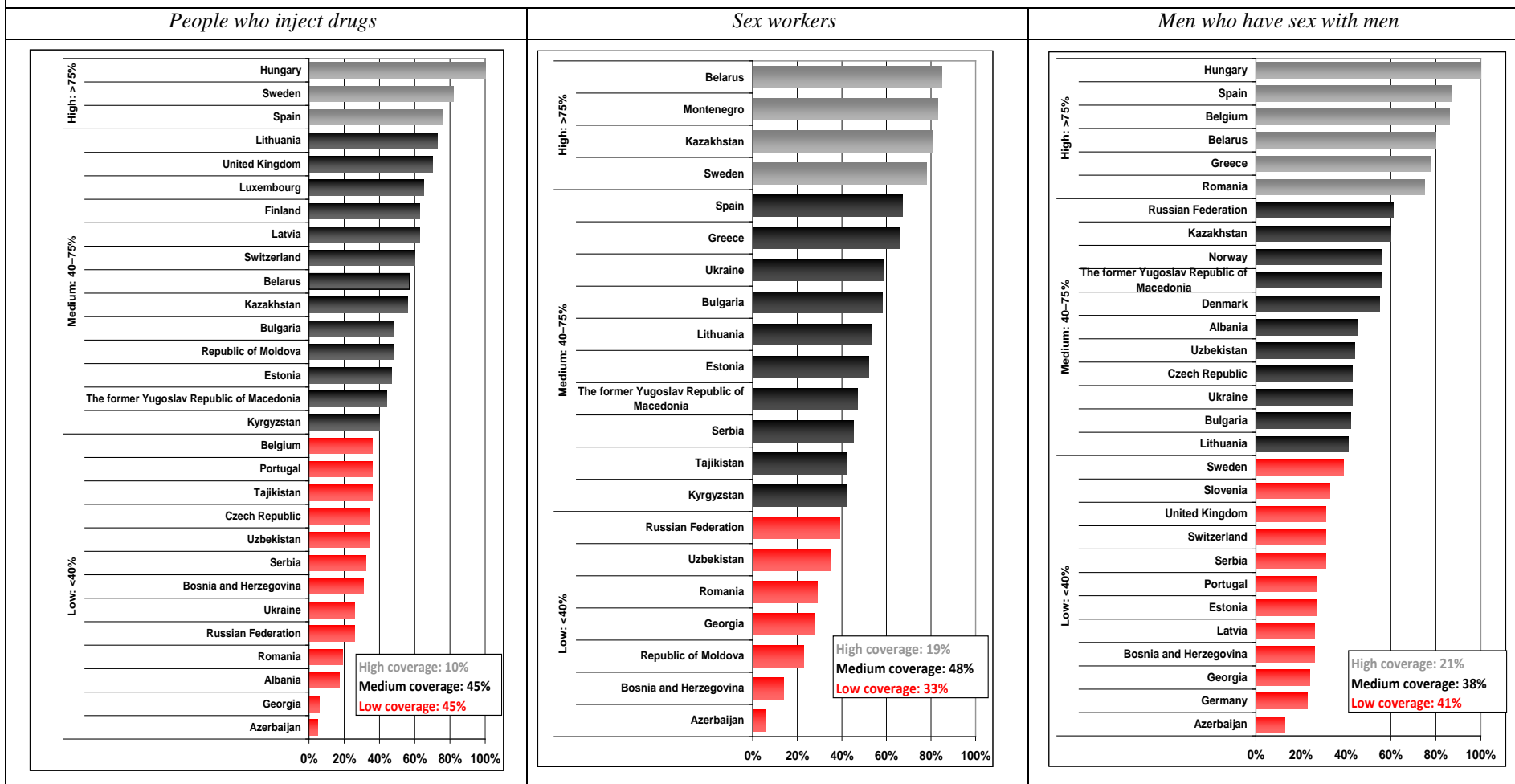
Mandatory testing policies and practices should be replaced by the full range of models for delivering HIV testing and counselling services described above, including campaigns and outreach programmes especially for key populations at higher risk, young people and migrants. Without these essential services, people living with HIV will miss opportunities to access treatment, care and support in a timely fashion and could unknowingly transmit HIV (2).

Fig. 3.23. Median percentage of respondents who reported receiving an HIV test and learning the result in the preceding 12 months among selected key populations at higher risk, selected countries in Europe and central Asia, 2005, 2007 and 2009



Source: AIDSinfo [online database] (3).

Fig. 3.24. Coverage of HIV testing among people who inject drugs, sex workers and men who have sex with men, selected countries in Europe and central Asia, 2009



Source: AIDSinfo [online database] (3).

Antiretroviral therapy and care: a public health priority

Progress and achievements

- Low- and middle-income countries increased antiretroviral therapy nearly nine fold between 2004 and 2010.
- Access to treatment for children diagnosed with HIV infection is 85%.
- Antiretroviral therapy gives people living with HIV a prevention tool that may reduce heterosexual transmission by 96% in serodiscordant couples.

Challenges and opportunities

- Coverage of antiretroviral therapy is low for key populations at higher risk of HIV infection and transmission.
- TB, HIV and drug dependence treatment services are rarely integrated.
- Social services are weak; civil society organizations are not involved in peer support for retention in HIV care and adherence to ART.
- HIV care retention rates and ART uptake and adherence can be optimized.
- Drug prices are high.
- Poor procurement and supply-chain mechanisms lead to stock-outs.
- Migrants living with HIV have poor access to antiretroviral therapy.

Antiretroviral therapy is a major public health priority. Its benefits include significant reductions in deaths from AIDS, in the cost of treating opportunistic infections and AIDS-related cancer, and in the transmission of TB and HIV. In 2010, more than 559 000 people in Europe and central Asia were reported to be receiving HIV antiretroviral therapy. This number includes more than 129 000 people from low- and middle-income countries, nearly nine times the number of people reported to have received treatment in 2004, although the rate of scaling up still lags behind other regions (Fig. 3.25). (WHO/UNICEF/UNAIDS .Global HIV/AIDS Response - Epidemic update and health sector progress towards Universal Access. Progress Report 2011. WHO, Geneva, 2011.WHO/UNAIDS and "3 by 5" Progress Report December 2004. Geneva, WHO, 2005).

Improved availability of life-extending antiretroviral therapy has profoundly affected the mortality and morbidity of people living with HIV. This is especially true in the west of the region, where widespread access to antiretroviral therapy has resulted in dramatic decreases in the number of deaths from AIDS. In the centre of the region there is also a general decline in deaths reported among people living with HIV. The effect of antiretroviral therapy on mortality in the east is less clear, given limitations in the availability of surveillance data, recent scale-up of antiretroviral therapy and continuing low coverage. Other factors independent of the scale and quality of antiretroviral therapy programmes, such as drug-related causes of death, alcohol and drug-resistant TB, further muddy the picture. Further analysis is required to understand the full impact of antiretroviral therapy on deaths in the east of the region.

