PLACE in Russia:

Identifying Gaps in HIV Prevention in St. Petersburg, 2002

This report was made possible by support from the U.S. Agency for International Development (USAID) under terms of Cooperative Agreement HRN-A-00-97-00018-00. The views expressed herein are those of the authors, and do not necessarily reflect the views of USAID.

June 2004 **TR-04-21**

Printed on Recycled Paper

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Acknowledgements

This study was conducted by Dr. Roman Dyatlov, Dr. Andrei Kozlov, N. Sokolov, and A. Khmyrov.

The nongovernmental organization Look to the Future provided interviewers and facilitated access to injecting drug users.

Drs. Sharon Weir and Roman Dyatlov served as co-principal investigators. Dr. Robert Ryder also provided technical assistance during implementation.

The text and graphics were prepared by Jen Brown under the direction of Dr. Weir and in consultation with Dr. Dyatlov. Karen Pilliod, Jackie Tate, and Charity Herman prepared the tables. Ms. Tate prepared the maps. Funding was provided by the U.S. Agency for International Development (USAID) through the MEASURE *Evaluation* project.

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Executive Summary

Why is PLACE necessary in St. Petersburg?

The annual incidence of HIV in Russia has been rapidly increasing since the late 1990s and is now one of the highest in the world.[1,2] By the end of 2001, 173,068 cases had been reported; 86,000 of these were newly reported cases. The prevalence at the end of 2001 was 118.2 cases per 100,000 population, but this figure is estimated to be a small fraction of the actual number of infections.[2-5] The current HIV epidemic appears to be concentrated in injecting drug users with up to 90% of reported cases associated with injecting drug use.[5,6] The vast majority of injecting drug users are less than 30 years old, and one-third are teenagers.[4]

The role of sexual transmission in the current epidemic should not be underestimated. Many young people, including injecting drug users, are sexually active and do not use condoms.[4,7,8] Some injection drug users are also commercial sex workers.[9] Men who have sex with men may also have female sex partners, not use condoms, and have gaps in knowledge of HIV risk.[10-12] Recent increases in incidence of other sexually transmitted infections indicate that a transition to an epidemic of sexual transmission may soon take place, especially among young people.[7] Comprehensive HIV prevention interventions are urgently needed to prevent this transition. This study identifies intervention targets in St. Petersburg, the academic and cultural center of modern Russia.

What is the specific aim of the PLACE protocol?

Because resources for HIV prevention programs are extremely limited, there is an urgent need to focus interventions where they are most cost-effective. To prevent new infections in the most cost-effective ways, AIDS prevention programs should focus on areas likely to have a higher incidence of infection. The Priorities for Local AIDS Control Efforts (PLACE) method is a new monitoring tool to identify areas likely to have a higher incidence of infection (based on available epidemiological and socio-demographic information) and specific sites within these areas where AIDS prevention programs should be focused. Site-based indicators monitor whether interventions are reaching key sexual and injecting drug use networks in the city.

Where do available data suggest HIV incidence is highest in St. Petersburg?

In a one-day meeting of people knowledgeable about the HIV epidemic in St. Petersburg, the group reached consensus on three areas of St. Petersburg where HIV incidence is likely to be highest. These three areas included the central downtown area of St. Petersburg, a large residential district, and a small suburb. The PLACE method was implemented in these three areas from April to August, 2002.

Where do people go to meet new sexual partners? Where can injecting drug users be found?

Over 800 community informants identified approximately 350 sites in the three districts. Both indoor sites, such as bars and taverns, and outdoor sites, such as streets, yards, and garbage dumps, were common. Sites clustered around transportation routes, particularly in the large residential area where 70% of sites were within two blocks of the district's main street. Sites ranged from having fewer than 10 patrons to over 200 patrons. Most sites had been in existence for several years. Beer and hard alcohol consumption were reported at a very large proportion of sites.

Interviews with people socializing at the sites confirmed that people meet new sexual parterns at the sites, and that people at the sites frequently had new sexual partners.

Over 80% of individuals socializing at the sites reported they believe that other people meet new sexual partners at the site. About 44% of the men and 27% of the women reported having personally met a new sexual partner at the site. Approximately 30% of the women and half of the men reported having had a new sexual partner in the past four weeks. Within the previous four weeks, 4% of the women and 2% of the men reported having more than 10 new sexual partners.

Injection drug use is perceived to be common in St. Petersburg. Approximately 10% of men and women socializing at sites reported injecting drugs.

Community informants, site representatives, and people socializing at sites all reported that injection drug use was common in the assessment areas. Between one-half and two-thirds of site representatives had seen used syringes at their sites. Over 60% of people interviewed at a site reported that injection drug users could be found at the site. Of the 10 percent who had ever injected drugs, the proportion who reported sharing a needle during the most recent injection ranged from 7% among men in the large residential district to 24 % among men in the downtown area.

Condoms are not consistently available at sites and condom use was inconsistent.

Most sites did not have condoms available, but many sites perceived as feasible for condom sales were willing to sell condoms. About 90% of men and women had used a condom before, but only about one-third of men and one-fifth of women had used a condom with their last new sex partner.

There is great potential for the HIV epidemic to move from injecting drug users to people with many sexual partners.

There was extensive overlap between sexual and injecting-drug-use networks. In the large residential district, 48% of site representatives reported that people meet new sexual partners at these sites, and that injection drug users also socialize at the sites. Consequently, these sites should be targeted for AIDS prevention efforts.

What are the key findings and recommendations?

A summary of PLACE results and PLACE indicators for monitoring prevention programs in the three districts is presented in Table 1. Following are key recommendations resulting from this research:

- AIDS prevention programs should target sites where people meet new sexual

partners and where injecting drug users can be found.

- Condom use should be actively promoted at sites and sites should have a consistent supply of condoms.

- Clean needles should be available to injecting drug users to reduce the probability of HIV transmission via infected needles.

- Young people should be encouraged to avoid injecting drug use and unsafe sex practices.

Table 1. Summary of PLACE results and PLACE indicators for monitoring prevention programs in central St. Petersburg, Krasnogvardeisky, and Lomonosov

Community Informant Interview Results			
	Central St. Petersburg	**Krasnogvardeisky**	**Lomonosov**
Number interviewed	400	400	19
Number of refusals	35	18	3
Number of site reports outside district	588	692	0
Number of site reports inside district	1258	1095	81
Number of sites to be verified	422	304	20
Percent reporting drug use "very common" in area	70.6	70.3	58.3
Site Verification Results			
	Central St. Petersburg	**Krasnogvardeisky**	**Lomonosov**
Number of sites located and verified by interview	182	160	17
Percent of sites within 2 blocks of main route or metro	53.3	70.0	42.1
Percent of sites where people meet new sex partners	57.1	61.9	94.7
Percent of sites where IDUs socialize	36.3	53.1	31.6
Percent of sites where people meet new sex partners *and* IDUs socialize	22.6	32.3	31.6
Type (percent of sites)			
Bars	24.7	26.9	55.6
Nightclubs	10.9	5.6	5.5
Streets/yards	27.5	25.0	16.7
Stairwells	6.0	18.1	0.0
Activities (percent of sites)			
Beer consumed	88.9	87.4	94.7
Hard alcohol consumed	71.3	69.7	78.9
Computer games	12.2	20.9	15.8
Food consumed	61.9	50.0	78.9
Dancing	34.3	27.2	52.6
Striptease shows	9.4	8.9	15.8
Sexual partnerships formed at site (percent of sites)			
Men meet female partners	63.5	60.8	89.5
Women meet male partners	59.7	58.9	89.5
Men meet male partners	12.7	5.7	26.3
Someone facilitates partnership formation	9.4	7.6	15.8
Female sex workers solicit clients	26.5	22.8	21.1

Table 1. Summary of PLACE results and PLACE indicators (continued)

Site patrons (percent of sites)			
Male students	87.8	94.3	100.0
Female students	84.0	87.3	94.7
Men under age 18	66.3	66.7	62.2
Women under age 18	69.7	74.7	69.4
Male injection drug users	56.3	68.4	52.6
Female injection drug users	49.2	60.8	42.1
Injection drug use in area (percent of sites)			
Very common	40.3	56.3	79.0
Somewhat common	42.5	34.8	10.5
Not very common	16.0	8.2	10.5
Does not occur	1.1	0.6	0.0
Used syringes have been seen at site	47.4	67.1	47.0
Condoms and HIV prevention (percent of sites)			
Condoms never available in past 12 months	58.2	64.4	79.0
Condoms seen at site during interview	11.5	11.3	10.5
Condoms available within a 10-minute walk	88.5	83.1	73.7
Site representative willing to sell condoms	44.5	31.9	42.1
HIV prevention programs have occurred at site	6.1	1.9	10.5
Site representative willing to have HIV prevention programs	53.3	55.6	52.6
Interviews with People Socializing at Sites			
Men (percent)	**Central St. Petersburg (n=719)**	**Krasnogvardeisky (n=712)**	**Lomonosov (n=239)**
Younger than 20	22.8	17.3	18.7
Unemployed	17.9	14.6	12.7
Visit the site every day	24.2	30.3	9.4
Report that other people meet new sex partners at the site	91.3	84.8	87.2
Have ever met a new sex partner at the site	48.6	40.0	41.6
Of those, used a condom with last new sex partner from the site	63.1	61.6	75.4
Met a new sex partner at the site in the last 4 weeks	23.0	18.9	13.4
Have a condom that was seen by the interviewer	17.6	11.0	11.3
Had a new sex partner in the last 4 weeks	50.7	52.1	47.7
Of those, used a condom with last new sex partner	71.2	63.5	74.3

Table 1. Summary of PLACE results and PLACE indicators (continued)

Had a new sex partner in the last 12 months	93.4	90.6	88.0
Have a current steady sex partner	64.6	78.4	73.2
Had sex with another man in the last 4 weeks	10.0	0.5	1.3
Paid for sex in the last 4 weeks	19.5	26.9	14.1
Median number of sex partners in the last 4 weeks	1.0	1.0	1.0
Median number of new sex partners in the last 4 weeks	1.0	1.0	0.0
Report that injection drug use is very common in the area	49.2	56.2	74.0
Report that injection drug users socialize at the site	66.0	64.9	70.7
Have ever injected drugs	8.7	11.2	10.7
Of those, shared a needle at most recent injection	24.3	6.7	22.3
Women (percent)	**Central St. Petersburg**	**Krasnogvardeisky**	**Lomonosov**
Younger than 20	37.8	32.8	39.3
Unemployed	35.8	14.6	12.7
Visit the site every day	17.6	34.2	14.6
Report that other people meet new sex partners at the site	87.4	80.9	74.2
Have ever met a new sex partner at the site	21.3	23.1	33.6
Of those, used a condom with last new sex partner from the site	73.2	77.6	30.0
Met a new partner at the site in the last 4 weeks	15.3	12.9	10.1
Have a condom that was seen by the interviewer	10.1	15.8	13.0
Had a new sex partner in the last 4 weeks	34.4	31.0	21.3
Of those, used a condom with last new sex partner	64.5	63.8	42.1
Had a new sex partner in the last 12 months	84.3	79.1	84.3
Have a current steady sex partner	71.8	74.3	76.4
Median number of sex partners in the last 4 weeks	1.0	1.0	1.0
Median number of new sex partners in the last 4 weeks	0.0	0.0	0.0
Report that injection drug use is very common in the area	59.9	65.5	80.9
Report that injection drug users socialize at the site	75.6	68.8	80.9
Have ever injected drugs	10.7	8.6	11.2
Of those, shared needle at most recent injection	14.6	21.8	16.8

