

## Chapter 18

# Drug Use and HIV/AIDS: Risk Environments in Post-Soviet Russia

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**Abstract** This chapter explores the links between drug use and HIV/AIDS in post-socialist Russia, investigating the connection between drug use, especially Injecting Drug Use (IDU), and HIV/AIDS (Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome). It considers drug use both in terms of IDU as a direct means of transmission for the HIV virus and non-IDU (including alcohol and marijuana), which has been observed to contribute to risk behaviors, which can lead to transmission of the HIV virus. Russia and other post-socialist states are unusual in the context of the global HIV/AIDS pandemic in the relative importance of IDU as a means of transmission of the virus within their territories, and also in their stance toward harm reduction programs such as needle exchange. The chapter draws upon a wide range of literatures, including sociological literatures dealing with substance abuse in general and in Russia in particular; geographical and area study literatures with a focus on the Russian Federation; research publications on HIV/AIDS in Russia from the epidemiological and public health literatures, as well as policy-oriented and practitioner-focused materials produced by non-government organizations, international donors (e.g., UNAIDS) and policy research institutions.

## Introduction

This chapter explores the links between drug use and HIV/AIDS in post-socialist Russia, investigating the connection between drug use, especially Injecting Drug Use (IDU), and HIV/AIDS (Human Immunodeficiency Virus and Acquired Immunodeficiency Syndrome). The chapter considers drug use as a direct means of transmission for the HIV virus, and drug use which has been observed to contribute to risk behaviors, which can lead to transmission. It also considers progression of the virus from “high-risk” populations (including injecting drug users and commercial sex workers) to the mainstream population, and the role of IDU in facilitating this

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“crossover.” Drug use is considered in the context of post-Soviet transition; observers have noted societal change in Russia post-1991, with a perceived “relaxing” of social norms, increase in illegal activity, and increase in use of drugs (including alcohol, marijuana and also narcotics) as response to the stresses experienced in the last 15 years.

In considering drug use and the geography of HIV/AIDS in Russia together, this chapter is informed by the work of Rhodes, Singer, Bourgois, Friedman, and Strathdee (2005), who posit a “risk environment” for HIV infection connected with IDU, which is defined as “the space – whether social or physical – in which a variety of factors exogenous to the individual interact to increase the chances of HIV transmission” (p. 1027). This risk environment may be considered to operate at a number of different scales; ranging from the micro-level interpersonal interactions between drug users, through the meso-level of local environmental influences such as the nature of local policing and the location of needle exchange facilities, to the macro level of structural factors such as laws, policies, economic and social conditions, and wider cultural beliefs. It is characterized by the influence of factors such as population movement, neighborhood disadvantage, social norms and networks, law enforcement and policing, and crucially, the interplay both between these *types* of risk, and the *level* of the risk environment (micro/meso/macro).

## Drug Use in Russia

For the purposes of this chapter, it is useful to clarify exactly what is meant by the term “drugs”. Clearly at its broadest, this term means any biological substance that is not taken for dietary needs. More narrowly, the focus here is on “recreational” (as opposed to medicinal) drugs, which again at a broad level could include alcohol, nicotine, cannabis, and a range of “harder” substances such as methamphetamine, cocaine and heroin, as well as, in the Russian context, a range of other locally produced opiate and amphetamine substances such as “*chornaya*”, “*khimiya*”, “*vint*” and so on. However, given the focus of this chapter, injectable drugs are of primary concern, with other substances such as alcohol and cannabis having secondary importance. For the sake of clarity, therefore, “drugs” will be taken to mean injectable drugs, unless specified otherwise. For the most part, the injectable drug in question is heroin. Heroin came on to the Russian market relatively recently, becoming readily available in cities only in the second half of the 1990s, when it effectively replaced less powerful homemade opiate solutions, anesthetics, and medical preparations which had previously been injected. Heroin has rapidly become the “drug of choice” among drug users (Abdala, Grund, Tolstov, Kozlov and Heimer 2006; Pilkington 2006).

Drug use in Russia has increased considerably since the collapse of the Soviet Union. During the late Soviet period, attention was focussed heavily upon alcohol as the drug whose abuse caused health and social problems. The Soviet government admitted only in the 1980s that opiates and drugs other than alcohol existed within

its territory; under Gorbachev's policy of *glasnost* (openness), it finally became acceptable for the Soviet medical literature to acknowledge the increasing problems caused by abuse of narcotics (Conroy 1990). As Platt et al. (2004) note, it is widely believed that since the collapse of the Soviet Union in 1991, and especially over the past 10 years, there has been a sharp increase in IDU in Russia as evidenced by indicators such as a ninefold increase in the number of people attending state-provided drug treatment clinics in the 1990s. Authors such as Shelley (2006) point to Russia's status as a transit country for drugs, where many substances entering the country are also consumed domestically. However, there is very little information pertaining to the prevalence of IDU in the general population. The Russian Ministry of the interior estimates between three and four million injecting drug users, which in a population of 150 million, would yield a figure of 1–2%. Estimates derived from rapid assessment studies of urban areas suggest higher urban prevalence rates between 3% and 5% (see, for example, Dehne and Kobyshcha 2000, Koshkina, Koryakin, and Tsarev 2002).