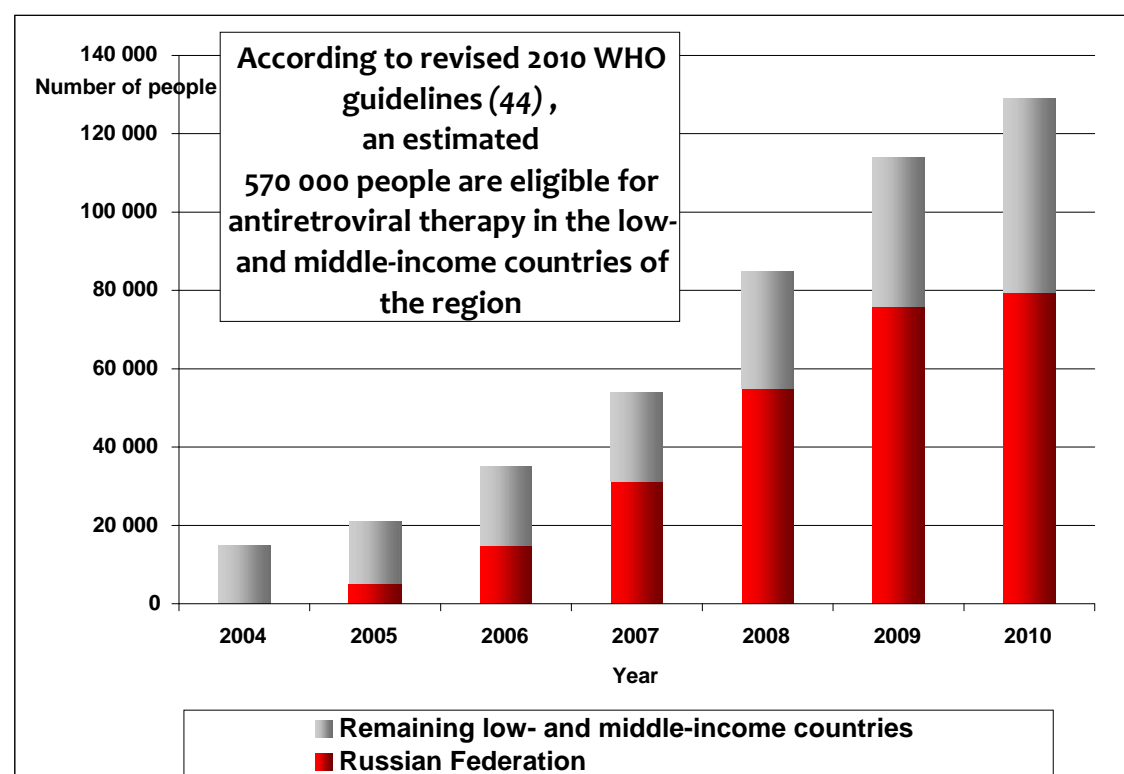
Antiretroviral therapy is being scaled up but not as quickly as in other global regions

With few exceptions, most countries in Europe and central Asia have developed national clinical protocols on HIV treatment and care following the recommendations of the WHO Regional Office for Europe, including those on the use of antiretroviral drugs for first- and second-line regimens. This allows countries to use strategic and cost-effective approaches in providing lifelong treatment and to better monitor the effectiveness of treatment programmes.

In 2010, WHO revised its guidelines for antiretroviral therapy, calling for earlier initiation of treatment at a CD4 count of <350 cells per mm^3 and the use of simpler, better drug regimens. These recommendations have the potential to further decrease morbidity and mortality and reduce HIV transmission (44).

As a result of these new recommendations, the total estimated number of people medically eligible for antiretroviral therapy in 2010 was 570 000 in the low- and middle-income countries in the region, leaving an estimated 441 000 people living with HIV who are eligible but not receiving treatment, many of whom have not been tested and are not aware of their HIV-positive status. More than half the people who need treatment live in the Russian Federation (*WHO/UNICEF/UNAIDS. Global HIV/AIDS Response - Epidemic update and health sector progress towards Universal Access. Progress Report 2011. WHO, Geneva, 2011*).

Fig. 3.25. Scaling up antiretroviral therapy in low- and middle-income countries in Europe and central Asia, 2004–2010



Source: AIDSinfo [online database] (3). [Annual report of the Ministry of Health and Social Development of the Russian Federation for 2010] (45).

In the low- and middle-income countries in the region, 23% [20%-26%] of the people estimated to be eligible for treatment were able to access life-saving medicines in 2010. In 2010, 10 of 21 low- and middle-income countries with available data in the region had antiretroviral therapy coverage estimates of 30% or less. The number of people on antiretroviral therapy increased by 34% between 2008 and 2009, an increase in line with other global regions (sub-Saharan Africa 33%, Asia 29% and the Caribbean 30%). In 2010, the scaling up of antiretroviral therapy slowed, and the total absolute number of new people receiving treatment in the low- to middle-income countries increased by only 13%, or only 14 000 people (Fig. 3.25).

In 2011, high-income countries in the region reported a total of 430 000 people receiving antiretroviral therapy (Table 3.5).

Many countries report a much higher percentage of known (registered or diagnosed cases) people living with HIV needing treatment (Table 3.4). The figures above estimating coverage are lower because they take into account both diagnosed people living with HIV and an estimate of the number of people living with HIV who are eligible for antiretroviral therapy but are not yet aware of their HIV-positive status. The percentage coverage of people living with HIV who have been diagnosed is more difficult to interpret at the regional level because the methods used to calculate which of these people need antiretroviral therapy as well as national criteria for ART initiation vary between countries. Nevertheless, the coverage of known cases is useful to monitor a country's capacity to meet the immediate need and current demand for antiretroviral therapy for diagnosed people living with HIV.

The difference between the antiretroviral therapy coverage of registered (known) people living with HIV and the antiretroviral therapy coverage of all (known or unknown) people living with HIV highlights the importance of linking treatment with other HIV services to help ensure all people living with HIV are tested, diagnosed and referred to appropriate care and treatment.

Access to antiretroviral therapy among children

Access to HIV treatment for children is high: 85% of known eligible children living with HIV receive antiretroviral therapy and an estimated 65% of all eligible children (2,3). This is a major success in the region and largely the result of HIV services being integrated into existing maternal and child-health services, including the registration of all newborns of mothers living with HIV and close follow-up of their health and HIV status.

Although antiretroviral therapy coverage for children born with HIV infection is high, a growing population of adolescents and young adults have acquired HIV through risk behaviour, including injecting drug use and sexual practices, including selling sex. As described in a recent UNICEF publication (21), these young people often lack a stable home environment that makes them difficult to reach with antiretroviral therapy and other care and support services.

Treatment: as an effective prevention tool

In addition to saving lives, antiretroviral therapy may be up to 96% effective in preventing HIV infections. In May 2011, the National Institutes of Health in the United States released results from an extensive trial showing that people living with HIV adhering to an effective antiretroviral therapy regimen can significantly reduce the risk of transmitting the virus to their uninfected sexual partner. Antiretroviral therapy reduces the risk of transmission by reducing the amount of the virus circulating in the blood to near negligible levels. Suppressing the viral load through treatment can substantially decrease the risk of not only vertical transmission but also of sexual and bloodborne HIV transmission (*Cohen M et al. Antiretroviral treatment to prevent the sexual transmission of HIV-1: results from the HPTN 052 multinational randomized controlled ART. Sixth International AIDS Society Conference on HIV Pathogenesis, Treatment and Prevention, Rome, abstract MOAX0102, 2011*).