Background and Objectives

Background: The HIV Epidemic in St. Petersburg, Russia

The social and political changes that took place in Russia after the dissolution of the Soviet Union in 1991 have created an environment favorable for human immunodeficiency virus (HIV) transmission. Economic instability has led to widespread unemployment, poverty, and crime.[1,2] Exposure to Western culture has resulted in a liberalization of attitudes toward sex, but there is still a widespread lack of knowledge about the health risks of unsafe sex.[3] There is a paucity of public health resources for drug prevention and rehabilitation, HIV education, and treatment of sexually transmitted infections. These conditions have exacerbated a number of social problems, including injection drug use and risky sexual behavior.[1-4]

The annual incidence of HIV in Russia has been rapidly increasing since the late 1990s and is now one of the highest in the world.[1,2] By the end of 2001, 173,068 cases had been reported; 86,000 of these were new reported cases. The prevalence at the end of 2001 was 118.2 cases per 100,000 population, but this figure is estimated to be a small fraction of the actual number of infections.[2,5] The current HIV epidemic appears to be concentrated in injection drug users. There are between 1 million and 3 million injection drug users in Russia; heroin is the drug of choice, but cocaine, crack, amphetamines, and homemade cocktails are also used.[4,6] Injection drug users often share needles, which is a strong risk factor for HIV infection.[4,6,8] The prevalence of HIV is extremely high among injection drug users, and up to 90% of reported cases are associated with injection drug use.[5,6]

However, the role of sexual transmission in the current epidemic should not be underestimated. The vast majority of injection drug users are less than 30 years old, and one-third are teenagers.[4] Many young people are sexually active, do not believe that they are at risk of HIV infection, and do not practice safer sex.[7] Similarly, injection drug users often have large numbers of sex partners and do not practice safer sex.[4,8] Many injection drug users are also commercial sex workers.[9] Men who have sex with men often have large numbers of both male and female sex partners, do not practice safer sex, and have gaps in knowledge of HIV risk.[10-12] This extensive overlap among HIV risk groups will facilitate the spread of HIV into the general population.[13] Recent increases in incidence of other sexually transmitted infections indicate that a transition to an epidemic of sexual transmission will soon take place, especially among young people.[7] Comprehensive HIV prevention interventions are urgently needed to prevent this transition.

This study identifies intervention targets in St. Petersburg, the academic and cultural center of modern Russia. St. Petersburg is located in northwestern Russia on the coast of the Baltic Sea and is home to over 5 million people. There are governmental and nongovernmental agencies engaged in HIV prevention activities in St. Petersburg. These organizations have developed sophisticated interdisciplinary approaches and strong collaborations. Even so, many

interventions have inadequate coverage due to a lack of sustained funding and limited resources. The PLACE method can help prevention groups decide how to allocate resources to make interventions more effective.

The Priorities for Local AIDS Control Efforts (PLACE) Method

HIV incidence is not uniform within geographic regions. Rates and patterns of new sexual partnership formation are important determinants of local variations in incidence.[14] The PLACE method is a rapid, inexpensive tool to identify high transmission areas (HTAs), which are areas likely to have a higher incidence of HIV, and specific sites within them where interventions will have the greatest impact.

Site-based interventions have advantages over clinic-based or risk-group approaches. Clinic-based strategies are essential components of AIDS prevention programs, since people with many sexual partners are more likely to contract sexually transmitted infections (STIs) and may seek treatment for them. However, clinic-based strategies can miss a large proportion of people with STIs, including those with asymptomatic infections and those with limited access to health care.[14,15] Risk-group interventions target groups of people who are known to have many sexual partners, such as commercial sex workers. Such interventions have been used to prevent the spread of HIV from risk groups into the general population. However, risk-group interventions can be stigmatizing to members of the group, and are not very effective if the HIV epidemic is already established in the general population.[14,15] Site-based interventions do not stigmatize individuals and are efficient because they can reach large numbers of people who are at risk of infection.

Table 2 gives a summary of the steps in the PLACE method. Preliminary steps include ethical approval, communication with intervention programs, translation and adaptation of survey instruments, and interviewer training. The first step in the protocol is to identify HTAs using available demographic, epidemiologic, socioeconomic and behavioral information. Contextual factors that are often associated with HTAs include poverty and unemployment, lack of health care services, alcohol or drug use, high population mobility, urbanization and rapid growth, and a high male-to-female ratio.

Table 2. The PLACE method

Steps	
1	Identify areas in St. Petersburg where HIV incidence is likely to be high.
2	Within these areas, conduct community informant interviews to identify all public sites where people meet new sexual partners and where injecting drug users can be reached.
3	Visit, map, and characterize sites identified in assessment areas.
4	Interview people socializing at sites about their sexual and injecting drug use behavior.
5	Summarize results for intervention teams and make specific recommendations for prevention programs.

The second step is to conduct interviews with community informants who are likely to know where people in the HTAs go to meet new sexual partners or where injection drug users can be found. Sexual network sites might be traditional, such as bars and brothels; or nontraditional, such as public parks, marketplaces, and bus stops. The third step is to confirm and map the location of sites named by key informants and describe site characteristics that are relevant to AIDS prevention. The fourth step is to conduct interviews with people socializing at a sample of sites to learn about the demographic, social, and behavioral characteristics of site visitors. The final step is to summarize results and provide recommendations to intervention groups.

The PLACE method was developed at the University of North Carolina at Chapel Hill and pilot tested in 1999 in Cape Town, South Africa, in collaboration with the University of Cape Town. USAID has supported development of the method through its Monitoring and Evaluation to Assess and Use Results (MEASURE) *Evaluation* project. The method has also been implemented in Tanzania, India, Uganda, Central Asia, Burkina Faso, Jamaica, and Mexico.

Step 1: How Were the Three Districts in St. Petersburg Selected for the PLACE Assessment?

Background

Ethical Approval

Participation in the study was voluntary; informed consent was obtained for each respondent. Respondents were only interviewed if they were older than the age of majority in Russia. No information was obtained that would allow deductive disclosure of the identity of any respondent. The institutional review boards of St. Petersburg State University and the University of North Carolina at Chapel Hill approved the study protocol.

Adaptation and Translation of Questionnaires

The PLACE method was adapted to the HIV epidemic in St. Petersburg. The epidemic in St. Petersburg reflects heterosexual and male-to-male sexual transmission as well as transmission via shared needles. Consequently, questions about the rate and pattern of injection drug use were added to the survey instruments and sites where injection drug users can be found were identified, mapped and characterized. Local investigators suspected that sites with injection drug users would be clustered around travel routes, and that interventions at metro stops or main streets would therefore be an efficient way to reach this hard-to-reach risk group. The survey instruments were adapted to evaluate this hypothesis. Interviewers noted whether sites were within two blocks of main streets or the metro and asked site representatives and patrons about residence and use of main routes in travel to the site. Questionnaires were translated into Russian, back-translated into English, and field tested before use.

Objective

The objective of this step was to identify HTAs in St. Petersburg for implementation of the PLACE method.

Methods

Investigators and stakeholders identified districts for assessment during a one-day meeting in St. Petersburg in August 2001. The 1999 United Nations Programme on HIV/AIDS (UNAIDS) situation analysis in St. Petersburg, epidemiological reports, census data, health reports, maps, and discussions with STI experts were used to identify likely HTAs in St. Petersburg. Criteria for selection included feasibility, utility of results to intervention groups, and variety to ensure that an intervention protocol would be useful in most environments.

The following stakeholders and intervention groups were invited to participate in the selection of assessment areas:

- St. Petersburg State University
- The Biomedical Center
- HIV/AIDS Prevention and Control Office of the City of St. Petersburg
- UNAIDS

- University of North Carolina at Chapel Hill
- Administration of the City of St. Petersburg
- Legislative Assembly's Committee on Social Issues
- Public Health Committee of the City Administration
- Republican Clinical Hospital for Infectious Diseases
- North West Regional AIDS Centre
- Medical Academy of Postgraduate Studies
- Epidemiological Surveillance Service
- Drug Abuse Prevention Centre
- NGO Vozvrashcheniye (Return)
- Medecins du Monde
- Look to the Future.

The group characterized the 20 districts in St. Petersburg into three types: downtown districts, "sleeping communities," and suburban areas. The group decided to select one district of each type for assessment. Each person at the meeting cast three votes – one for each district type.

Results

Downtown Districts: Admiralteisky and Tsentralny

There are four downtown districts in St. Petersburg. The downtown votes were divided between Admiralteisky and Tsentralny, which are contiguous districts. Both were included in the study and they are considered as a single assessment area, described as "central St. Petersburg" in this analysis. This area is a well-developed commercial center that is easily accessible by public transportation, including the metro. There are several educational institutions in the area, so there is a high concentration of students. Central St. Petersburg offers an active social scene, with numerous bars, nightclubs, and theaters. The population density is high, and there is a housing problem in Tsentralny as a result. Commercial sex work is common in this area. The coverage of HIV prevention and treatment programs is inadequate.

Residential Districts: Krasnogvardeisky

There are nine primarily residential or "sleeping" community districts in St. Petersburg. Residential districts have many crowded high-rise apartments, as well as large multi-story dormitories for students and employees of large businesses. The dormitories are overcrowded and offer little privacy. The bars and nightclubs in this area are popular and are much cheaper than those located downtown. Neighborhood markets provide cheap food, toys, and other miscellaneous items. The markets also serve as gathering places where commercial sex and injection drugs are available. In a nearly unanimous decision, Krasnogvardeisky was selected to represent them. Krasnogvardeisky is not easily accessible by public transportation routes and is therefore somewhat isolated from the other districts.

Suburban Area: Lomonosov

There are seven suburban districts in St. Petersburg. In a nearly unanimous decision, Lomonosov was selected to represent them. Lomonosov has a much lower population density than the other two assessment areas, so the study was conducted on a smaller scale in this district. Lomonosov is an extremely poor area that is remote and isolated from the other districts of St. Petersburg. Many people who live in this area have a low level of educational attainment and are unemployed. There is a lack of organized social activities for youth. Drug use is a problem in the area, but there

are no medical or social services for injection drug users. There is a general medical clinic, but there are no prevention programs for HIV or drug abuse.

Step 2: Where Do People Go to Meet New Sexual Partners? Findings from Community Informant Interviews

Objectives

The objectives of this step were to identify all sites in the three assessment areas where people meet new sexual partners and where injection drug users socialize and to determine the distribution of these sites in relation to main transit routes.

Methods

Approval for conducting interviews was sought from government and community organization officials. Look to the Future, a nongovernmental public health organization with experience in outreach to injecting drug users, provided the interview team. Interviewer selection was guided by interviewing experience, sensitivity of the study questions on sexuality, fluency in Russian and English, flexibility regarding working hours, and the ability to communicate well with of a wide range of respondents.

Interviewer training included presentations on the objective and methods for the study. Training also included review of the data collection manual, discussions on field study ethics, mock interviews, and field testing of questionnaires. Each question on every questionnaire was reviewed.

The initial target, based on other PLACE studies, was to interview a minimum of 180 informants in central St. Petersburg and Krasnogvardeisky and 20 in Lomonosov, with interviews continuing until the local investigator determined that few new sites were being identified. People who were likely to know about the social activities of those who are sexually active or injection drug users were targeted as informants. These included:

- government officials, including the police and military
- officials in nongovernmental organizations (NGOs)
- officials in community-based organizations (CBOs)
- health care workers
- taxi or truck drivers
- workers in bars or stores selling alcohol
- sex workers
- teachers
- youth.