Considering the geography of drug use in Russia, Shelley (2006) argues that the highest concentrations of usage are in the major cities along the Trans-Siberian railway; Vladivostok, Irkutsk, Ekaterinburg and Moscow, and in the city of St Petersburg, reflecting the fact that internal trade in Russia relies heavily on rail networks. (See Fig. 18.1 for these and other locations noted in this chapter.)

However, there is still a great deal of uncertainty. Despite the unprecedented rise in the use of drugs in post-socialist Russia, prevalence data have been patchy, deriving mainly from national household surveys, and regional level "snap shots". Research has traditionally focussed on Moscow, and it is unclear whether results can be extrapolated to smaller cities and towns. However, focussing on the use of



Fig. 18.1 Orientation map

drugs by young people (aged 14–19) in Russia, a recent study of drug use in three regions has shown considerable geographical variation both in the use of drugs, and in the circumstances under which individuals become drug users. The three regions selected for the study were Krasnodar, Samara, and Komi, which reflect a geographical spread from north to south, and encompass a diversity of drug markets. This study found considerable regional differentiation in drug use, with a very high rate of reported drug use in the Komi region (29%) as opposed to 16% in Krasnodar and Samara regions. This finding was particularly significant as it contradicts “accepted wisdom” in Russia that drug use is strongly associated with supply, and in particular with drug trafficking routes (Pilkington 2005). The Komi region, situated in the Far North of the Russian Federation, is at some considerable distance from the trafficking routes known to operate in the south of the country.

Statistical data pertaining to the regional distribution of drug use in Russia are extremely scarce, and even if such data were available, their accuracy would be suspect. The number of registered drug users is certainly only a fraction of the actual number, but the size of that fraction is not known. Data detailing the number of registered IDUs in Russian regions are not available (Koshkina 2001), and furthermore, there are major disincentives for IDUs to register at their local narcology unit. In Togliatti, for example, registration has a negative effect on the ability to gain employment and find housing, and it increases an individual’s chance of being detained by police (Platt et al. 2004). Togliatti’s local narcology service obtains most of its registrations through police referral rather than through voluntary registration, and this pattern may well be repeated across Russia. A proxy for these data is the number of recorded crimes associated with illegal narcotics (Figs. 18.2 and 18.3). Such drug crime data have their weaknesses; regional funding for enforcement of

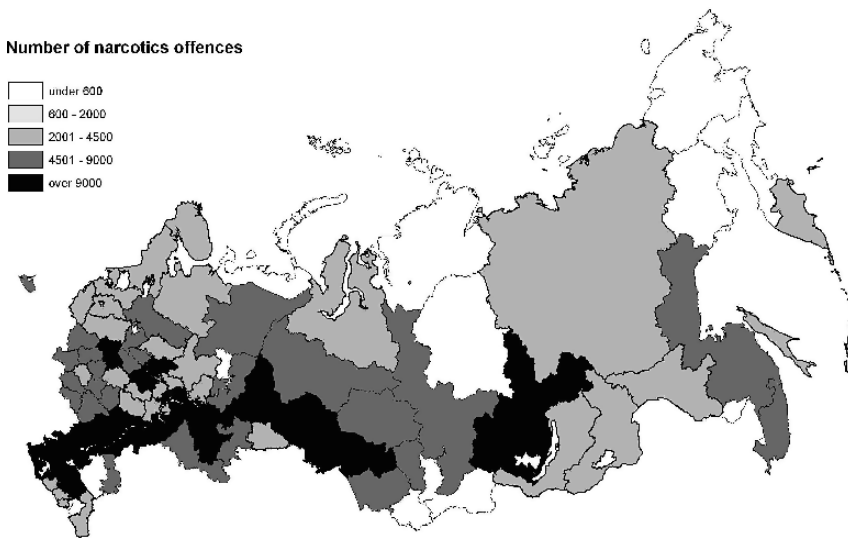
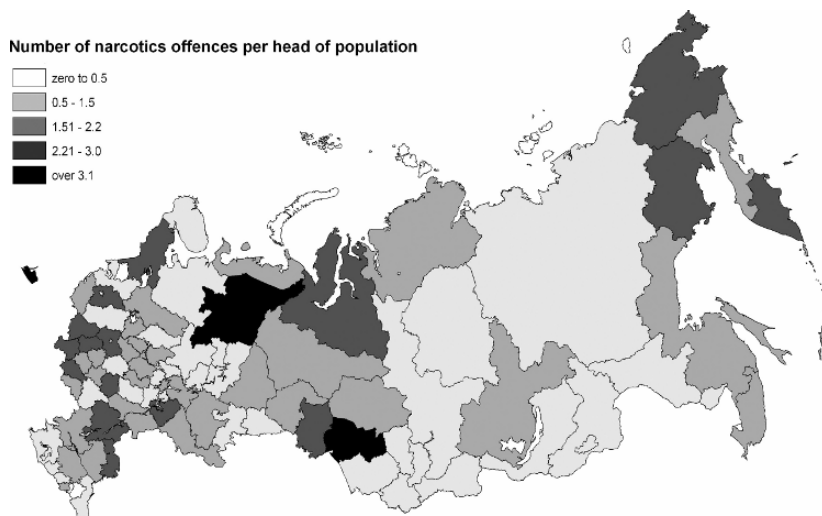