Table 3.4. Estimated antiretroviral therapy coverage, selected countries in Europe and central Asia, 2009 and 2010

	Country reported antiretroviral therapy coverage, 2009 ^a		Estimated antiretroviral therapy coverage, 2009 (CD4 count <350 per mm3) ^b			Estimated antiretroviral therapy coverage, 2010 (CD4 count <350 per mm3) ^b		
	Point estimate		Point estimate	high	low	Point estimate	high	low
Armenia	51%		23%	40%	10%	30%	49%	14%
Austria	100%		—	—	—	—	—	—
Azerbaijan	57%		21%	30%	15%	32%	43%	24%
Belarus	62%		38%	58%	25%	51%	75%	33%
Bosnia and Herzegovina	76%		—	—	—	—	—	—
Bulgaria	—		26%	34%	20%	24%	30%	19%
Croatia	—		83%	>95%	65%	89%	>95%	70%
Czech Republic	97%		—	—	—	—	—	—
Denmark	94%		—	—	—	—	—	—
Estonia	36%		—	—	—	—	—	—
Finland	95%		—	—	—	—	—	—
Georgia	95%		62%	>95%	17%	65%	>95%	20%
Germany	55%		—	—	—	—	—	—
Hungary	—		34%	43%	28%	38%	48%	30%
Kazakhstan	54%		27%	31%	23%	30%	35%	26%
Kyrgyzstan	51%		6%	11%	3%	12%	21%	7%
Latvia	—		17%	22%	13%	18%	23%	14%

Lithuania	53%		29%	36%	22%		27%	34%	21%
Luxemburg	100%		—	—	—		—	—	—
The former Yugoslav Republic of Macedonia	5%		—	—	—		—	—	—
Malta	100%		—	—	—		—	—	—
Montenegro	8%		—	—	—		—	—	—
Poland	87%		32%	41%	24%		34%	44%	25%
Portugal	85%		—	—	—		—	—	—
Republic of Moldova	35%		21%	25%	18%		25%	30%	21%
Romania	100%		69%	78%	61%		69%	77%	60%
Russian Federation	96%		—	32%	22%		—	29%	21%
Serbia	83%		33%	44%	25%		34%	45%	26%
Slovakia	—		86%	>95	68%		81%	95%	63%
Sweden	98%		—	—	—		—	—	—
Tajikistan	56%		11%	19%	6%		16%	27%	9%
Turkey	71%		67%	86%	52%		56%	72%	45%
Ukraine	48%		9%	12%	7%		13%	16%	11%
United Kingdom	91%		—	—	—		—	—	—
Uzbekistan	—		22%	38%	12%		28%	47%	16%

^a Country-reported coverage rates are not necessarily based on the same methodological definitions between countries or those used to estimate coverage rates reported by UNAIDS/WHO. Comparisons between countries should be made with caution.

^b Estimated coverage is based on the estimated unrounded numbers of adults receiving antiretroviral therapy and the estimated unrounded need for antiretroviral therapy (based on UNAIDS/WHO methods). The ranges in coverage estimates are based on plausibility bounds in the denominator: that is, low and high estimates of need. The estimates are standardized for comparability according to UNAIDS/WHO methods. Estimates are subject to change as a result of methodological updates or as new data become available.

Source: AIDSinfo [online database] (3) and WHO/UNICEF/UNAIDS. Global HIV/AIDS Response - Epidemic update and health sector progress towards Universal Access. Progress Report 2011. WHO, Geneva, 2011.

Table 3.5. Total number of people receiving antiretroviral therapy, 48 countries in Europe and central Asia, 2006–2010

	2006	2007	2008	2009	2010
Andorra	24	25	...	...	...
Albania	45	74	110	114	145
Armenia	47	78	100	179	250
Austria	2 101	...	2 250	1 800	3 163
Azerbaijan	7	81	159	238	435
Belarus	638	884	1 249	1 776	2 614
Belgium	6 450	6 928	...	...	8 690

Bosnia and Herzegovina	19	30	33	38	48
Bulgaria	196	221	251	327	...
Croatia	291	310	398	441	510
Cyprus	...	151	170	187	198
Czech Republic	570	570	654	706	760
Denmark	2 800	...	3 000	3 000	3 000
Estonia	495	772	1 004	1 263	1 793
Finland	450	...	...	...	...
France	...	...	79 680	...	93 090
Georgia	267	334	498	655	830
Germany	35 200	36 500	39 200	42 900	...
Greece	3 426	3 746	4 236	...	5 114
Hungary	412	452	559	547	630
Israel	2 431	...	2 876	...	3 875
Italy	81 600	...	95 000	...	...
Kazakhstan	326	442	707	1 035	1 336
Kyrgyzstan	47	87	89	231	548
Latvia	301	323	334	439	508
Lithuania	75	98	127	145	...
Luxembourg	312	...	344	434	...
Malta	56	65	91	100	119
Monaco	45	...	...	...	...
Montenegro	26	...	25	31	40
Netherlands	...	7 919	9 272	...	11 780
Norway	900	...	...	...	...
Poland	3 072	3 382	3 822	4 329	4 897
Portugal	18 679	...	12 366	18 107	...
Republic of Moldova	262	464	682	984	1 237
Romania	6 790	6 500	7 434	7 244	7 276
Russian Federation	14 681	31 094	54 900	75 900	79 430
Serbia	600	628	842	790	915
Slovakia	96	98	97	111	118
Slovenia	147	157	...	...	...
Spain	77 500	...	82 710	79 500	85 700
Sweden	2 800	...	3 615	4185	...
Tajikistan	37	86	138	322	504
The former Yugoslav Republic of Macedonia	11	15	23	24	36
Turkey	685	...	900	1 000	1 000
Ukraine	4 777	7 657	10 629	15 871	22 697
United Kingdom	36 000	39 556	39 704	50 292	...
Uzbekistan	259	928	1 200	1 753	2 479

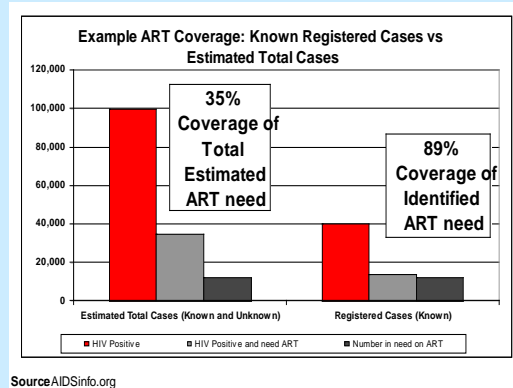
Source: AIDSinfo [online database] (3); [Annual report of the Ministry of Health and Social Development of the Russian Federation for 2010] (45); WHO/UNAIDS/UNICEF Universal Access progress reports 2008-2011

Two ways to look at antiretroviral therapy (ART) coverage

In Europe and central Asia, two indicators of antiretroviral therapy coverage are most often used in planning programmes and making decisions. Separately, these indicators provide different, but important information; together the two indicators can be used to provide a richer picture of the steps required in the larger health system to ensure all people living with HIV are tested, diagnosed, assessed for eligibility for antiretroviral therapy, enrolled in care and, when indicated, enrolled in treatment.

Used strategically, planners and decision-makers can use this information to understand how and where to scale up services to meet universal access goals for treatment.

Both methods of calculating antiretroviral therapy coverage use the same standardized definition for the numerator. The difference between the two is in the denominators and the definition of antiretroviral therapy need.



UNAIDS/WHO estimate of antiretroviral therapy coverage – an “HIV” programme indicator

Antiretroviral therapy coverage of all people living with HIV (known and unknown)

This coverage measure considers all estimated number of PLHIV who are eligible for treatment, including those who have not yet been identified. The information is useful for monitoring the achievements in the larger HIV service delivery system and the system’s ability to find, diagnose, assess and initiate antiretroviral therapy for eligible people. High coverage indicates that the steps in the system, from identifying who is living with HIV to initiating antiretroviral therapy, are working efficiently. Low coverage indicates that one or more steps in the chain are compromised. This information is also useful for setting targets and projecting resource needs.