Interviewers recorded the gender and type ("taxi driver," "police officer," etc.) of each informant. They also noted the location of the interview within the assessment area and whether it was within 2 blocks of a main route or the metro. Interviewers briefly described the study and requested verbal consent to participation, assuring informants that their responses would remain anonymous. If the informant declined to give consent, the interview was terminated. If the informant gave consent, the interviewer verified that he or she was over the age of consent (16 years) before proceeding. If the informant was of age, he or she was asked to identify sites where people meet new sex partners, where sex workers solicit clients, and where people use injection drugs in the assessment area. Probing questions were used to elicit additional sites. The informant provided the

name and address and a description of each site that he or she identified and noted whether the site was within two blocks of a main route or the metro. Informants were also asked to characterize injection drug use as "very common," "somewhat common," or "not very common," if it occurred within the assessment area. Community informants were not asked about their own sexual behavior or injection drug use. Informants were compensated with gifts of approximately U.S. $15 in value.

Key informant reports were compiled into a master list of sites where people in the assessment areas meet new sexual partners and inject drugs.

Results

Community informant interviews were conducted in Krasnogvardeisky and central St. Petersburg during the month of April 2002. Interviews in Lomonosov occurred in June 2002. Four hundred key informant interviews were conducted in central St. Petersburg and 400 in Krasnogvardeisky (Table 3). This was more than twice the target number of interviews. Nineteen interviews were conducted in Lomonosov. Refusal rates ranged from 4% in Krasnogvardeisky to 14% in Lomonosov.

Informants gave 1,846 site reports in central St. Petersburg, 1,787 in Krasnogvardeisky, and 81 in Lomonosov. These numbers include duplicate reports of some sites. The number of unique sites reported was determined during the site verification process (Step 3).

Overall Findings

Most informants named more than one site. Most reported sites were within the assessment area where the interview took place. The types of informants are shown in Figure 1. Youth constituted the largest group; approximately two-thirds of informants were between 16 and 24 years old. Most informants (62%) were male. Almost three-quarters of the informants (73%) said that injection drug use was "very common" in the assessment areas (appendix Table A2).

Table 3. Summary of community informant interviews

	Central St. Petersburg N	Krasnogvardeisky N	Lomonosov N
Days of interviews	9	9	1
Number of interviewers	11	12	10
Community informants			
Refused interview	35	18	3
Granted interview	400	400	19
Total	435	418	22
Site reports			
Inside assessment area	1,258	1,095	81
Outside assessment area	588	692	0
Total	1,846	1,787	81

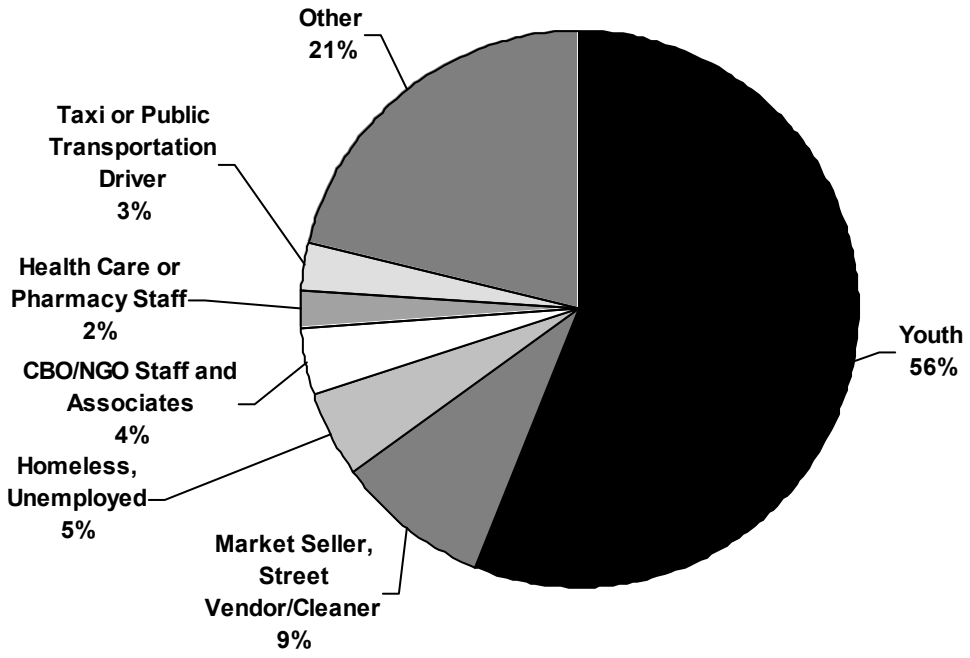
Site-SpecificFindings

Central St. Petersburg — Approximately two-thirds of the male and female informants in Admiralteisky and Tsentralny named five or six sites each (appendix Table A2). Sixty-eight percent of the sites reported by informants in central St. Petersburg were within the assessment area. Sixty-nine percent of the informants in this area were male. Most male (62%) and female (76%) informants were between 16 and 24 years old. Large proportions of male (71%) and female (77%) informants reported that injection drug use was "very common" in central St. Petersburg.

Krasnogvardeisky — About 55% of male and female informants in Krasnogvardeisky suggested 5 or 6 sites each. Sixty-one percent of the sites reported by informants in Krasnogvardeisky were within the assessment area. Fifty-six percent of the informants in this area were male. Approximately 62% of male and female informants were between 16 and 24 years old. Seventy percent of male informants and 76% of female informants reported that injection drug use was "very common" in Krasnogvardeisky.

Lomonosov — Only one-third of the male and female informants in Lomonosov identified 5 or 6 sites each. Forty-two percent of the male informants and 57% of the female informants reported 3 or 4 sites each. One-quarter of the men and 14% of the women suggested only 1 or 2 sites. All of the sites reported were within the assessment area. Twelve of 19 (63%) informants in this area were male. Three-quarters of the male informants and all of the female informants were between 16 and 24 years old. There was a slight difference in the proportions of men (58%) and women (71%) reporting that injection drug use was "very common" in this area.

Figure 1. Types of community informants in the three assessment areas (N=819).



Step 3: What Are the Characteristics of Sites Where People Meet New Sexual Partners and Where Injecting Drug Users Can Be Found? Findings from Site Verification Visits

Objectives

The objectives of this step were to confirm the location of sites named by community informants, to determine the distribution of sites in relation to main transit routes, and to identify characteristics of each site relevant to AIDS prevention.

Methods

A list of sites in each assessment area was compiled from the more than 2000 community informant site reports obtained in the previous step. Interviewers attempted to locate and visit each public site with the exception of schools. Schools were excluded based on a local decision that school administrators would not participate in an interview about sexual behavior and injection drug use at schools. After excluding schools and known duplicates, there were 422 sites to be verified in central St. Petersburg, 304 in Krasnogvardeisky, and 20 in Lomonosov.

For sites that could be located, the type of site and the number of men and women socializing there were recorded first. Site coordinates were obtained using hand-held Geographic Positioning System (GPS) units. Interviewers noted whether the site was within two blocks of the metro (in central St. Petersburg) or main traffic routes (in Krasnogvardeisky and Lomonosov). In addition, interviewers identified and interviewed one person at each site who was familiar with the site and its patrons (for example, a manager, employee, or regular visitor). Verbal consent and age verification were requested from these potential "site representatives" as previously described. If the potential representative declined to give consent, his or her gender was recorded and the interview was terminated. If the representative gave consent, he or she was questioned about the following characteristics of the site:

- Number of years in operation
- Types of activities occurring at the site
- Characteristics of visitors, including residence, employment status, age, and gender
- Peak hours of operation and estimated number of clients during peak hours
- Whether people meet new sexual partners at the site
- Whether sex workers solicit customers at the site
- Whether injection drug users socialize at the site
- Current AIDS prevention activities, including condoms and posters
- Willingness to conduct AIDS prevention activities.

Interviewers noted whether posters, condoms, or other AIDS prevention materials were observed at the site. Permission to return to conduct interviews of people socializing at the site was requested from each representative. Site

representatives were not asked about their own sexual behavior or injection drug use. Representatives were compensated with gifts of approximately 20 United States dollars in value.

Results

Nine to 12 interviewers performed site verification visits in each assessment area. Interviews were conducted during May and June 2002 over a period of 16 days in Admiralteisky and Tsentralny, 11 days in Krasnogvardeisky, and 1 day in Lomonosov.

In central St. Petersburg, 228 unique sites were located and 181 were verified by interview with a site representative (Table 4). In Krasnogvardeisky, 179 unique sites were located and 158 were verified by interview. In Lomonosov, 19 unique sites were found and verified by interview. Among sites that were found, 9% of representatives in central St. Petersburg, 4% in Krasnogvardeisky, and 0% in Lomonosov refused to be interviewed.

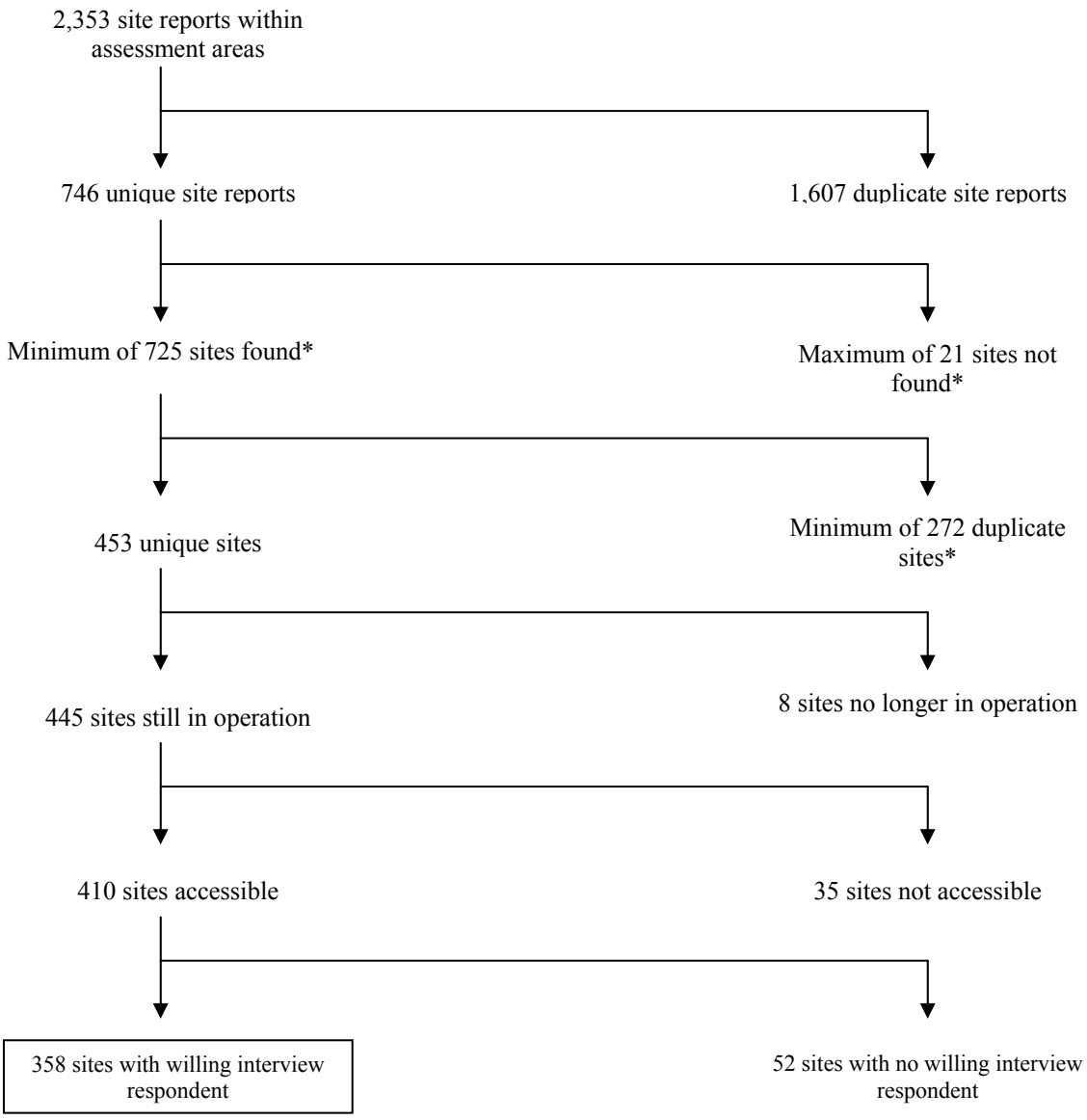
Over a third of the sites on the central St Petersburg and Krasnogvardeisky lists were not unique sites but duplicate reports of other sites on the list. They were included in the initial lists of 422 and 304 sites because, although the name matched a name of another site on the list, the reported address was slightly different. Interviewers visited all of the addresses and determined which address was correct. Unfortunately, duplicate sites with incorrect addresses were coded as "site not found" on the site verification form rather than "duplicate site." Sites that could not be located were also coded "site not found." Since duplicate sites and sites not found were assigned the same code, the actual number of each in Table 4 is based on discussions with interviewers. Local investigators and interviewers reported that there are no more than 10 unique sites that were not located in each assessment area. Consequently, Table 4 shows 10 sites not found in each area. Figure 2 is a flowchart showing how the final list of sites was derived.