Fig. 18.2 Distribution of narcotics offences by Administrative Unit, 2003



**Fig. 18.3** Narcotics offences per capita by Administrative Unit, 2003

legislation relating to narcotics will vary, as will the level of priority afforded to enforcement by regional administrations, and by local police. Regional policy toward harm reduction (including needle exchange) also varies, and all these factors will affect the statistics collected under this heading. The level of drug crime does not, therefore directly corresponds to numbers of IDUs. Figures 18.2 and 18.3 depict the regional distribution of drug crimes and the number of crimes per capita in 2003, respectively. The first map shows that the absolute number of narcotics offences is the highest in the large conurbations and in the south of the country – probably a function of the trade in narcotics entering Russia cross-border and directly to Moscow (i.e., offences pertaining to commercial trade in rather than personal use of narcotics), and of heightened attention to such crimes in these areas. The second demonstrates that the level of narcotic offences per head of the population places the highest figures again in the south and the major urban regions, but also in the Russian Far East and the European North, perhaps suggesting that the distribution of drug users may actually be more even across space than the absolute numbers suggest. Drug crime is positively correlated with the urban distribution of population in ( $r = 0.432$ , significant at the 0.01 level), suggesting that at the local level, drug users are probably most heavily concentrated in urban areas.

## **The Geography of the Russian HIV/AIDS Epidemic – The Macro-Risk Environment**

Rhodes et al. (2005) argue that the macro-risk environment for HIV transmission among IDUs can be viewed as “comprising large-scale social, physical, economic, organizational and policy systems” (p. 1028). In Russia, HIV is widely perceived to

be connected with the experience of post-Soviet transition, in that the circumstances of transition, (sudden and fundamental economic, social and political change), comprise the macro-risk environment. Although the first HIV infections occurred before the end of the Soviet era (Table 18.1), it is argued that “social changes arising from political transition may have contributed to the spread of HIV” (Rhodes and Simic 2005, p. 220). Thus, the disintegration of the Soviet state appears to have set the stage for the development of this macro-risk environment. “The upheavals of Russia’s ongoing transition: economic and social dislocation, increased poverty, [and] new freedoms (including greater opportunities for geographic mobility, extramarital sex, prostitution, and drug use) transformed the country into a far more conducive setting for the spread of HIV/AIDS” (Eberstadt 2002). Furthermore, “social and political conditions [in Eastern Europe and the Commonwealth of Independent States (CIS)] encourage significant segments of the population to engage in high-risk behaviors and place themselves in high-risk environments” [United Nations Development Programme (UNDP) 2004, p. 7]. Mashkilleyson and Leinikki (1999, pp. 40–41) contend that “the present situation has deep political, social and economical roots, a pronounced economic stratification of the once uniform society, . . . with . . . consequent unemployment particularly among young people.” The authors noted that the resulting rise in rates of crime and prostitution, and increases in alcohol and drug consumption, “influenced the prevalence of risk behavior, particularly of teenagers and young adults.” UNDP (2004, p. 12) observes that the CIS region “today, this is predominantly an epidemic among urban, young, male injecting drug users and their sexual partners,” with IDU and unprotected sex as the main means of transmission of the HIV virus [European Centre for the Epidemiological Monitoring of AIDS (ECEMA) 2002].

The characteristics of the Russian epidemic fit the pattern of a “developed” Northern Hemisphere country, with a predominantly urban distribution of HIV, as opposed to sub-Saharan Africa’s relatively equal impact on rural and urban regions.

**Table 18.1** Number of reported HIV infections, 1987–30/06/2006

Year	Newly Diagnosed HIV Infections	Cumulative Total of Infections
1987–1994	887	887
1995	203	1,090
1996	1,513	2,603
1997	4,315	6,918
1998	3,971	10,889
1999	19,758	30,647
2000	59,261	89,908
2001	87,671	177,579
2002	49,923	227,502
2003	36,396	263,898
2004	32,147	296,045
2005	37,287	333,332
30/06/2006	13,492	347,222

Source: [www.afew.org](http://www.afew.org)

In Russia, there is a positive and significant correlation between the proportion of a region's population which is urban, and HIV prevalence, with the relationship particularly strong in the Central and North-western areas of the country, and in the Urals (Moran 2005).

In order to explore the geography of HIV/AIDS in post-socialist Russia (Fig. 18.4), macro-level data can be used to discover whether the perceived links between the post-socialist condition and increased HIV infections have resonance beyond the specific local contexts studied (Table 18.2), and to draw some conclusions about the ways in which this macro-risk environment might "combine with micro-level factors to "structure" the risk environments in which HIV risk and harm is produced and reproduced" (Rhodes et al. 2005, p. 1028). Data pertaining to HIV prevalence in the Russian regions in 2005 has been correlated with socio-economic indicators for years previous to 2005 (given that infections detected by 2005 must have taken place some months or years previously) drawn from the State Statistical Agency. The accuracy of both sets of data is acknowledged to be questionable [Bradshaw and Vartapetov 2003; Center for Strategic and International Studies (CSIS) 2005], and results of analysis must accordingly be treated with care.