Number receiving antiretroviral therapy

(reported by national programmes)

Antiretroviral therapy coverage (all cases) (%) =

Estimated number eligible antiretroviral therapy

(CD4 count <350 per mm³)

(based on statistical modelling)

In many countries, this denominator is estimated by using SPECTRUM, an epidemiological model based on behavioural data, epidemic trends, estimates of the size of key populations at higher risk of HIV infection and scientific evidence of antiretroviral therapy and the natural history of HIV infection. The method is standardized, enabling comparison across countries. These models are continually reviewed to improve and maximize confidence in the estimates.

Antiretroviral therapy coverage of people registered or diagnosed as living with HIV – an ‘antiretroviral therapy’ programme indicator

Antiretroviral therapy coverage of people known to be living with HIV

This indicator also measures the steps but goes a step further down the chain of events required to initiate antiretroviral therapy for a new person and after the person is already diagnosed with HIV infection. The information is useful for monitoring the capacity of antiretroviral therapy programmes to meet the immediate need and current demand for treatment of people who are known to be living with HIV (registered or diagnosed). High coverage indicates that the treatment programme has sufficient links between diagnostics and treatment providers, antiretroviral therapy drugs and capacity to treat current demand.

Number receiving antiretroviral therapy

(reported by national programmes)

Antiretroviral therapy coverage (diagnosed cases) (%) =

Number of diagnosed PLHIV with a CD4 count <350 per mm³

(based on case registration)

Countries often use this method when reporting antiretroviral therapy coverage rates (Table 3.6). In past reporting years this method has not been standardized across countries in the region, and comparisons between countries should therefore be made with caution. Beginning in 2012, a new standardized denominator will be introduced to capture coverage of diagnosed PLHIV eligible for antiretroviral treatment.

Access to antiretroviral therapy for key populations at higher risk of HIV infection

Many factors hinder access to antiretroviral therapy for people who inject drugs, sex workers and men who have sex with men, including stigma and discrimination by health workers, lack of access to opioid substitution therapy for IDUs, who are the most affected population in the Region; lack of integrated services on TB/HIV/Viral Hepatitis/drug dependence treatment for key populations, lack of social services and support of peers for initiation and adherence to ART, and the absence of links between antiretroviral therapy service providers and prisons, health services and disease prevention services.

Table 3.7. Antiretroviral therapy among people who inject drugs, selected countries in Europe and central Asia, most recent year

	<i>Year</i>	<i>Number of people infected through injecting drug use receiving antiretroviral therapy</i>	<i>People infected with HIV through injecting drug use receiving antiretroviral therapy as a percentage of all people receiving antiretroviral therapy for whom there is information about transmission mode</i>	<i>People infected with HIV through injecting drug use as a percentage of the cumulative number of people diagnosed with HIV for whom there is information about transmission mode^a</i>
Albania	2010	0	10%	<1%
Andorra	2010	7	37% ^b	29%
Armenia	2010	91	38%	43%
Azerbaijan	2010	246	58%	71%
Belarus	2010	612	24%	52%
Belgium	2010	34 ^c	3%	5%
Bosnia and Herzegovina	2010	2	4%	15%
Bulgaria	2006	5	3%	10%
Croatia	2010	29	6%	8%
Czech Republic	2007	27	5%	6%
Estonia	2006	300	67%	83%
Finland	2006	45	11%	18%
Georgia	2010	427	52%	60%
Germany	2010	604 ^d	9%	10%
Greece	2008	120	3%	5%
Hungary	2005	5	1%	2%
Israel	2006	286	12%	15%
Kazakhstan	2010	673	50% ^e	73%
Kyrgyzstan	2010	139	39%	71%
Latvia	2010	235	46%	69%
Lithuania	2009	53	37%	78%
Luxembourg	2009	27	7%	14%
Malta	2010	4	4%	8%
Montenegro	2010	0	0%	4%
Netherlands	2010	303	3%	4%
Poland	2010	1 700	48% ^b	76%

Republic of Moldova	2010	446	36%	46%
Romania	2008	4	0.1% ^e	1%
Russian Federation	2005	1,200	25%	85%
Serbia	2010	223	25%	45%
Slovakia	2010	4	3%	3%
Slovenia	2007	8	4%	4%
Spain	2010	35 823	42% ^f	14%
Sweden	2005	100	4%	14%
Tajikistan	2010	272	54%	68%
The former Yugoslav Republic of Macedonia	2010	0	0%	7%
Turkey	2006	10	2%	5%
Ukraine	2010	2546	11%	61%
United Kingdom	2010	1 295	2% ^e	5%
Uzbekistan	2007	510	55% ^e	69%

^a 2009 HIV case reporting data or as of most recent year of ART data reporting.

^b Inclusion of all ART recipients (including those with unknown transmission mode) would decrease the percentage by 10-15 percentage points. For the remaining countries, this adjustment would result in a 0-2 percentage point change.

^c Data include only "eligible" patients (based on first CD4 count (<350)) who initiated ART in 2009 (~ 20% of all on ART in Belgium).

^d Data derived from a clinical surveillance study covering approximately 20% of all HIV patients in medical care in Germany.

^e ART data not reported for transmission categories other than injecting drug use and therefore the percentage is not adjusted to include only ART recipients for whom information about transmission mode is available.

^f ART data not reported for transmission categories other than IDU and MSM and therefore the percentage is not adjusted to include only ART recipients for whom information about transmission mode is available.

Sources; WHO/UNICEF/UNAIDS health sector country progress reporting 2005-2010; European Centre for Disease Prevention and Control and WHO Regional Office for Europe (6) and HIV infection information bulletin #34 of the Russian Federal AIDS Center (41).

Few data are available on access globally to antiretroviral therapy for sex workers, men who have sex with men or people who inject drugs. However, in Europe and central Asia, the WHO Regional Office for Europe has collected data on antiretroviral therapy by mode of transmission through standardized reporting since 2002, with a special focus on people who inject drugs (47). Since evidence indicates that providing antiretroviral therapy to people who inject drugs has individual and population-wide health benefits (48) and given the imperative to provide universal and equitable access to HIV treatment, such data are important in assessing the extent to which people who inject drugs have access to antiretroviral therapy. For example, in the centre and east of the region, all 29 countries reporting on the delivery of antiretroviral therapy have done so at least once since monitoring was initiated, and most provide updated data annually. Comparing the proportion of recipients of antiretroviral therapy who were infected with HIV through injection drug use with the proportion of people infected with HIV through injection drug use among all those diagnosed with HIV infections provides a useful, although not perfect, indication of access to antiretroviral therapy for this population group. After adjusting available data for recipients of antiretroviral therapy and the people diagnosed with HIV infection whose mode of transmission is unknown, people who inject drugs comprise less than 50% of antiretroviral therapy recipients in five of the eight countries¹⁴ in which people who inject drugs represent more than 70% of the people diagnosed with HIV infection.

¹⁴ Azerbaijan, Estonia, Kazakhstan, Kyrgyzstan, Lithuania, Poland, the Russian Federation and Uzbekistan.

In two of the five countries¹⁵ in which people who inject drugs comprise 50–70% of the people diagnosed with HIV infection, less than 25% of antiretroviral therapy recipients are people who inject drugs (3). The 2009 Reference Group to the United Nations on HIV and Injecting Drug Use reviewed 45 countries in Europe and central Asia; 27 were able to provide data on antiretroviral therapy for people living with HIV who inject drugs, and 6 of these had provided treatment for 10% or less of the people who inject drugs living with HIV. Only four countries (Austria, Czech Republic, Luxembourg and Norway) had provided treatment for more than 30% of the people living with HIV who inject drugs (5). Data on the coverage of people who inject drugs who need antiretroviral therapy are generally not available.