Table 4. Site verification outcomes

	Central St. Petersburg		Krasnogvardeisky		Lomonosov	
	N	%	N	%	N	%
Site found and respondent interviewed	181	42.9	158	52.6	19	95.0
Site already identified (duplicate)*	164	38.9	108	35.5	0	0.0
Site found but no willing respondent	39	9.2	13	3.6	0	0.0
Site temporarily closed	8	1.9	8	2.6	0	0.0
No longer a site	6	1.4	2	0.7	0	0.0
No access to the site	14	3.3	5	1.6	0	0.0
Site not found*	10	2.4	10	3.3	1	5.0
Total unique reported sites	422	100	304	100	20	100

* See text.

Figure 2. Flowchart showing how the list of 358 sexual network sites was derived from 2,353 community informant reports.



*See text.

Table 5. Types of sites where interviews completed

	Central St. Petersburg n=181		Krasnogvardeisky n=158		Lomonosov n=19	
	N	%	N	%	N	%
Bars, Clubs and Hotels	**73**	**40.5**	**52**	**32.9**	**11**	**57.9**
Formal bar/tavern	45	24.9	43	27.2	10	52.6
Night club	20	11.1	9	5.7	1	5.3
Gay Club	2	1.1	0	0	0	0
Casino	1	0.6	0	0	0	0
Hotel	5	2.8	0	0	0	0
Remote, Abandoned or Private	**62**	**34.3**	**70**	**44.2**	**3**	**15.8**
Street/waste/yard	50	27.6	40	25.3	3	15.8
Stairwells	11	6.1	27	17.1	0	0
Basement/roof	1	0.6	1	0.6	0	0
Private dwelling	0	0	1	0.6	0	0
Unused /abandoned building	0	0	1	0.6	0	0
Other Public Venues	**33**	**18.3**	**32**	**19.5**	**4**	**21**
Park	15	8.3	6	3.8	2	10.5
Market	4	2.2	6	3.8	0	0
Dormitory	0	0	4	2.5	0	0
Technical school	1	0.6	1	0.6	0	0
High school	1	0.6	1	0.6	0	0
Other	12	6.6	13	8.2	2	10.5
Transportation Sites	**13**	**7.2**	**5**	**3.2**	**0**	**0**
Metro stop	10	5.5	2	1.3	0	0
Railway stations	2	1.1	2	1.3	0	0
Street Tunnel	1	0.6	0	0	0	0
Public transportation parking lots	0	0	1	0.6	0	0
Missing	0	0	0	0	1	5.3
Total	181	100.0	158	100.0	19	100.0

Overall Results

Table 5 gives the distribution of site types for all three assessment areas. The most common roofed sites were formal bars or taverns and nightclubs (36% of all sites). The most common open sites were stairwells or areas such as streets, yards, or garbage dumps (37% of all sites). Other relatively common site types included parks, metro stops, and markets.

The majority of sites had less than 100 men (78%) and less than 100 women (80%) present at the time of the verification visit (appendix Table B4). Most sites had existed for three years or more (appendix Table B2). Most site representatives reported that evenings were the busiest times on Sunday through Thursday (57%-70%). An even larger proportion reported that evenings were the busiest times on Fridays and Saturdays (82%-84%) (appendix Table B4).

Figure 3. Activities reported by site representatives by assessment area.

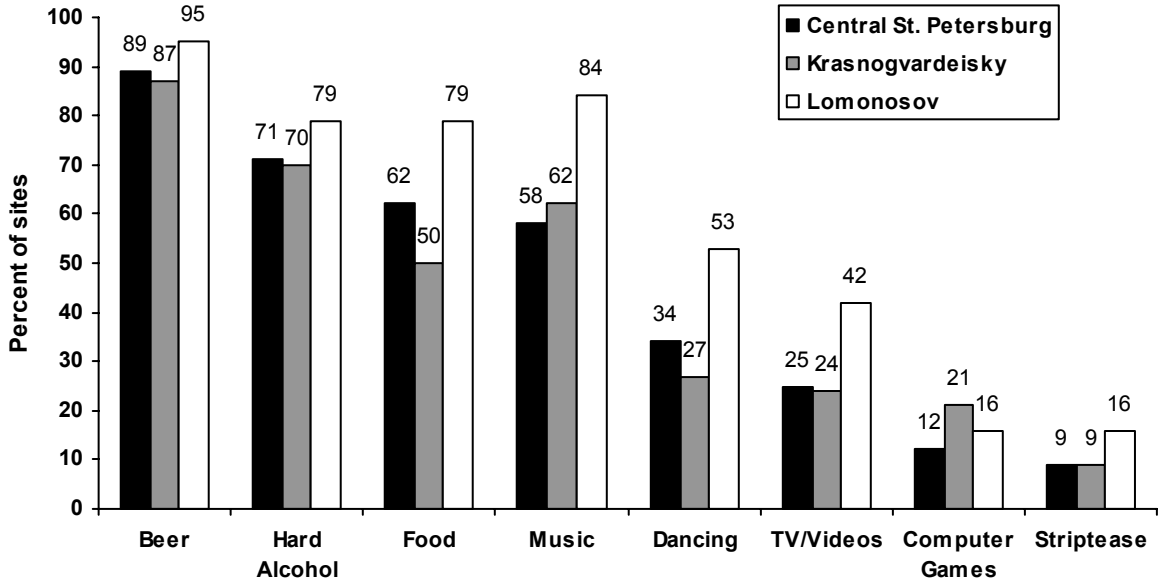


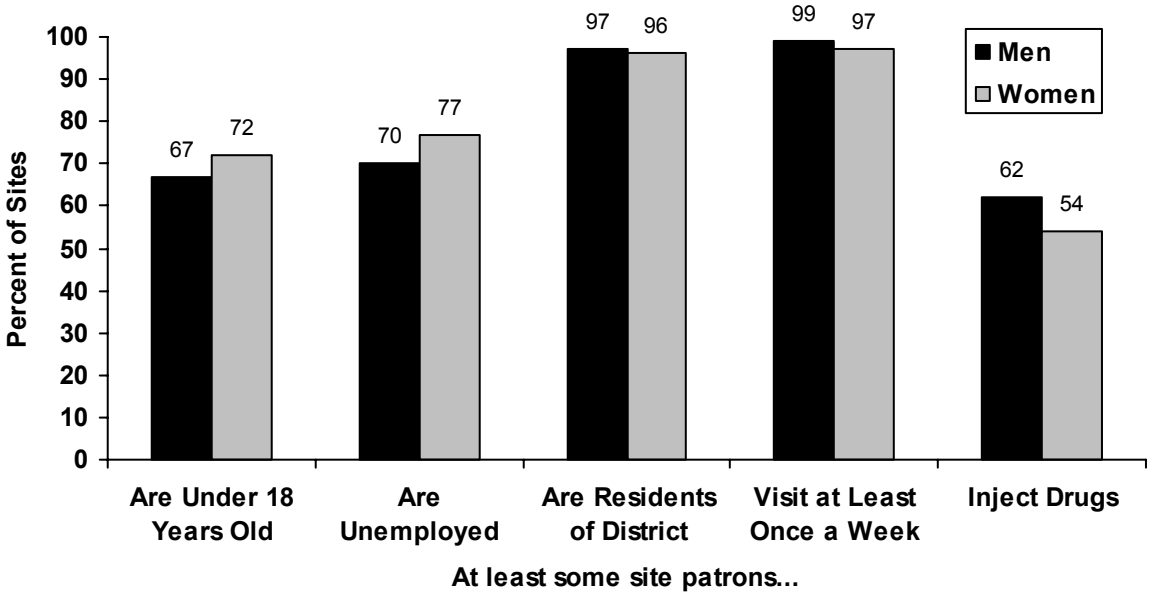
Figure 3 shows the proportions of representatives reporting different activities at their sites. A large proportion reported consumption of beer (89%) and hard alcohol (71%). Most representatives also reported that music and dining took place at their sites. Dancing, television or video viewing, computer games, and striptease shows were reported less frequently, but still took place at a substantial number of sites.

Characteristics of Site Visitors

Site representatives estimated the proportion of site visitors with different characteristics (Figure 4). For example, representatives were asked: "Among men who come here during the busiest times, how many do you think are unemployed?" Response choices were: none, less than half, half, more than half, and all or almost all.

Most representatives reported that at least some visitors were unemployed; more reported unemployed female visitors (77%) than male visitors (70%). About three-quarters reported that the unemployed constituted less than half of site visitors. Representatives at over two-thirds of sites reported that at least some visitors were less than 18 years old. Sites predominated by youth were rare, however; most representatives thought that less than half of their male and female visitors were younger than 18. Nearly all representatives reported that some of their visitors were residents of the assessment area, and most felt that at least half of their visitors lived nearby.

Figure 4. Characteristics of patrons reported by site representatives.



Representatives at almost 100% of the sites reported at least some regular male and female visitors. Almost 60% reported that over half of their male visitors came to the site at least once a week; a similar proportion reported that over half of female visitors did the same. Over 90% of representatives reported alcohol consumption by both men and women. Over two-thirds thought that at least half of male and female visitors drank at the sites. More representatives reported male drug users (62%) than female drug users (54%). Over three-quarters reported that less than half of male and female visitors appeared to be drug users.