Correlations between HIV prevalence and socioeconomic indicators show that there are strong and statistically significant relationships between HIV prevalence and the patterns of regional economic development and domestic population movement characteristic of the post-socialist period, and also with social "dislocation", particularly amongst the age group of the population experiencing most infections. Considering the economic aspect of the post-socialist condition, observers of Russia's HIV epidemic have noted a connection between economic dislocation and stratification, and risk behaviors that facilitate infection. However, risk behaviors do

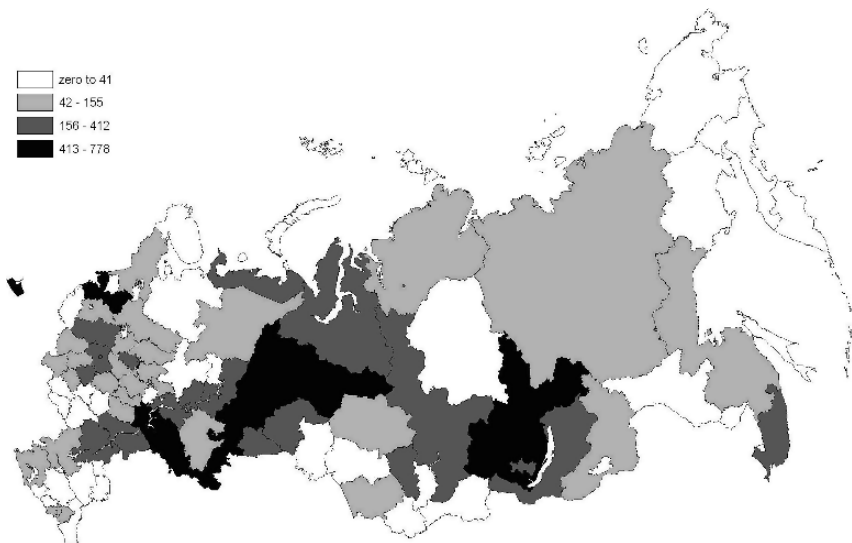


Fig. 18.4 HIV prevalence per 100,000, June 2006



**Table 18.2** Correlations between HIV prevalence 2005 and independent variables

	Urban Pop'n 2005	Change in FDI 1995– 2003	Unemployment 2003	Teenager Crime 2003	Cars per 100,000, 2003	Kilometers of paved road, 2003
Russian Federation	0.432**	–	–	0.480**	0.380**	0.351**
Urban regions (>60% urban)	0.430**	–	–0.310*	0.410**	–	0.279*
Rural regions (<60% urban)	–	0.626**	–	0.440*	–	0.500**
Low prevalence regions (below 300/100,000)	0.438**	–	–	0.540**	–	0.409**

\*Significant at the 5% level

\*\*Significant at the 1% level.

Source: Moran (2005)

not seem to be related to economic factors in a straightforward manner; there are strong correlations between HIV prevalence and indicators of regional economic growth rather than decline, with unemployment and HIV negatively correlated, indicating that high levels of unemployment in Russia coincide with low HIV prevalence. Also, the relationship between HIV and foreign direct investment (FDI) is striking, with long-term increase in FDI positively correlated with HIV prevalence.

Analysis of domestic population movement – one of Eberstadt's “new freedoms” (2002) – and HIV prevalence shows that there are strong and significant correlations with statistics for kilometers of paved road, and number of cars per 100,000 population, indicating that population mobility may be a factor in explaining regional distribution of HIV infections.

Social as well as economic dislocation has been suggested as a contributory factor, and analysis here included crime and divorce rates as proxies for this intangible situation. It has been hypothesized that there has been social dislocation (fragmentation of the more “ordered” society perceived to have existed under the Soviet system) indicated by higher divorce rates, and increased incidences of extramarital sex, commercial sex work, and crime (Walberg, McKee, Shkolnikov, Chenet, and Leon 1998), and that these circumstances have contributed to the increase in HIV infections in Russia (Eberstadt 2002). Here, the crime rate per 100,000 population, the number of crimes committed by teenagers and with their cooperation, and the divorce rate per 1,000 population in 1997 and 2003 were correlated with 2005 HIV prevalence. By far the most important result is for teenager crime, where there is a constant positive correlation at all spatial scales, and an increase in the strength and significance of relationships since the late 1990s. These data suggest that social dislocation could be an important contributory factor for risk behaviors, particular within an age group at increased risk of infection (Moran 2005).

Extension of this analysis shows that the salient features of the macro-risk environment for HIV transmission in Russia include the process of urbanization,



particularly in already highly-urbanized regions; domestic population mobility and social dislocation, with the association between HIV and mobility being the most statistically significant. While this macro-scale research confirms that there is a relationship between HIV/AIDS and the “condition” of post-socialism (Moran 2007), a nuanced understanding of local and individual engagements with post-socialism – the micro-level risk environment – is needed in order to uncover how these processes are worked out in everyday lives – the contexts and circumstances which enable and encourage individuals and especially injecting drug users to engage in risky behaviors (Moran and Jordaan 2007).

## **Drug Use and HIV/AIDS in Russia**

A major characteristic claimed for the Russian HIV/AIDS epidemic is the link between HIV and IDU (Kalichman et al. 2000), through the use of contaminated needles and drug use practices that encourage infection. In the public health literature, papers by Rhodes et al. (1999, 2002), and Krupitsky et al. (2004) have described the link between HIV and drug use in Russia and elsewhere as unequivocal. Where the source of Russian infections is known, statistics have variously linked up to three quarters of HIV infections to IDU (ECEMA 2002). Federal AIDS Center reported in 2002 that at least 90% of HIV infections have been linked to IDU (cited in Rhodes et al. 2003). The youth of the HIV epidemic in Russia, in terms of the high proportion of infections amongst individuals aged under 35, is distinctive in comparison with Western Europe and the USA, and potentially linked to drug use, which also tends to be the most common amongst teenagers and young adults. The nature of drug abuse in Russia has changed since the mid 1990s, with drug use becoming more common at a younger age (Kramer 2003); 6% of 15 and 16 year olds in Moscow report having used heroin at least once, whereas in Western Europe comparable figures do not exceed 2% (Paoli 2002).