Systemic and structural barriers restrict the access of people who inject drugs to antiretroviral therapy. These include stigmatization and negative attitudes towards drug users among health-care workers, especially a common belief that antiretroviral therapy should not be initiated because of anticipated poor adherence among drug users. This can deter people who use drugs from seeking testing and treatment services (48).

HIV infected people who inject drugs often have also TB, viral hepatitis B and/or viral hepatitis C. However lack of integration of services and social support contribute to low level of uptake of ART and retention in HIV care.

Limited access to opioid substitution therapy limits access to and retention on antiretroviral therapy for people who inject drugs. Lack of access to care for drug dependence, especially opioid substitution therapy, is a major barrier to access to antiretroviral therapy in the east of the region; in most countries there, less than 1% of people who inject drugs have access to opioid substitution programmes (5). Many countries deny access to antiretroviral therapy for migrants.

Prison systems often limit access to antiretroviral therapy because of poor coordination of services between the health ministry and the ministry responsible for prison health, according to UNAIDS country progress reports (3).

Involving civil society in planning, implementing and monitoring programmes to promote better links between marginalized populations and HIV services can improve the uptake of treatment and adherence. Outreach work and integrating services are crucial for such uptake. In particular, opioid substitution therapy and antiretroviral therapy in health ministry and prison health settings offer opportunities for countries to improve universal access to antiretroviral therapy.

Retention in treatment

Retaining people living with HIV on antiretroviral therapy is an important indication of the quality and effectiveness of such programmes. Across Europe and central Asia, the percentage of people who continue antiretroviral therapy within the first year of initiating it varies widely between countries (58–97%). On average, 83% of adults and children with HIV are known to be alive and receiving treatment 12 months after initiating antiretroviral therapy. Eleven of the 27 countries reporting to UNAIDS/WHO on this indicator said that less than 80% of the people initiating antiretroviral therapy were still alive 12 months later. This raises concern about the effectiveness of antiretroviral therapy

¹⁵ Belarus, Georgia, Latvia, Tajikistan and Ukraine.

programmes in the region. In Europe and central Asia, at 48 months, 66% of the people who started treatment were still known to be alive and receiving treatment; 34% died or were lost to follow-up (2) (Fig. 3.26). Nevertheless, there are examples of improvement. In Ukraine, retention in antiretroviral therapy after 12 months of treatment increased from 78% in 2007 to 85% in 2009 (3).

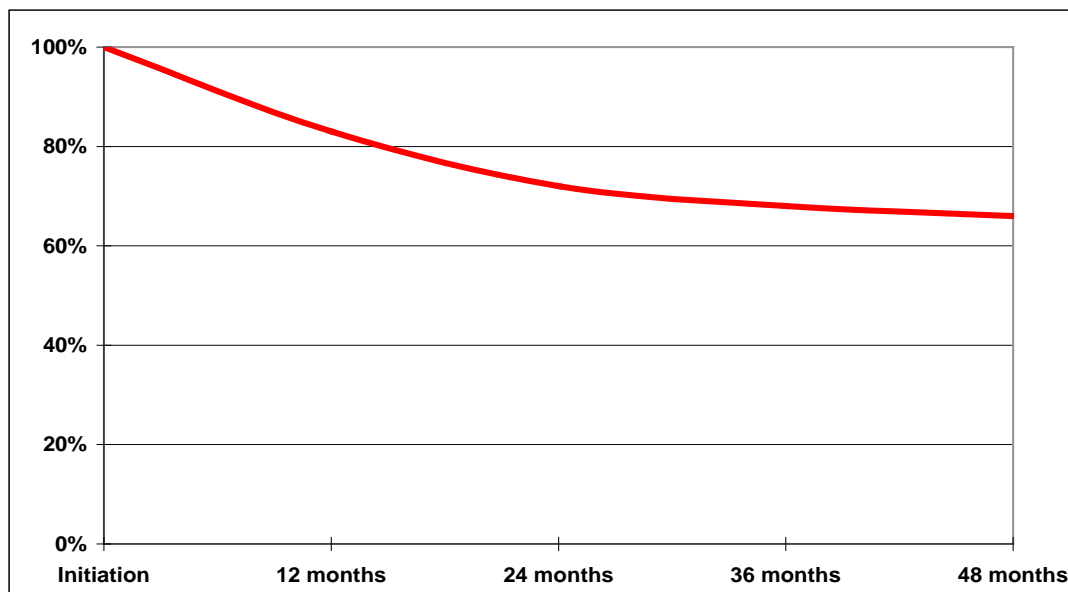
The west of the region tends to have a higher percentage of individuals surviving the first year on treatment (89%) than the centre or east (81%) (3).

Late-stage diagnosis reduces survival rates. At the time of diagnosis, 24–67% of HIV cases from 22 reporting countries are reported to have a CD4 count of less than 350 cells per mm³ (6). Further, 20–30% of people living with HIV known to the health system do not reach health services and are not contacted proactively. Earlier diagnosis and early entry into care to ensure the timely initiation of antiretroviral therapy according to revised WHO guidelines would improve the prognosis of people living with HIV and the cost–effectiveness of antiretroviral therapy programmes (43,44).

Another crucial factor in the survival of people living with HIV is adherence to treatment protocols. To ensure adherence, particularly for key populations at higher risk, health services, including those in prisons, need to be closely linked with the NGOs offering social and psychological support, especially initiatives that involve peer support from people living with HIV. Integrated services should be scaled up, including opioid substitution therapy and care for drug dependence, TB and hepatitis and their links with prison health services.

Interrupting antiretroviral therapy endangers the survival of people living with HIV and is a major concern in the east of the region especially. Weakness in supply-chain management systems, including poor planning and late procurement, have led to shortages of HIV medicines and other commodities, leading to stock-outs and interrupted treatment regimens. The Russian Federation has experienced significant interruptions to treatment regimens, and short-term interruptions have also been registered in Latvia, Romania and Ukraine (2).

Fig. 3.26. Percentage of adults and children receiving antiretroviral therapy who are known to be still alive and receiving treatment over time in 26 countries in Europe and central Asia, most recent year available



Countries included: Armenia, Austria, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Georgia, Germany, Greece, Hungary, Kazakhstan, Kyrgyzstan, Lithuania, Luxembourg, Montenegro, Portugal, Republic of Moldova, Romania, Russian Federation, Slovakia, Sweden, Tajikistan, The former Yugoslav Republic of Macedonia, United Kingdom and Uzbekistan.

Source: WHO, UNICEF and UNAIDS (2) and AIDSInfo [online database] (3).

Death by drug overdose also influences survival rates in the east of the region, where many people living with HIV inject opiates or other drugs. Research conducted by the Eurasian Harm Reduction Network suggests that overdose is a major cause of death among people living with HIV in the region, but one that can be prevented with appropriate programming, including the distribution of nalaxone (an antidote to opioid overdose) to people living with HIV who use drugs and their communities (49). Nalaxone programming has been successfully piloted in the east and west of the region. Although nalaxone is inexpensive and the Global Fund to Fight AIDS, Tuberculosis and Malaria recommends nalaxone programming as a vital part of comprehensive HIV services for people who use drugs (50), it is still not commonly distributed in the region.

Antiretroviral drugs

In the east of the region, Global Fund grants usually cover the procurement of antiretroviral drugs. However, grants do not always cover full country needs, and there is concern about the sustainability of treatment programmes and the capacity of countries to assume this significant financial responsibility. Only Kazakhstan, the Russian Federation and Ukraine procure antiretroviral drugs solely or mostly through government sources of funding.