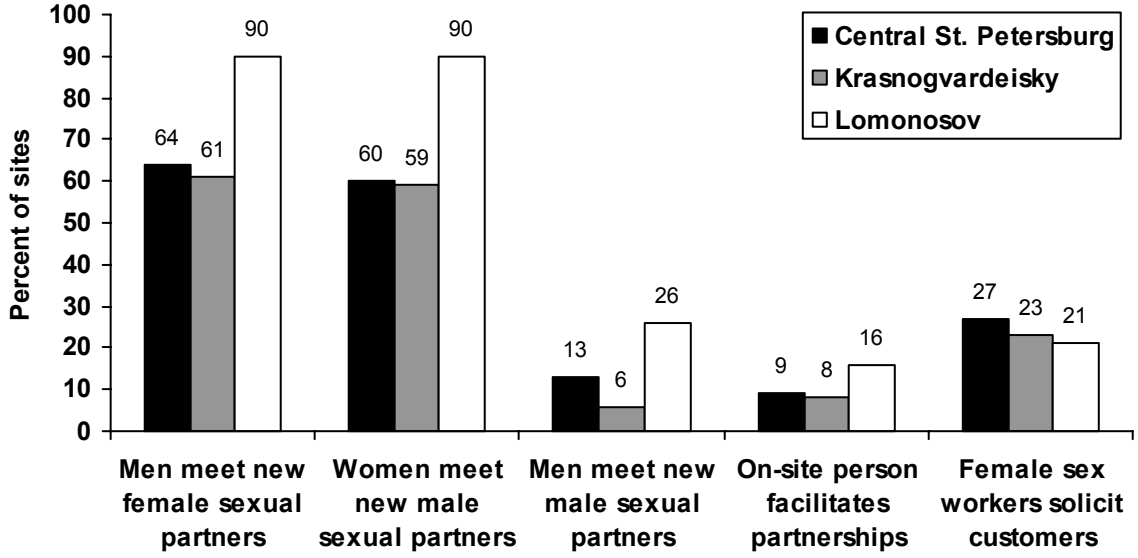
Sexual Partnerships Formed at the Site

Figure 5 shows the proportion of site representatives reporting sexual partnership formation among site visitors. Most representatives said that men formed new heterosexual partnerships at their sites; similar proportions reported that women did so. Proportions of representatives reporting that men formed partnerships with other men at their sites varied by assessment area (range: 6%-26%). Female commercial sex workers were reported at 21%-27% of sites.

Injection Drug Use

Eighty-seven percent of site representatives said that injection drug use was "very common" or "somewhat common" in the area (appendix Table B7). Large proportions of representatives in all three areas said that that they had seen discarded syringes at the site during the three months prior to the interview.

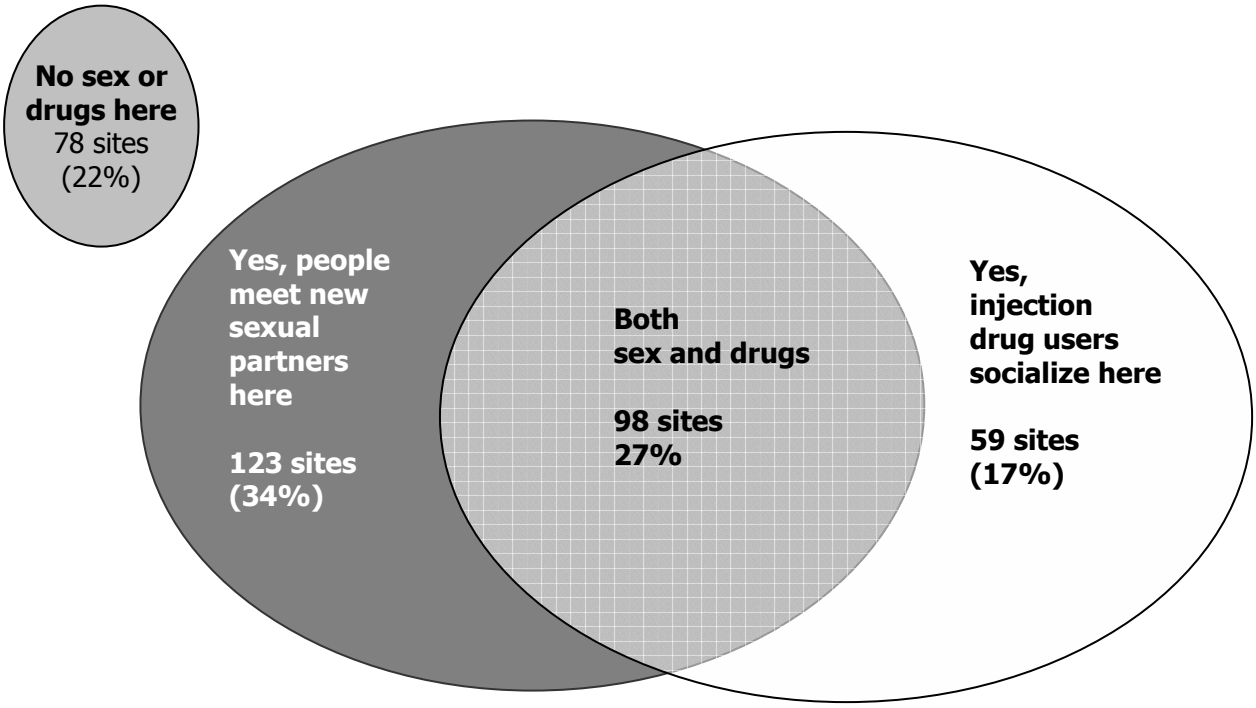
Figure 5. Sexual partnerships reported by site representatives by HTA.



Overlap between Risk Groups

Site representatives were directly asked at the end of the interview if the site was a place where people meet new sexual partners, where drug injectors socialize, both or neither. Only 22% of site representatives reported that neither activity occurred at the site. Over a fourth of site representatives reported that both occur at the site (Figure 6 and appendix Table B7). When responses to specific questions about the characteristics of people who come to the site are taken into account, the proportion of sites where people meet new sexual partners and injection drug users socialize increased to 47% (data not shown).

Figure 6. Percent of sites where the site representative reported that people meet new sexual partners at the site and injection drug users can be found at the site (n = 358).



AIDS Prevention Activities

Ten percent or less of representatives reported that AIDS prevention activities (posters, brochures, etc.) had been available at their sites within the 12 months prior to the interview (Figure 7). Representatives were asked if they would be willing to support such activities in the future. About a fourth of the sites (parks, stairwells, and some streets) were not considered suitable for most AIDS prevention activities.

Condom availability at sites varied by district (Figure 8).

Figure 7. AIDS prevention activities reported by site representatives.

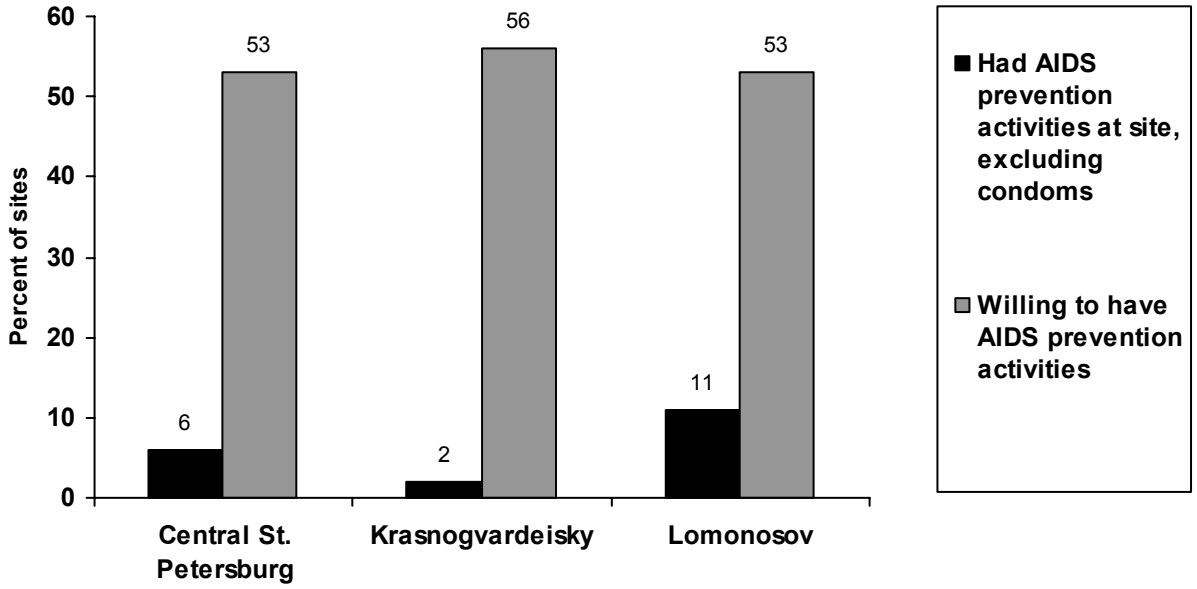
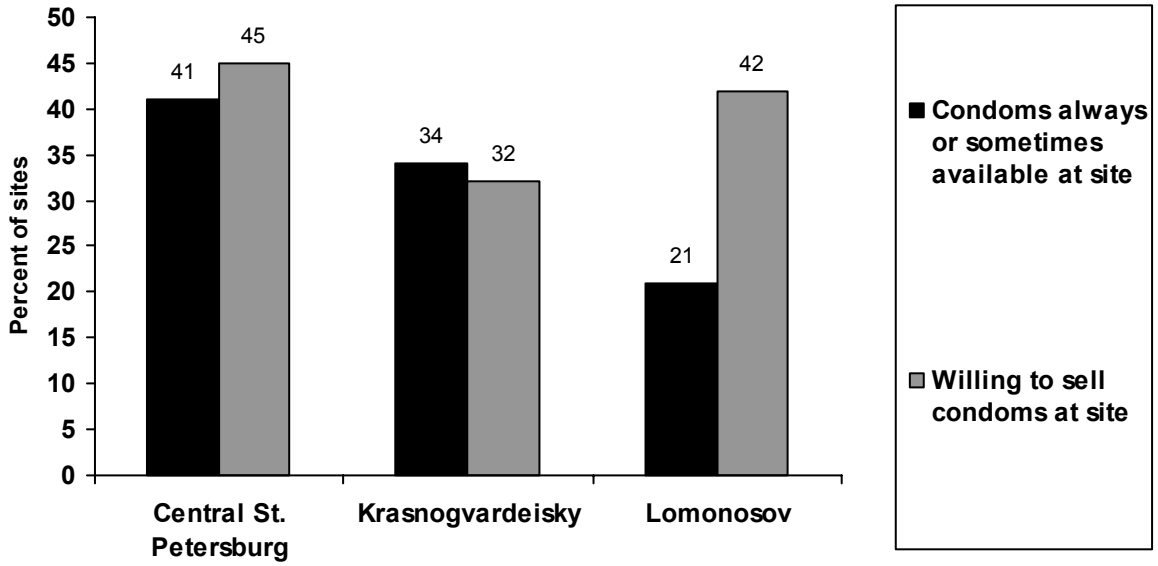


Figure 8. Condom availability reported by site representatives.



Of sites considered appropriate for selling condoms, about two-thirds of the representatives were willing to sell condoms. Condoms were reported available within a 10-minute walk from 85% of the sites.

Relationships between Sites and Transit Routes

Local investigators suspected that sites would be clustered around travel routes and that people who engaged in high-risk behaviors were likely to use the metro or main transit routes to reach sites. If this were true, then interventions at metro stops or main streets would be an efficient way to reach people that frequent sites.

Sites varied by district with regard to accessibility by main transit routes. Approximately 4% of all sites were intimately associated with transit routes; these included metro stops, public transport parking lots, and taxi stands.

Table 6 compares the site activities according to proximity to a metro station in central St. Petersburg and proximity to the main road in Krasnogvardeisky. There were too few sites in Lomonosov to make this comparison. In Krasnogvardeisky, 70% of the 158 sites were within two blocks of the main route, including most of the sites where people meet new sexual partners, men meet men, sex workers solicit, and used syringes were seen nearby. In central St Petersburg, half of the sites were within two blocks of the metro, including 70% of the sites where men meet men and 67% of the sites where sex workers solicit.