While relationships between HIV and IDU have been widely observed in individual city studies, including studies of Togliatti (Platt et al. 2004) and of Krasnodar, Nizhniy Novgorod, Rostov, Saratov, Tula, Tyumen', Tver', Irkutsk, and Moscow [Alcabes, Beniowski and Grand 1999; Dehne, Khodakevich, Hamers and Schwartzlander 1999; World Health Organization (WHO) 2000] and IDU is a major risk factor, it is difficult to establish a statistical relationship between IDU and HIV prevalence at the national or even the regional level due to the availability and the nature of current data.

While data detailing the number of IDUs in Russian regions is not available, the results of correlations between the drug crime proxy data mapped in Figs. 18.1 and 18.2 and HIV prevalence in 2005 are presented in Table 18.3. Drug crime data themselves have their weaknesses as discussed earlier; in particular, the level of drug crime does not directly equate to numbers of IDUs, and IDU itself does not necessarily result in HIV infection, given the potential for safer injecting practices. However, as in the case of the HIV prevalence data, it is impossible to control for such variation, and correlations should be viewed in this light.

**Table 18.3** HIV prevalence/100,000 2005 and number of crimes connected with illegal narcotics 2003

	<i>n</i>	Correlation Coefficient <i>r</i>
Russian Federation	87	0.418**
Urban regions (65% or over urban population)	57	0.370**
Rural regions (under 65% urban population)	30	0.361
Eleven highest prevalence regions	11	-0.180
Federal Okrugs		
Central FO	10	0.630**
Far Eastern FO	10	0.809**
North Western FO	11	0.655*
Privolga FO	15	0.519*
Siberian FO	15	0.277
Southern FO*	12	0.510
Urals FO*	6	0.456
Seventy-six lowest prevalence regions	76	0.418
Urban regions (65% or over urban population)	47	0.395**
Rural regions (under 65% urban population)	29	0.262
Central FO	17	0.388
North Western FO	8	0.221
Privolga FO	12	0.710**
Siberian FO	13	0.030

None of the 11 top prevalence regions is located in the Southern FO, and there are too few regions in the Urals FO for a correlation removing its three top 11 prevalence regions to be carried out

\*Significant at the 0.05 level

\*\*Significant at the 0.01 level

Source: Goskomstat Rossii 2004:328-9, Moran (2005)

At the Russian Federation level and in urban regions, there is a highly significant (1% level) if not particularly strong, correlation between 2005 HIV prevalence and 2003 drug crime, with stronger regional associations in the Central and the Far East regions ( $r = 0.630$  and  $0.809$ , respectively, both at the 1% level). However, the most notable result is that for the 11 top-prevalence regions, there is no significant correlation between the two variables (the very weak association is actually negative,  $r = -0.180$ ). Nevertheless, there are three obvious outliers within this group, regions at the extremes of the range of values for each variable. Removing them from the analysis leaves a group of eight high-prevalence regions for which there is a strong and significant (1%)  $r$ -value of  $0.877$ . HIV prevalence and drug crime as a proxy for drug use are clearly positively correlated at various levels in the Russian Federation. However, the lack of a consistently strong, positive, and significant correlation between HIV and drug crime could be argued to support the case of observers who contend that whereas almost all infections in the earliest phase of the epidemic have occurred among IDUs, sexual contact may be increasing in importance as a means of transmission (Mashkilleyson and Leinikki 1999; Grassly et al. 2003; Lowndes, Alary, and Platt 2003).

## The Risk Environment: Drug Use and Risk Behaviors

The consideration of the macro-scale risk environment presented above concludes that although there are certain characteristics of the condition of post-socialist transition in Russia which seem to have an association with the transmission of HIV (whether sexually or through IDU), a nuanced understanding of the ways in which these circumstances are played out at the local level, via meso and micro-level risk environments, is critical to an understanding of drug use and HIV/AIDS in Russia. Transmission of HIV through needle and syringe sharing is relatively efficient (Royce et al. 1997), and in the Russian context, there has been a preference for injection (over other methods of drug use, although this tendency may be on the wane). Unsafe injecting practices facilitate the transmission of HIV, and individual studies have tracked local increases in IDU followed by (presumably linked) increases in HIV prevalence in Russia (e.g., Krupistky et al. 2006). There is a growing body of knowledge about precisely *how* the injection of drugs is associated with infection, or in other words, about the micro-risk environment in which unsafe injection practices take place. This section focuses on the geographical aspects of drug use, especially but not exclusively IDU, in relation to HIV prevalence; the micro-geographies of drug use, paying particular attention to the ways in which local social and spatial configurations facilitate drug use and risk behavior.

The critical factor making injection practice unsafe is the sharing of injection paraphernalia (i.e., drug preparations, containers, syringes, and needles), with the concomitant risk of contamination with infected body fluids. Such sharing takes place in specific circumstances where the configuration and use of space is highly significant in encouraging sharing. The following examples are drawn from the small but significant number of studies in Russia, which have focussed on this issue.