Pricing of HIV medicines is a challenge given the variety available and the differences in regimens, manufacturers and supply sources. Limited knowledge of free trade agreements, intellectual property laws and drug pricing is hampering access to affordable, high-quality drugs. In addition, information on drug procurement is limited and often lacks transparency and accountability. In Ukraine, civil society has challenged the state monopoly on antiretroviral drug purchases by establishing

competition in procurement through transparency and open competition, and advocating to improve drug quality. As a result, between 2004 and 2008, antiretroviral drug prices in Ukraine dropped substantially while simultaneously, the quality increased (Box 2.3 describes the full example).

Several countries use the Global Fund's Voluntary Pooled Procurement mechanism to reduce the cost of antiretroviral drugs. Voluntary Pooled Procurement aims for cost-effective and cost-efficient procurement processes that ensure: efficient, timely and reliable procurement; stringent quality standards for procured products; and attractive pricing for key health products.

Weak pharmacovigilance systems can lead to poor-quality generic medicines, resulting in side-effects and poor adherence to treatment. In 2008, Ukraine completed an external evaluation of procurement and supply-chain management. Recommendations from the assessment focused on lowering cost while improving quality and timely procurement, and resulted in a new state Procurement Law in 2010 that reduces the benefit to local producers and eliminates some regulatory barriers for international suppliers. Belarus has plans to complete a similar assessment.

Proper planning and supply chain management demands accurate assessments of antiretroviral commodity needs, including safety (buffer) stocks, longer periods of ordering and recognition of stock-outs to enable requests for international support. WHO guidance is available to support tracking the performance of national procurement and supply management systems and for preventing frequent stock-outs and overstocking (*WHO. Harmonized monitoring and evaluation indicators for procurement and supply management systems. Early-warning indicators to prevent stock-outs and overstocking of antiretroviral, antituberculosis and antimalaria medicines. Geneva, World Health Organization, 2011*).

Universal access to essential antiretroviral therapy services is one of the main tools for containing the HIV epidemic. Antiretroviral therapy not only reduces morbidity and mortality but also has prevention benefits, including lowering the probability of HIV transmission and rates of TB. Antiretroviral therapy confers huge benefits for the individual and the community.

Treatment 2.0 is an initiative coordinated by UNAIDS and WHO to provide leadership and technical guidance for the next phase of HIV treatment. It must be implemented as a matter of urgency to innovate, simplify, reduce costs and mobilize communities to scale up HIV testing and counselling and increase access to treatment as a prevention option. (*WHO and UNAIDS. The treatment 2.0 framework for action: catalysing the next phase of treatment, care and support. Geneva, World Health Organization, 2011*).

Tuberculosis and HIV

Progress and achievements

- Coverage of HIV testing in TB settings is good (86%).
- TB incidence rates are declining (<1% per year).
- Comprehensive programmes implemented in prisons in selected countries demonstrate their effectiveness in reducing the prevalence of HIV, TB and hepatitis C.

Challenges and opportunities

- TB is the leading cause of mortality among people living with HIV.
- Sixteen of the 27 countries globally with a high burden of multidrug-resistant TB are in Europe and central Asia.
- People who use drugs, migrants and prisoners are the major population groups affected.
- TB treatment is complicated and long, and hospitalization is widespread, often six months or more.
- Delivery of TB, HIV and drug-dependence services is generally not linked or integrated.
- The two million prison inmates in Europe and central Asia have a high prevalence of HIV, TB and hepatitis C.

HIV is the greatest risk factor for developing TB, and TB is responsible for more than a quarter of deaths among people living with HIV (51). In the east of the region, the estimated coverage of antiretroviral therapy among people with TB and HIV is lower than that for everyone living with HIV (2). Globally, the highest proportions of multidrug-resistant TB are found in countries in the east of the region (52).

To appropriately respond to both epidemics and avoid more widespread drug resistance, fully integrating TB and HIV services should be a priority for all relevant programmes. Unfortunately, in most countries in the east of the region, TB and HIV services are provided in separate institutions and links are weak. This becomes even more challenging when people who use drugs or are enrolled in drug-dependence treatment (opioid substitution therapy) have TB and HIV infection. People with active TB are often hospitalized in TB dispensaries but have their HIV and drug dependence services provided elsewhere and, in some cases, also need to travel to get their antiretroviral drugs. This leads to a higher TB treatment interruption rate and the risk of developing multidrug-resistant strains of TB (52).

This is intolerable, given that 16 of the 27 countries with a high burden of multidrug-resistant TB globally are located in the Europe and central Asia region (53).

**86% coverage
of HIV testing in
TB settings**

People living with HIV and TB often represent marginalized populations, such as people who use drugs and/or alcohol, have a history of repeated incarcerations or have no job or financial resources. Health systems need better multisectoral coordination and integration with prison and civil society services, and with drug dependence treatment providers.

Much higher rates of TB are observed in prisons than in the general population. They therefore need special focus, similar to HIV.

All people living with HIV require care and support that includes intensified TB case-finding, isoniazid preventive therapy for those who have latent TB to stop progression to active disease, and infection control for TB, especially in places providing health care for people living with HIV and congregate settings. Likewise, people newly diagnosed with TB require HIV testing and counselling and HIV prevention in addition to their TB treatment. If they are living with HIV, then antiretroviral therapy needs to be initiated irrespective of CD4 counts, co-trimoxazole therapy introduced if appropriate and referrals made to HIV care and support services (54). The Europe and central Asia region has the highest global rates of HIV testing among people with TB (80%) (53).

According to 2010 WHO recommendations (44), all people with active TB should receive antiretroviral therapy irrespective of their CD4 cell count. TB treatment should be started first, followed by antiretroviral therapy as soon as possible. Countries in the region reported to UNAIDS that about 62% of all people living with HIV who acquired TB received both treatments. Coverage rates are lower in the Russian Federation (40%) and Ukraine (21%), the two countries most severely hit by both the HIV and TB epidemics. Four other countries in the region are also reporting coverage rates equal to or less than 40%, including Latvia (13%) and Lithuania (38%).

In 2010, the Global Fund to Fight AIDS, Tuberculosis and Malaria awarded a grant to “Stop TB in Ukraine” that will address some of the above issues through its HIV and TB component.

The west of the region has achieved high coverage for TB and HIV treatment. In 10 of the 24 reporting countries (Austria, Croatia, Estonia, Finland, Hungary, Malta, Poland, Portugal, Sweden and the United Kingdom), at least 90% of the people diagnosed with HIV who acquired TB received antiretroviral therapy. *Global tuberculosis control 2011* (53) reported in Europe and central Asia that 77% of people diagnosed with HIV and TB started antiretroviral therapy in 2010 (53).

Although a collaborative approach to these interrelated diseases is essential, in most countries the budget allocations for joint TB and HIV activities remain small: 1% of the total budgets for either disease individually. Strong national advocacy must address the lack of links between these and other vertical health programmes if universal access is to be achieved.

Hepatitis and HIV

In the Europe and central Asia region, end-stage liver disease caused by viral hepatitis C infection is among the leading causes of death among people living with HIV, especially those who are also drug-dependent (55).

The prevention and treatment of hepatitis C is rarely mentioned in national health plans or adequately budgeted for. When national health authorities underestimate the importance of hepatitis C as a public health burden, it leads to poor access to prevention and treatment. Hepatitis C antibody testing is not widely available for people who inject drugs, although free-of-charge antibody testing is sporadically available through harm-reduction services receiving support from international donors. For most people living with hepatitis C in the east of the region, polymerase chain reaction (PCR) and genotype testing, as well as state-of-the-art peginterferon and ribavirin combination treatment are unavailable. The standard regimen for treating the 1b genotype (most frequent in Europe and central Asia) costs

up to US\$ 30 000 per year. The prohibitive cost deters national governments and international donors, including the Global Fund to Fight AIDS, Tuberculosis and Malaria from providing hepatitis C treatment for everyone in need.