Sites were mapped using Global Positioning System units. The maps show that sites are indeed located throughout each area but tend to cluster along more heavily traveled roads.

Table 6. Distribution of sites where the representative reported high-risk activities in relation to main streets and the metro

	Central St. Petersburg				Krasnogvardeisky			
	Within 2 blocks of metro		Not within 2 blocks of metro		Within 2 blocks of main route		Not within 2 blocks of main route	
	N	%	N	%	N	%	N	%
All sites	96	53.0	85	47.0	111	70.3	47	29.8
All sites where:								
men meet women	60	52.2	55	47.8	67	69.8	29	30.2
women meet men	56	51.9	52	48.1	65	69.9	28	30.1
men meet men	16	69.6	7	30.4	6	66.7	3	33.3
third party facilitates	14	82.4	3	17.6	8	66.7	4	33.3
sex workers solicit	32	66.7	16	33.3	21	58.3	15	41.7
used syringes seen	46	54.1	39	45.9	76	71.7	30	28.3

Priority Sites for Interventions

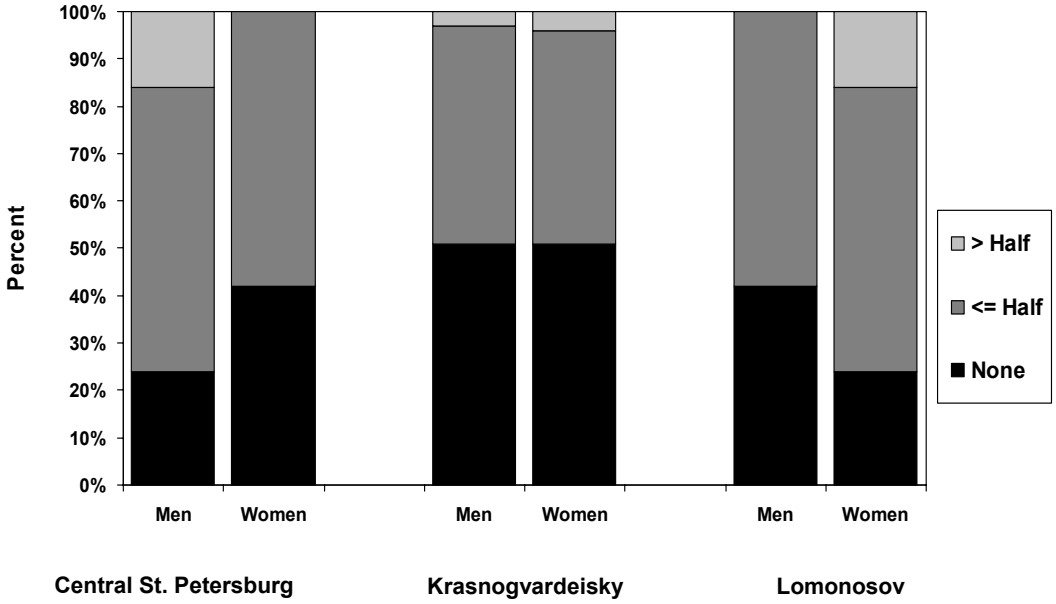
Based on responses from site representatives, a list of priority sites for prevention programs was developed. A site was considered a priority site if: (1) the site representatives reported that over half of their patrons (male or female) were youth, injection drug users, or people seeking new sex partners; or (2) more than 20 community informants reported the site. Table 7 shows the distribution of high-risk sites in relation to main routes and the metro compared with the distribution of all sites. There were not enough sites verified in Lomonosov to conduct a meaningful analysis. Of the 56 priority sites in central St. Petersburg, 59% were within two blocks of a metro station. Of the 77 priority sites in Krasnogvardeisky, 74% were within two blocks of the main road.

Overall, around 60% of representatives reported that some visitors arrived by train or metro, but there were differences in male and female use of mass transit by region (Figure 9).

Table 7. Distribution of priority sites in relation to main streets and the metro

	Central St. Petersburg				Krasnogvardeisky			
	Within 2 blocks of metro		Not within 2 blocks of metro		Within 2 blocks of main route		Not within 2 blocks of main route	
	N	%	N	%	N	%	N	%
All sites	96	53.0	85	47.0	111	70.3	47	29.8
High-risk sites								
Youth	10	50.0	10	50.0	34	79.1	9	20.9
Injection drug users	7	43.8	9	56.3	27	77.1	8	22.9
Seeking new partners	19	67.9	9	32.1	13	65.0	7	35.0
Popular	9	81.8	2	18.2	7	70.0	1	30.0
At least 1 of the above	33	58.9	23	41.1	57	74.0	20	26.0
At least 2 of the above	11	61.1	7	38.9	19	86.4	3	13.6

Figure 9. Use of mass transit reported by representatives in HTAs.



Area-Specific Findings

Central St. Petersburg: 182 Sites — The most common sites in central St. Petersburg were streets, yards, or garbage dumps (28%) and formal bars and taverns (25%). Other relatively common site types included nightclubs, parks, stairwells, and metro stops. Two gay clubs were verified in central St. Petersburg. In general, sites in central St. Petersburg had been in operation longer than sites in the other districts; almost 40% of the sites there had been operating for ten years or more.

Eighty-three percent of representatives thought that injection drug use was "very common" or "somewhat common" in the area, and about half (47%) had seen used syringes at the site in the three months preceding the interview.

Sixty-four percent of site representatives reported that men met new female sex partners at the site; 60% reported that women met new male sex partners at the site. Thirteen percent reported that men met new male sex partners at the site. Over one-quarter (27%) reported that commercial sex workers solicited customers at the site.

In answer to the general question at the end of the interview about whether people meet new sexual partners and whether injection drug users socialize at the site, 22% reported that both occur at the site. However, when the responses to the more specific questions (e.g., whether sex workers solicit, whether men meet male or female sex partners at the site, and whether injection drug users visit the site) were taken into account, the proportion where both occur increased to 47% (Figure 10).

Six percent of representatives reported that HIV prevention activities had taken place at the site during the year preceding the interview. About 40% reported that condoms had always or sometimes been available at the site during the same period. Condoms were available within a 10-minute walk at 89% of sites. Figure 11 shows condom availability in central St. Petersburg. Fifty-three percent of representatives said that they would be willing to have HIV prevention activities at the site, and 45% said that they would be willing to sell condoms.

About half (53%) of all sites in central St. Petersburg were located within two blocks of the metro. Fifty-two percent of the bars, taverns and nightclubs were close to the metro, while 44% of the stairwells and outdoor areas were similarly situated. Sites where the representative reported men met male partners, third parties facilitated partnerships, or commercial sex workers solicited customers were more likely to be within two blocks of the metro. Popular sites, sites where the representative reported that most people sought new sex partners, and sites having at least one or two priority characteristics were also likely to be close to the metro. About three-quarters (76%) of site representatives reported that some men arrived by train or metro, while 58% reported that some women did so. Forty-one percent of the sites where representatives reported that some of their male and female patrons arrived by train or metro (N=145) were not within two blocks of the metro. Site representatives at the 91 street sites were more likely to report that people came to the site to meet new sexual partners AND injection drug users could be found on-site (Figure 12).

Figure 10. Percentage of sites in central St. Petersburg where sex and drugs occur, according to site representatives.

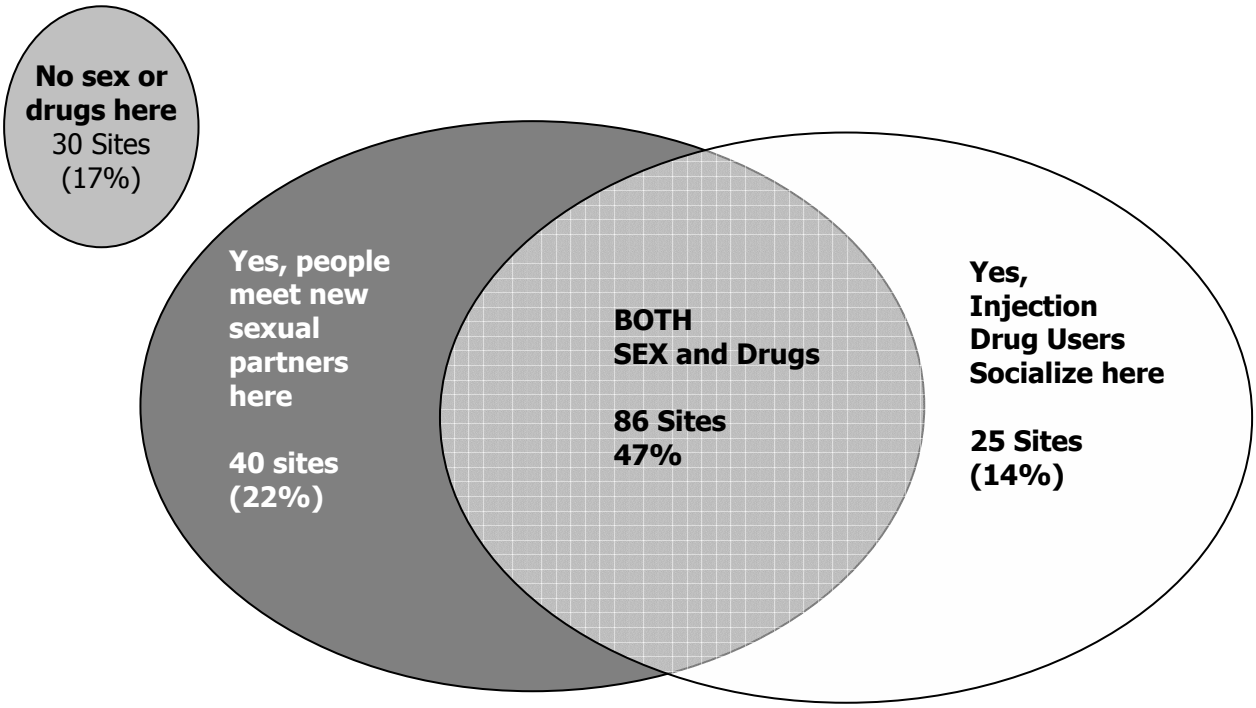


Figure 11. Condom availability in central St. Petersburg.