The first issue is the nature of spaces encountered and used by IDUs. Although the availability of drugs is described as widespread (Rhodes et al. 2003), with users able to access dealers in public spaces such as urban streets and in the courtyards enclosed by apartment blocks, most drug injection seems to take place either in the private spaces of the user's home, sometimes in the company of friends who also use, or at the location of the drug vendor. Clean syringes, while also relatively widely available, are, by contrast, obtained in public spaces such as pharmacies and needle exchanges, where these exist. The process of negotiating the spaces between these three locations is central to understanding the choice to share equipment, especially needles and syringes. In the Russian Federation, the possession of injection paraphernalia where the intention to use drugs is evident, or of quantities of narcotics, is an offence, and those suspected of possession are liable to arrest. Police have been reported to target pharmacies, needle exchanges, and the courtyards enclosed by apartment blocks as likely locations to encounter drug dealers and users. There is also a perception that the apparently "neutral" spaces of needle exchanges are in some way associated with the police. For example, Rhodes et al. (2003) report that the *Tsentrlnii* (central) clinic in the city of Togliatti is located within the City Narcology Unit, where there is invariably a police presence as individuals suspected to be drug users are routinely brought in for verification and/or registration.

The location and the apparent appropriation of this clinic by the official authorities serves as a deterrent to drug users needing to obtain clean needles; “These exchanges should be independent – not controlled by the police” (Rhodes et al. 2003, p. 49).

The nature of the location of the needle exchange is also an important factor. The fact that a needle exchange is fixed in space limits its appeal for some drug users; for example, in the city of Barnaul in central southern Russia, the needle exchange operates at a fixed site in the local AIDS Center, and local users find that the cost and inconvenience of traveling to the center discourages their use of it, whereas in other cities, Volgograd and Moscow for example, there are no fixed-site exchanges, services being provided instead by mobile exchanges and outreach workers [Department for International Development (DFID) 2006].

In order to avoid arrest, users prefer neither to travel to the vendor in possession of a syringe, nor to travel home in possession of drugs. There is also a belief that buying a syringe in advance of purchasing drugs places a jinx on the likelihood of a successful subsequent drug purchase, and anecdotal evidence suggests that although new syringes are cheap and readily available, many users follow this superstition (Rhodes et al. 2003). Depending upon individual circumstances, there may also be an urgency to inject as soon as drugs are purchased. The alternative to crossing the neutral space between home and dealer carrying incriminating evidence is either to deposit a syringe at the dealer’s premises for use *in situ*, or to re-use needles previously deposited or discarded by previous clients. Two quotations surmise this situation (Rhodes et al. 2003, p. 49):

I know that I might get stopped by the police on the way. That is why you sometimes have to use other people’s syringes. It is mostly because of the fear of the police.

People are afraid to carry syringes on them. They try to hide any evidence that they are drug users. The police can easily arrest you for a few days; no drug user would want that to happen.

The fact that needle *exchanges* are precisely that necessitates the return of used needles to be exchanged for new ones. Some drug users in Barnaul find it difficult to store used needles for this purpose (for example in order to avoid discovery of their drug use by friends and family), and are also reluctant to travel to the needle exchange carrying incriminating evidence of their habit (DFID 2006).

In the user’s or the vendor’s private space, the social networks that operate around the injection of drugs encourage risky behaviors, and as Rhodes et al. (2003, 2005) argue, situational factors contribute to sharing. There is a predilection toward practices that increase the risk of infectious contacts with contaminated blood, including distribution of drugs in pre-loaded syringes, use of group-prepared drug preparations (especially home-made injectable opiates, where potentially contaminated blood is added to solutions to stabilize them), as well as the social context of drug injecting in particular environments, which increase the potential for multiple transmission events in IDU populations (Rhodes et al. 1999).

Apart from the direct sharing of needles themselves, some “indirect” sharing practices have been found to be common among injecting drug users in the city of Togliatti. Rhodes et al. (2003) found that 73% of IDUs interviewed reported that in

the previous week they had drawn their drug solution from a container into which someone else had already put a used needle. This sharing of common containers seemed ubiquitous within a social group (Rhodes et al. 2003, p. 47):

You fill up from one syringe. This is the person who makes, it, draws it up, and he pours it into a wine glass. Let us suppose I wanted to inject first. I fill up myself, go off and inject. Then the next person draws up. So everyone fills up in turn.

We buy drugs together, prepare them together, everything together.

There were only two syringes for the group. . . There were around five people. . . This is a usual situation.

The unsafe injection of drugs is clearly a major vector threat for the transmission of HIV, but the influence of other drugs, including alcohol and marijuana, on risk behavior should not be underestimated. Krupitsky et al. (2004) argue that there is evidence for an indirect role of alcohol use in HIV transmission through the modulation of sexual or IDU-associated risk behavior. Research has shown an association between alcohol use and unsafe sex (McEwan, McCallum, Bhopal, and Madhok 1992), and although this effect has not been widely studied in Russia, the fact that Russia's alcohol consumption is amongst the highest in the world, suggests that this may be an important factor. For instance, looking specifically at alcohol- and drug-dependent (mainly heroin) attendees of a substance abuse facility in the Leningrad region of north western Russia, Krupitsky et al. (2004) found an increase in HIV infection amongst alcohol-dependent individuals. The means of transmission of the virus was not known, but unsafe injecting was unlikely given that none of the individuals affected had a prior record of IDU. Those infected were also from a significantly older age cohort than their drug-dependent counterparts. Whether infection took place through sexual contact or through injection, it might reasonably be assumed that alcohol mediated the decision (or lack thereof) to share equipment or to engage in unprotected sex.