Programmes designed to reduce the use of non-sterile drug-injecting equipment are not only effective at preventing hepatitis C being transmitted (as well as HIV) but can reduce costs considerably.

Access to life-saving treatment and community mobilization on hepatitis C issues should be integral to universal access strategies.

In Europe and central Asia, where key populations at higher risk face many other health threats, further integration with other health programmes – TB, drug dependence, sexual and reproductive health, maternal, newborn, child and adolescent health, viral hepatitis and noncommunicable and chronic diseases – will strengthen the success of one and all. (*WHO Regional Office for Europe. Management of Hepatitis C and HIV Coinfection. Clinical Protocol for the WHO European Region. Copenhagen, WHO Regional Office for Europe, 2007*)

4. Regional priorities

Recommendations from Regional Consultation for future action by all countries

- Scale up antiretroviral therapy coverage to at least 80% of people in need.
- Provide a comprehensive package of interventions to 60% of people who inject drugs in countries where such use is the main driver of the epidemic.
- Provide a comprehensive service package to address sexual transmission, especially among key populations at higher risk.
- Enhance domestic funding for the HIV response and orient it towards priority interventions.
- Eliminate mother-to-child transmission.
- Review laws and policies that criminalize key populations at higher risk, and align them with international standards.
- Provide universal access to prevention, treatment, care and support services for migrants.
- Redress discrimination and denial of rights.
- Halve TB mortality.

In March 2011, 200 representatives from countries in Europe and central Asia gathered at the Regional Consultation on Universal Access to HIV Prevention, Treatment, Care and Support in Europe and Central Asia to review the progress of universal access and set an agenda to 2015.

Participants reviewed the epidemiological situation in light of regional and national priorities and discussed the following: national commitment and ownership; the challenges of prevention programmes, particularly for key populations at higher risk of HIV infection and transmission; sustainability of funding for HIV and the role of health systems; the future of antiretroviral therapy and the effects of drug cost, resistance and adherence programmes; the role of civil society; gender issues; and stigma and human rights.

Their recommendations included mechanisms for future regional cooperation and contributed to the Report of the Secretary-General at the 2011 United Nations High Level Meeting on AIDS in New York.

The consultation identified the following nine overarching priorities for the region and devised a framework to pursue these in accordance with the targets and elimination commitments set out in the UNAIDS Strategy 2011–2015 adopted at that High Level Meeting.

Priority 1. Scale up antiretroviral therapy coverage to at least 80% of people in need, including 100% of diagnosed people living with HIV with a CD4 cell count <350 cells per mm³.

Rationale. Antiretroviral therapy coverage in low- and middle-income countries is the second lowest in the world; up to two thirds of people living with HIV in some countries are not aware of their HIV status; key populations at higher risk are the least likely to access HIV treatment and care services; systems of treatment support are rare and adherence low; and the high cost of treatment and care, and inefficient procurement systems, obstruct scaling up antiretroviral therapy. Low treatment coverage will jeopardize all efforts towards universal access. The age for access to services is fixed at 18 years, whereas vulnerability sets in earlier.

Key actions and potential partners. (1) Advocate for the CD4 threshold to be raised from 200 to 350 cells per mm³ (WHO). (2) Promote the use of generics (United Nations Development Programme (UNDP), WHO, UNAIDS, International Treatment Preparedness Coalition, European AIDS Treatment Group and East Europe & Central Asia Union of PLWH). (3) National legislative, procurement and other systems need to be strengthened to make use of TRIPS (trade-related aspects of intellectual property rights) flexibilities, pooled procurement and cost reduction (WHO, UNAIDS, health ministries and national AIDS councils). (4) Advocate for increased HIV testing and counselling via outreach, by using rapid tests and non-medical service providers, including workplace voluntary testing programmes (WHO and civil society). (5) Ensure treatment adherence and systems for tracking cases lost to follow-up (networks of people living with HIV and national AIDS councils). (6) Remove legislative, policy and service-related barriers to key populations at higher risk or youth accessing treatment services (UNDP, WHO and NGOs providing sexual and reproductive health and HIV services).

Coordinating United Nations agency: WHO.

Priority 2. All countries in which injecting drug use is the main driver of the epidemic will expand coverage to a comprehensive package of interventions available to 60% of people who inject drugs.

Rationale. Injecting drug use is still the most significant driver of the HIV epidemic in the region; significant progress has been made, good practices exist and scaling up is possible.

Key actions and potential partners. (1) Promote a standardized comprehensive package of HIV prevention services based on WHO guidelines and successful models in the region (governments, UNODC, WHO, UNAIDS). (2) Based on existing mapping of unfavourable policies, lobby governments and help them revise policies that limit access to essential prevention, treatment, care and support services for people who inject drugs (UNODC, community-based organizations of people who inject drugs and people living with HIV). (3) Advocate to include opioid substitution therapy in country programmes where it is absent, such as in the Russian Federation and Uzbekistan (UNODC, Eurasian Harm Reduction Network and International HIV/AIDS Alliance in Ukraine). (4) Expand

harm-reduction and drug-dependence treatment services to prisons (UNODC, prisons, interior ministries and justice ministries). (5) Promote strategies to reduce drug demand (UNODC, health ministries, narcotics departments and civil society).

Coordinating United Nations agency: UNODC.

Priority 3. Comprehensive service packages will address sexual transmission, especially among key populations at higher risk, such as sex workers, people who inject drugs, men who have sex with men, transgender people, prisoners, migrants and the sexual partners of people in these populations.

Rationale. Sexual transmission accounts for an increasing proportion of HIV cases, with many new infections among sex workers, their clients, prisoners, people who inject drugs, stimulant drug users, men who have sex with men and transgender people, and among the sexual partners of people in these key populations. Many members of these key populations are young people not in long-term sexual relationships, increasing the risk of transmission later in life.

Key actions and potential partners. (1) Implement comprehensive sexuality education in schools and colleges (United Nations Educational, Scientific and Cultural Organization (UNESCO), United Nations Population Fund (UNFPA), UNICEF and education, health and labour ministries). (2) Implement comprehensive condom programming, including dedicated budget lines for commodity security (quality and access) and generating adequate demand for condoms (UNFPA, WHO, UNICEF, UNODC, national AIDS councils, health ministries, labour ministries, NGOs and civil society organizations). (3) Ensure all key populations at higher risk are empowered and an enabling environment is created for peer-led approaches to HIV prevention (UNDP, UNFPA, WHO, UNICEF, UNODC, ILO, civil society organizations, NGOs, justice, interior or home affairs ministries and the International HIV/AIDS Alliance in Ukraine). (4) Ensure universal access to youth- and user-friendly sexual and reproductive health services (including HIV and sexually transmitted infection prevention, diagnosis, treatment and care), trained and sensitized to the needs of key populations at higher risk (WHO, UNFPA, UNICEF, UNODC, NGOs and health ministries). (5) Ensure the needs of women and girls are met, including the prevention of violence and abuse, and access to sexual and reproductive health services and female condoms, counselling and support, and negotiation skills (UNDP, UNFPA, UNODC, UN Women, NGOs and ministries responsible for women). (6) Work with men and boys to reduce risk behaviour, change attitudes and increase responsibility for HIV prevention (ILO, UN Women, UNFPA, UNICEF, NGOs and labour, sports, home affairs and education ministries). (7) Ensure HIV prevention programmes engaging people who inject drugs address the risk of sexual transmission and include outreach to the sexual partners (WHO, UNFPA, UNICEF, UNODC, NGOs and health ministries).