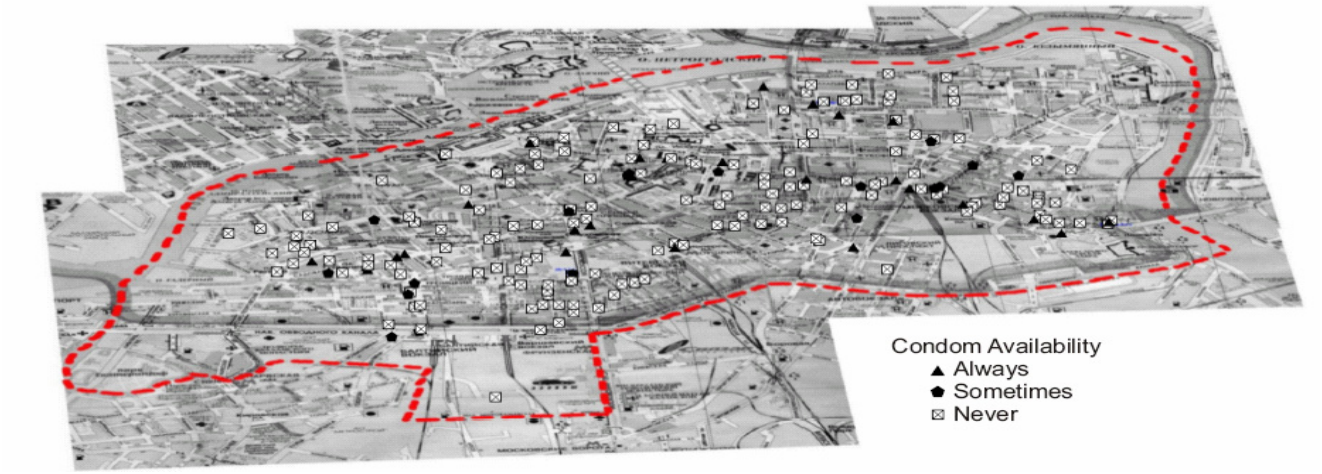
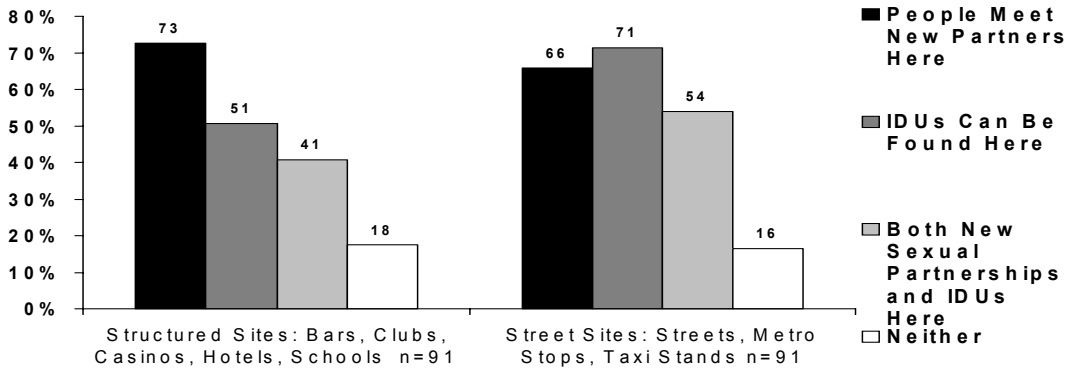


Figure 12. Percent of structured and street sites in central St. Petersburg where people meet new sexual partners or where injection drug users (IDUs) can be found, according to site representatives.



Krasnogvardeisky: 158 Sites — The most common sites in Krasnogvardeisky were formal bars and taverns (27%), streets, yards, and garbage dumps (25%), and stairwells (18%). Ninety-one percent of representatives thought that injection drug use was "very common" or "somewhat common" in the area, and about two-thirds (67%) had seen used syringes at the site in the three months preceding the interview.

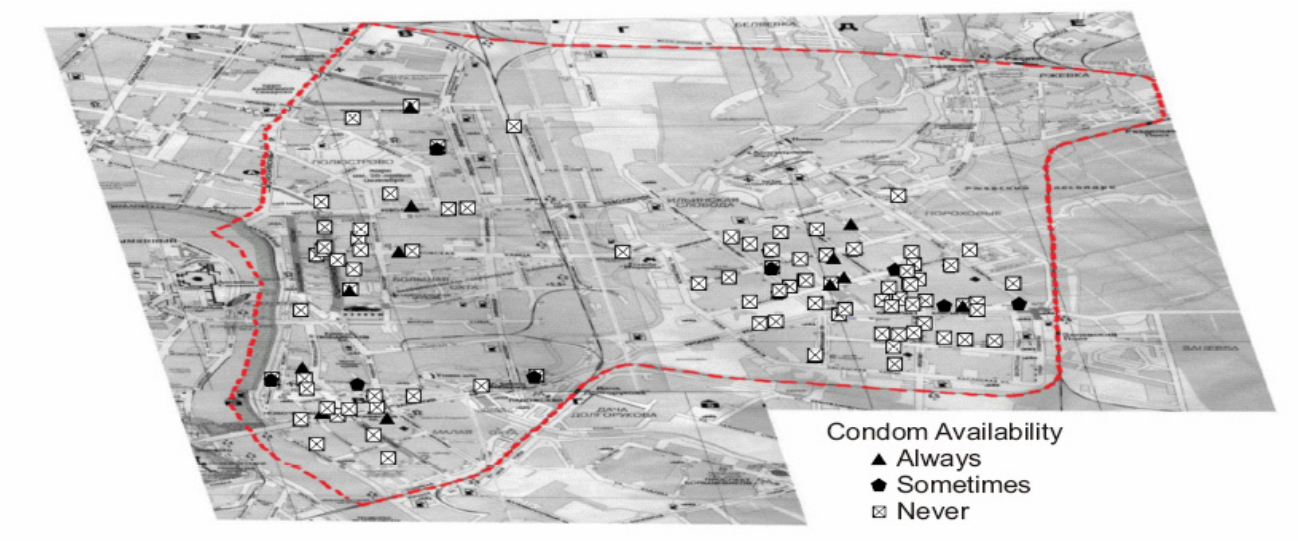
Sixty-one percent of representatives in Krasnogvardeisky reported that men met new female sex partners at the site; 59% reported that women met new male sex partners at the site. Six percent reported that men met new male sex partners at the site. Twenty-three percent reported that commercial sex workers solicited customers at the site.

In answer to the question at the end of the interview about whether people meet new sexual partners and whether injection drug user socialize at the site, 31% reported that both occur at the site. However, when the responses to the more specific questions are taken into account (e.g., whether sex workers solicit, whether men meet male or female sex partners at the site, and whether injection drug users visit the site), the proportion where both occur increases to 48%.

Only 2% of representatives said that HIV prevention activities had taken place at the site during the year preceding the interview.

About 34% of representatives reported that condoms had always or sometimes been available at the site during the same period. Condoms were available within a 10-minute walk at 83% of sites (Figure 13). Fifty-six percent of representatives said that they would be willing to have HIV prevention activities at the site, and 32% said that they would be willing to sell condoms.

Figure 13. Condom availability in Krasnogvardeisky

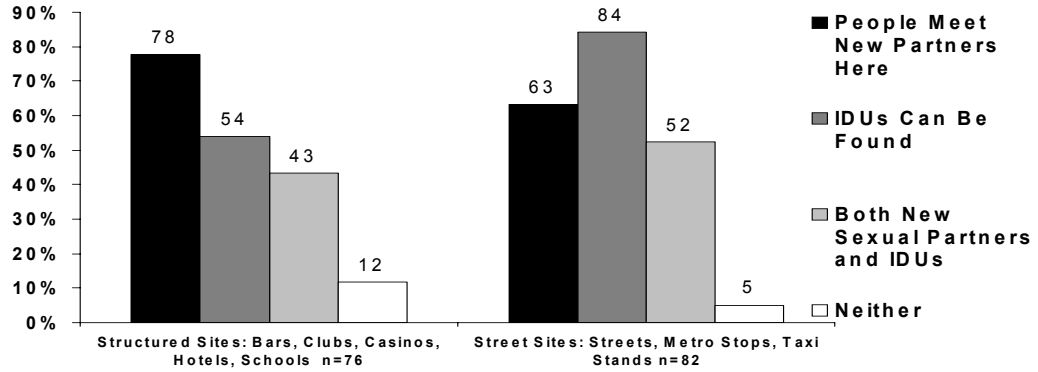


Seventy percent of all sites in Krasnogvardeisky were located within two blocks of a main route. Sixty-seven percent of the bars, taverns, and nightclubs were close to major streets, and 68% of the stairwells and outdoor areas were close to major streets. Sites where representatives reported that commercial sex workers solicited customers were less likely to be within two blocks of a main route. Sites where the representative reported that most people were youth or were injection drug users were more likely to be close to a main route. Sites having at least one or two priority characteristics were also likely to be close to a main route. About half (49%) of representatives reported that some male and some female patrons arrived by train or metro. Twenty-four percent of the sites where representatives reported that some of their male and female patrons arrived by train or metro (N=88) were not within two blocks of a main route.

Site representatives at the 82 street sites (including streets and taxi stands) were more likely to report that people came to the site to meet new sexual partners and that injecting drug users could be found at the site (Figure 14).

Lomonosov: 19 Sites — Lomonosov has a much lower population density than central St. Petersburg and Krasnogvardeisky. There were fewer sites verified in Lomonosov than in the other two assessment areas, so comparisons should be made with caution. The most common sites in Lomonosov were formal bars and taverns (56%). Other common site types included streets, yards, and garbage dumps (17%), and parks (11%). Ninety percent of representatives thought that injection drug use was "very common" or "somewhat common" in the area, and about half (47%) had seen used syringes at the site in the three months preceding the interview.

Figure 14. Percent of structured and street sites in Krosnogvardeisky where people go to meet a new sexual partner or where injection drug users (IDUs) can be found, according to site representatives.

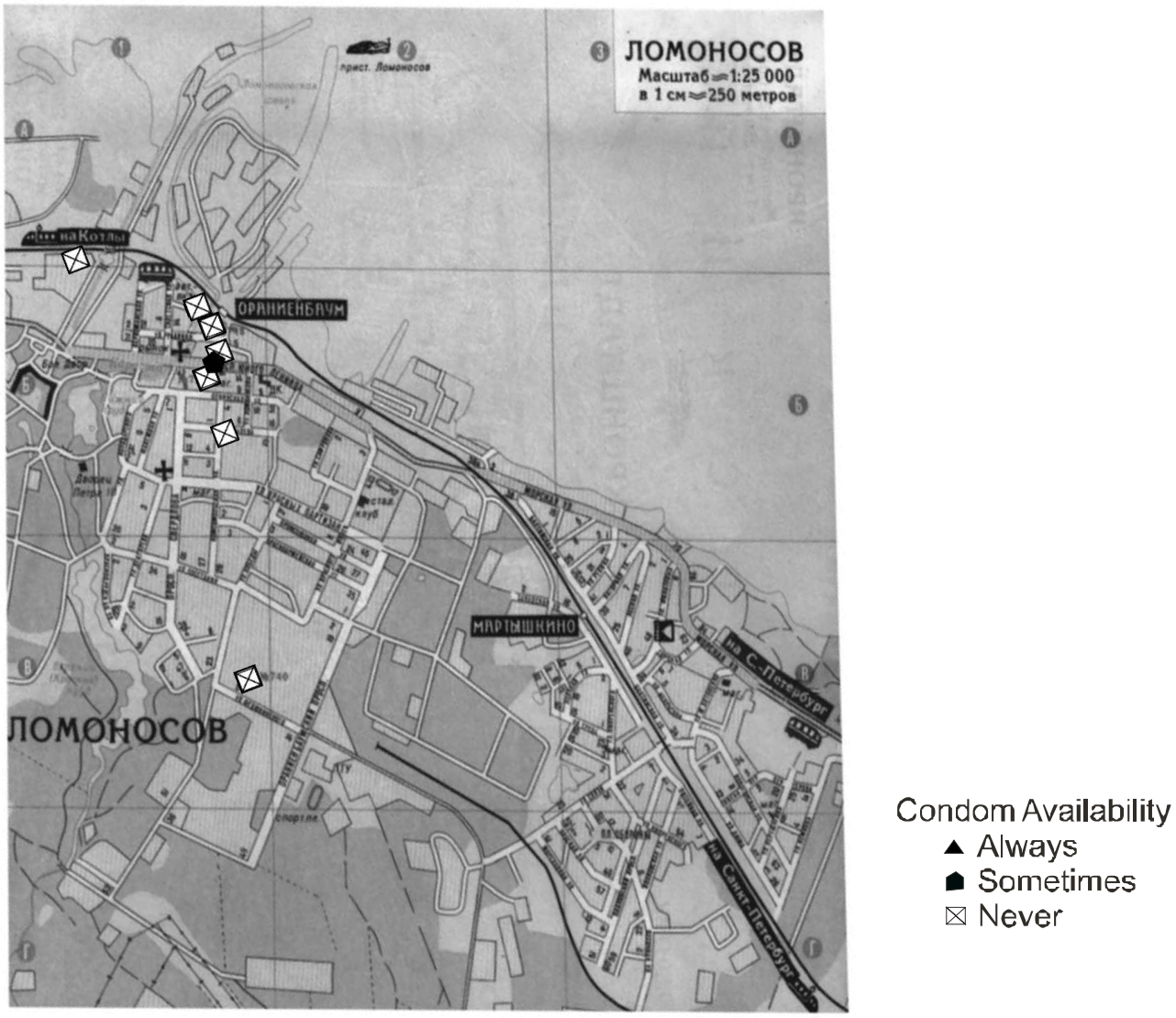


Ninety percent of representatives in Lomonosov reported that men and women met new partners of the opposite sex at the site. Twenty-six percent reported that men met new male sex partners at the site. Twenty-one percent reported that commercial sex workers solicited customers at the site. Ninety-five percent thought that people came to the site to meet new sex partners, to use injection drugs, or to do both.