The transmission of the HIV virus from high-risk groups such as injecting drug users into the mainstream population, amongst whom are counted the alcohol- but not drug-dependent, is generally perceived to take place via a "bridge population" – the result of particular social norms and configurations. As Kramer (2005) has argued, drug users themselves fuel this transmission by engaging in sexual relations with non-users, especially when the drug users are also commercial sex workers (CSWs). In this case, infected CSWs transmit the virus through unsafe sex with customers, who then form the "bridge," unknowingly transmitting the infection further into the general population.

It is impossible to accurately establish the extent of commercial sex work, and the prevalence of HIV within the CSW population in Russia, but "snapshot" studies suggest that prevalence is greatly in excess of that in the general population. HIV prevalence rates among female CSWs who also inject drugs have been recorded at 61% in Togliatti and 65% in Kaliningrad (Lowndes et al. 2003), and the need for money to support a drug habit may be a major factor in propelling individuals into sex work. In addition, female drug-using CSWs have been found to be at higher risk of infection through unsafe sex than their non-using counterparts; users are more likely to accept the terms offered by the client, including foregoing the use of

condoms, and agreeing to higher-risk sexual practices commonly refused by non-users. CSWs who are non-users also tend to refuse to service drug-using men (where they are identifiable), with the result that these men engage drug-using CSWs almost exclusively. Lower prices offered for sexual services by drug-using CSWs also mean that young boys who are not drug users but who lack money also purchase services from them, leading to exposure of adolescents to infections present in the adult male IDU population (Aral and St Lawrence 2002).

However, the picture painted by these data, of almost inevitable slide from drug injection to HIV infection, and concomitant overlap and interaction between injecting drug users and CSWs, is only partial although such a trajectory may indeed be unavoidable for many individuals. Recent research (Pilkington 2006) amongst young IDUs in Russia challenges this inevitability, presenting evidence derived from ethnographic research into the social norms and circumstances that surround drug use amongst young people. She argues that some users retain strong social ties that help to prevent their slide into the subcultural isolation that normally accompanies drug dependency, of which unsafe communal injecting practices and contact with commercial sex work may be part. Pilkington's fieldwork in the Krasnodar, Samara, and Komi regions of Russia, three diverse localities spanning the far south and far north of the country, found that heroin has penetrated both materially and symbolically into the lives of "ordinary" young people – those in full time education and participating in "normal" mainstream social and cultural institutions. Of the sample group, 13.5% of female and 7.5% of male respondents, who had ever tried any drug, reported the use of heroin, and the high visibility of the drug on the Russian market perhaps contributed to the use of heroin by 14–15 year olds (whereas in the United Kingdom, the mean age of experimentation with heroin is 17).

Pilkington's work challenges the sharp distinction drawn between "recreational" and "problem" drug use within the "normalization thesis", which posits a progression from early recreational drug use to problem heroin use explained by local social exclusionary factors, and provides a different view of the meso and micro-level risk environment for HIV transmission. She argues that within Russian youth cultural practice, a mode of occasional, long-term "safe" heroin use exists, and that this "safe" heroin use is less subculturalized and more embedded within, or alongside, more traditional forms of peer group-based "recreational" drug use. The nature of this heroin use may be an important factor in encouraging but also controlling "recreational" use of heroin (Pilkington 2006, p. 30); "the fact that heroin users continue to maintain strong and diverse friendship and family ties and pursue 'mainstream' goals, status and values may prevent heroin users sliding into the multiple deprivation situations that lead to a downward spiral of social exclusion and compound problem drug use."

This recent study may not be representative of drug use practices throughout Russia, but if it is at least indicative, then it suggests that there are alternative lifestyles for injecting drug users, which do not necessarily include participation in risk behavior, and demonstrates the complex and nuanced nature of the meso and micro-level risk environments.

## **Tackling IDU and HIV/AIDS: Understanding the Risk Environments**

Interventions to tackle the transmission of the HIV virus through IDU have two main points of entry; the prevalence of drug use itself and the unsafe practices that facilitate viral transmission. Given the close links between IDU and HIV, it is essential that interventions address both issues. Unfortunately, in the Russian Federation, this is not always the case; Russian government policy dealing with injection drug use arguably has been acting against initiatives to prevent HIV transmission, and policies aimed at tackling HIV seem to be directed more to the treatment of those infected rather than the prevention of infection.

Considering the first entry point, interventions have taken a hard line against IDU, and until May 2004, possession of even tiny amounts of narcotics was a criminal offence. The relevant law and its enforcement created a climate of fear, as discussed above, with police surveillance of pharmacies where IDUs were known to purchase syringes, detention and incarceration for possession of trace amounts of narcotics, and threat of extortion or arbitrary arrest [Human Rights Watch (HRW) 2004]. Any subsequent imprisonment for narcotics offences only serves to increase IDUs' risk of HIV infection through syringe-sharing in prisons and the poor quality of prison-based HIV-prevention services. The 2004 revision of the legislation saw small-scale drug possession reclassified as an administrative rather than a criminal offence, and the move was perceived to encourage policies grounded in public health and human rights.