Coordinating United Nations agencies: UNFPA and UNDP.

Priority 4. Enhance domestic funding for the HIV response and direct funding towards priority interventions, including those by civil society for key populations at higher risk.

Rationale. International funding is stretched. Most countries in the region will soon be ineligible for funds from the Global Fund to Fight AIDS, Tuberculosis and Malaria. External donors are still largely funding HIV prevention among key populations at higher risk and treatment. Some countries (such as the Russian Federation) show increasing domestic funding on HIV and AIDS.

Key actions and potential partners. (1) Form a donor coalition to advocate for increased domestic funding (United Nations, Global Fund to Fight AIDS, Tuberculosis and Malaria, United States President's Emergency Plan for AIDS Relief and the World Bank). (2) Lobby governments to reallocate funds to HIV prevention among key populations at higher risk and treatment (UNAIDS, and AIDS service organizations). (3) Help review national strategic plans to provide a clear role and performance-based funding for civil society (national AIDS programmes). (4) All countries should establish systems to procure services from civil society, channel funds to them and remove legislative barriers to registering civil society organizations (finance ministries).

Coordinating United Nations agencies: UNAIDS and World Bank.

Priority 5. Eliminate mother-to-child transmission: reduce vertical transmission to <2% in the non-breastfeeding population and <5% in the breastfeeding population.

Rationale. Notable gains have been made, with 95% of women already covered, though key populations at higher risk, especially women who inject drugs and sex workers, are left out. A comprehensive approach is lacking.

Key actions and potential partners. (1) Develop guidelines that adhere to UNICEF/WHO criteria for treatment that is accessible, feasible, affordable, sustainable and safe (health ministries and national AIDS councils). (2) Engage civil society and develop more user-friendly public sexual and reproductive health services for expanding coverage among people who inject drugs and sex workers (NGOs and community-based organizations focusing on people who inject drugs and/or HIV). (3) Reduce the number of women who receive only a single dose of nevirapine as a result of late diagnosis at the time of labour and delivery (health ministries, NGOs and UNFPA). (4) Expand the comprehensive approach, including universal access to family planning, for women and partners living with HIV, and improve follow-up care for women with HIV, their infants and families. (5) Strengthen links between HIV services and sexual and reproductive health and primary health care services. Secure national commitment and funding for integrating sexual and reproductive health and HIV at the policy, system and service-delivery level. (6) Strengthen the management of sexually transmitted infections for increased HIV prevention (UNFPA, WHO, UNICEF, NGOs (International Planned Parenthood Federation), government and NGO health care providers).

Coordinating United Nations agencies: UNICEF and WHO.

Priority 6. Review laws and policies that criminalize key populations at higher risk, especially sex workers, men who have sex with men, people who use drugs and people living with HIV, and align them with international standards.

Rationale. Many countries in the east of the region have laws and policies that criminalize sex work, men who have sex with men and injecting drug use.

Key actions and potential partners. (1) Form a parliamentary forum at the national, subregional or regional level for advocacy (UNDP, UNAIDS and political leaders). (2) Lobby governments and help them review unfavourable policies (community-based organizations of people who inject drugs, men who have sex with men and people living with HIV). (3) Foster information exchanges between countries in the east and central regions with those in the west (United Nations agencies, health ministries and national AIDS councils). (4) Advocate to reduce the age for access to services to 16 or lower (AIDS service organizations, legal organizations and UN Women).

Coordinating United Nations agency: UNDP.

Priority 7. Provide universal access to prevention, treatment, care and support services for migrants.

Rationale. There are large numbers of mobile populations in the region. Migrants are denied access to treatment in many countries. Different treatment regimens are used.

Key actions and potential partners. (1) Generate strategic information for migrant-related interventions (UNAIDS and International Organization for Migration (IOM)). (2) Implement standard treatment protocols (WHO and national AIDS councils). (3) Advocate policies to provide treatment coverage to foreigners (IOM, labour ministries and national AIDS councils).

Coordinating United Nations partner: IOM.

Priority 8. Redress discrimination and denial of rights in at least half the region's countries.

Rationale. Systems to redress discrimination do not exist or are inaccessible to the most vulnerable, including people living with HIV.

Key actions and potential partners. (1) Set up legal aid services, including specialized ones for key populations at higher risk, in countries with high levels of stigma and discrimination (networks of people living with HIV, legal experts or organizations and national AIDS councils). (2) Strengthen the capacity of people living with HIV and key populations at higher risk to access services and to be

effective advocates (legal organizations and UNDP). (3) Introduce policies to address discrimination in the workplace (ILO, national AIDS councils and private and public sector organizations). (4) Implement HIV prevention programmes to overcome stigma and discrimination among young people, including addressing homophobic bullying in schools and homophobia generally in tertiary institutions. (UNESCO, UNFPA, UNICEF and Office of the United Nations High Commissioner for Human Rights).

Coordinating United Nations agencies: ILO and UNDP.

Priority 9. All countries will reduce TB mortality by 50%.

Rationale. The region has a high proportion of multidrug-resistant and extremely drug-resistant TB and a high proportion of people who inject drugs, migrants and prisoners who have both HIV and TB.

Key actions and potential partners. (1) Develop, implement and strengthen joint policies, guidelines and standard operating procedures for preventing and managing HIV and TB coinfection. (2) Establish coordinating committees for TB, HIV, drug dependence and prison-related health issues (health ministries, WHO and UNODC). (3) Reduce the TB burden among people living with HIV by ensuring: intensified TB case-finding; diagnosis in people living with HIV; isoniazid preventive therapy to people living with HIV when active TB is safely excluded; screening for TB drug resistance; and the timely initiation of high-quality TB treatment and integrated infection control plans to minimize transmission in health-care and congregate settings, including prisons and pretrial detention centres (community-based organizations of people who inject drugs and people living with HIV, health ministries, national AIDS councils, WHO, ILO and UNODC). (4) Reduce the burden of HIV among people with TB by providing: HIV testing and counselling to everyone who has or is suspected of having TB; HIV prevention services, including condom provision, screening for sexually transmitted infections, harm reduction, and referral to services for preventing mother-to-child transmission for people living with TB and HIV; and co-trimoxazole preventive therapy for people living with TB and HIV (community-based organizations of people who inject drugs and people living with HIV, health ministries, national AIDS councils and WHO). (5) HIV treatment and care for everyone living with TB and HIV (national AIDS council and WHO).

Coordinating United Nations agency: WHO.

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Annex 1. AIDSInfo

To facilitate the use of AIDS-related data in countries and globally, UNAIDS has developed AIDSInfo. AIDSInfo is a data visualization and dissemination tool based on the DevInfo project. It contains data from multiple agencies, including WHO, MEASURE DHS, UNAIDS and UNICEF. AIDSInfoOnline houses multisectoral HIV data, including AIDS spending, epidemiological estimates, country-reported programmatic data and National Composite Policy Index responses from government and civil society.

AIDSInfo’s data visualization capabilities enable the rapid production of charts, maps and tables, along with the export of data and graphics to numerous formats for presentation and analysis. AIDSInfo allows comparison of similar indicators from multiple sources. It is provided free of charge and can be installed on a PC or as a web-based service.

Under development for AIDSInfo are e-learning materials to familiarize users with the tool and its advanced features, continued sourcing of relevant and complementary data into the database and assistance and guidance for regional and national entities that want to establish HIV/AIDS data hubs.

AIDSInfo aims to be the leading source of HIV/AIDS data globally and provide its users with the most innovative, interactive exploration of that data.



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