As we have already seen, the interaction between police and IDUs in public space is critical to the behavior of drug users, and influences heavily the choices made about sharing injecting equipment. In a recent study, Rhodes, Platt, Sarang, Mikhailova, and Monaghan (2006) found that a sample of Russian police officers interacting frequently with IDUs on the streets of the city of Togliatti, interviewed in 2002, described street policing as a means of maintaining close surveillance of drug users, which may lead to the registration of individuals suspected or proven to be users of drugs. Completion of the registration process further enabled subsequent surveillance, through stop and search procedures, which assisted officers in detaining individuals in contravention of federal legislation. Officers seemed aware of drug users' resultant reluctance to carry injecting equipment linked to their fears of detention or arrest, but the fact that the confiscation of previously used injecting equipment could constitute evidence in relation to drugs possession charges, and that discovery of clean injecting equipment could also be sufficient to raise suspicion meriting further investigation through stop and search or questioning, seemed to outweigh these concerns. These findings suggest that an uneasy relationship existed between street policing and needle and syringe access, in which policing strategies served to undermine needle and syringe accessibility among IDUs. Rhodes et al. (2006) concluded that facilitating partnerships between policing agencies and HIV prevention initiatives is a critical feature of creating environments conducive to risk reduction, but it is as yet unclear whether the 2004 legislation has had an effect on



these practices; it would seem reasonable to assume that police cultures and attitudes will take time to adapt.

Where programs to assist IDUs in recovering from addiction are concerned, along with many other countries in Eastern Europe, Russia does not support substitution therapy. Substitution therapy using drugs such as methadone is a treatment approach which assists heroin users to manage withdrawal symptoms and cravings which result when heroin use is reduced or stopped. Taken orally, methadone removes the need to inject, thus significantly reducing users' risk of HIV infection. Although the World Health Organization regards substitution therapy as an essential component of harm reduction programs, the Russian government resists its introduction, citing as justification a responsibility to implement the United Nations drug conventions of 1961 and 1971, Article 38 of the 1961 convention obliges signatories to take all practicable measures to provide treatment for drug dependence, and while there are also provisions in the 1961 and 1971 conventions to control access to methadone, these require prescription rather than outright prohibition. Russia also expresses concerns over the effectiveness of the therapy, and its potential to prolong and even encourage drug addiction. Despite the benefits claimed for the therapy where it is in operation beyond Russia, and widespread outcry over the Russian government's position on this issue, at present there seems little prospect for introduction of methadone substitution therapy for Russia's injecting drug users.

In short, Russian drug treatment services appear to be highly centralized and focussed upon medical approaches, rather than holistic and broad in terms of offering a range of available services to meet a variety of treatment needs. However, a change would require considerable economic resources as well as political commitment at both the federal and the local levels, as well as the commitment of resources to developing the capacity of those working within the treatment system.

Considering the second point of entry, realization of the size and potential impact of the HIV/AIDS epidemic in Russia came late, and although President Putin has recently announced a 20-fold increase in public spending on HIV/AIDS, increasing funds from 150 million rubles in 2005 to 3 billion in 2006 (Novosti, September 27, 2005), the apparent focus is on providing medication to infected individuals rather than focussing on the prevention of infection (Moran, 2005). Even here, due to fears that drug users will not adhere to the medication program, virtually no HIV-infected IDUs in Russia receive treatment with the antiretroviral (ARV) therapy, which can delay the onset of AIDS. As Long et al. (2006) note, only 5,000 individuals in the whole of Russia received ARV therapy in 2005, in the context of a health care system already weakened in the transition from socialism. While there are hopes that treatment programs will increase this figure to over 30,000 during 2007, with increased geographical dispersal of facilities, there is no indication that IDUs will be targeted for this therapy, and the lack of effective assistance to break drugs habits further marginalizes high-risk groups from access to ARV medication.

In terms of the prevention of HIV transmission, education and information dissemination about the risk of infection are not utilized as effectively as might be the case. In the school system, there remains a conservative perception that sex education is controversial, and at present there is no immediate indication that activities

will be scaled-up across the country. More practically, the development of harm reduction in Russia *per se* has been hampered by inadequate financing (including a lack of government resources to support projects), and the stigma and marginalization experienced by high-risk groups (DFID 2006).

## Conclusion

This chapter has explored the links between drug use and HIV/AIDS in the Russian Federation in the context of what Rhodes et al. (2005) describe as “risk environments.” Appreciation of the significance of the geographies of drug use and HIV/AIDS in Russia is central to the design of interventions to tackle these issues; this overview of the macro, meso, and micro-level risk environments demonstrates the complexity of the linkages between drug use and HIV, and the myriad configurations of social situations, structures and places in which risk is produced. Drug use and HIV must clearly be addressed together, and in the context of the Russian Federation, where financial resources are limited and where political commitment to more controversial programs may take time to achieve, interventions must be carefully targeted at the macro level, toward regions which are perhaps most at risk of increase in HIV infections, as well as where prevalence is already high (Moran and Jordaan 2007). At the local level, too, appreciation of the significance of space for social practice, in terms of the operation of policing in public space, and interpersonal interactions in private space is part of a process of decentralization of HIV interventions, in order that local contingencies and contexts can shape appropriate activities.