Eleven percent of representatives said that HIV prevention activities had taken place at the site during the year preceding the interview. About 21% of representatives reported that condoms had always or sometimes been available at the site during this period. Condoms were available within a 10-minute walk at 74% of sites (Figure 15). Fifty-three percent of representatives said that they would be willing to have HIV prevention activities at the site, and 42% said that they would be willing to sell condoms.

About 42% of sites in Lomonosov were within two blocks of a main route. Fifty-eight percent of representatives reported that some male patrons used mass transit, while 76% reported that female patrons did so. There were not enough sites verified in Lomonosov for a more detailed analysis of the distribution of sites in relation to main transit routes.

Figure 15. Condom availability in Lomonosov.



Step 4: What Are the Characteristics of People Socializing at Sites? Interview Findings

Objective

The objective of this step was to obtain information about the demographic, social, and behavioral characteristics of site visitors.

Methods

Individual interviews were conducted at 30 sites in central St. Petersburg, 30 sites in Krasnogvardeisky, and at 10 sites in Lomonosov. Sites were not chosen at random, but were selected by the investigators using the following strategy:

First, three types of sites were excluded:

- if fewer than 25 people were expected to visit during the course of an evening
- if a manager at the site refused to allow on-site interviews with site patrons
- if the site representative reported that people did not meet new sexual partners at the site.

Second, the remaining sites were sorted by type of site and how frequently the site was reported by community informants.

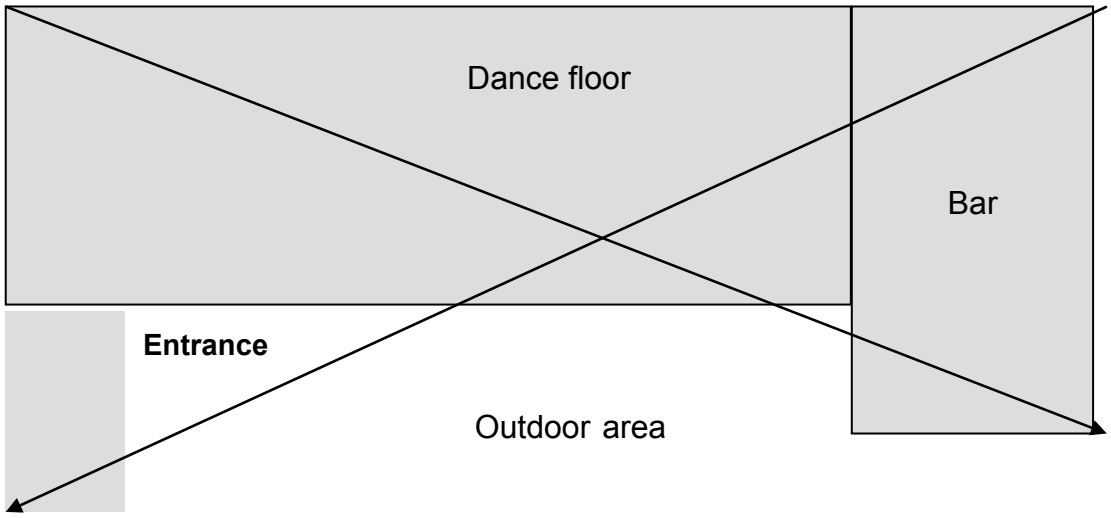
Third, within each type of site, the sites that were most frequently reported were selected as the sites where site patrons would be interviewed.

Random selection of sites would have increased the likelihood that the individuals interviewed were representative of all individuals socializing at all sites. However, random selection would not necessarily have resulted in a sample that included all types of sites and it may have missed the largest and most popular sites where the intervention team anticipated that interventions would be the most useful.

Interviewers worked in teams of at least two people (with at least one man and one woman per team) Interviews were conducted at times when sites were busy, usually in the evenings and on weekends. Interviewers recorded the day, time, and the number of people socializing at the site upon arrival. The goal was to interview 16 men and eight women at each of the selected sites, based on expected male-to-female ratio of two-to-one. If there were fewer than 24 people at a site, everyone was interviewed.

Interviewers attempted to obtain a sample that represented everyone socializing at the site at the time of the visit. They used a selection method that distributed interviews throughout the site and minimized selection of respondents based on convenience. Interviewers reviewed the layout at each site and identified four corners, including any spillover area outside. They drew two imaginary diagonal lines connecting opposite corners of the site to make an "X" (Figure 16). Each interviewer worked one diagonal, approaching people at evenly spaced points to request interviews.

Figure 16. Floor plan of a site, with interviewing paths along the diagonals.



To ensure privacy, interviews were often conducted in another area or outside the site. In these cases, the interviewer returned to his or her imaginary diagonal when the interview was finished and approached a new respondent at the next designated point. This method was always possible to administer, regardless of the size and shape of the site or the number of people present.

Verbal consent and age verification were requested from potential respondents as previously described. If the potential respondent did not give consent, his or her gender was recorded and the interview was terminated. If the respondent gave consent, his or her gender, age, place of residence, years residing at that residence, and employment status were recorded. The respondent was then questioned about the following:

- whether other people meet new sexual partners at the site
- whether the respondent had ever met a new sexual partner at the site
- whether other people who socialize at the site are injection drug users
- frequency of site attendance
- number of recent sexual partners
- number of new recent sexual partners
- condom use with recent sexual partners
- frequency of injection drug use and needle sharing
- whether the respondent has given money or gifts in exchange for sex
- exposure to HIV/AIDS prevention activities.

Respondents were compensated with approximately U.S. $20.

Table 8. Summary of interviews with individuals socializing at sites

	Central St. Petersburg		Krasnogvardeisky		Lomonosov	
	N	%	N	%	N	%
Sites visited	30		30		10	
Granted interview						
Men	458	63.5	408	57.3	149	62.3
Women	261	36.2	304	42.7	89	37.2
Refused interview						
Men	1	0.1	0	0.0	1	0.4
Women	1	0.1	0	0.0	0	0.0
Total	721	100	712	100	239	100

Results

Ten to 15 interviewers performed interviews in each assessment area. Interviews were conducted in June, July, and August of 2002, over a period of nine days in Admiralteisky and Tsentralny, 14 days in Krasnogvardeisky, and two days in Lomonosov. Almost 100% of men and women approached agreed to participate in the study (Table 8).

Overall Results

Sociodemographic Characteristics of Site Visitors — Most visitors were between the ages of 16 and 29 years (Figure 17). In general, female visitors were younger than males. The proportion of women aged 16-to-19 years (36%) was larger than the proportion of men the same age (20%). The proportion of male respondents exceeded the proportion of females in all other age groups.

Figure 18 gives the proportions of site visitors with different self-reported characteristics. These data are consistent with the perceptions of site representatives reported in Step 3 (Figure 4). The proportion of women that were younger than 18 years (17%) was more than twice the proportion of men the same age (7%). Most men and women were fully or partially employed (appendix Table C1). More women (31%) than men (16%) were unemployed. Most men and women who were unemployed were not looking for work (appendix Table C1). Education and place of residence of those interviewed differed by assessment area and will be discussed later.

Most men (64%) and women (62%) reported visiting sites at least once a week, and 25% of men and women said that they visited daily; however, this varied by assessment area.

Social Interactions and Sexual Behavior — Figure 19 shows the proportion of site visitors reporting different social interactions. These data are consistent with the perceptions reported by site representatives in Step 3 (Figure 5). Nearly all men (88%) and women (83%) reported that other people found new sexual partners at the site of the interview. Forty-four percent of the men and 27% of the women said that they had met new sexual partners there themselves. From 13% to 23% of men and 10% to 15% of women had met a new partner at the site within the four weeks prior to the interview (appendix Table C2).

Figure 17. Age distribution of individuals socializing at sites.

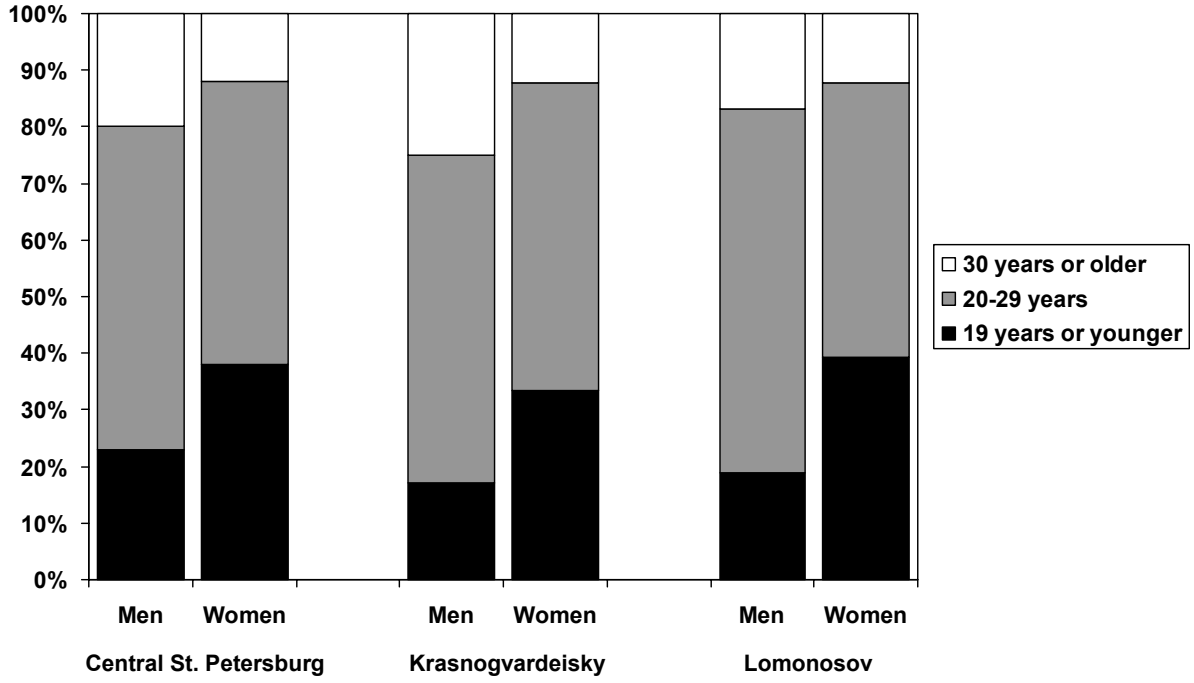


Figure 18. Self-reported characteristics of individuals socializing at all sites.

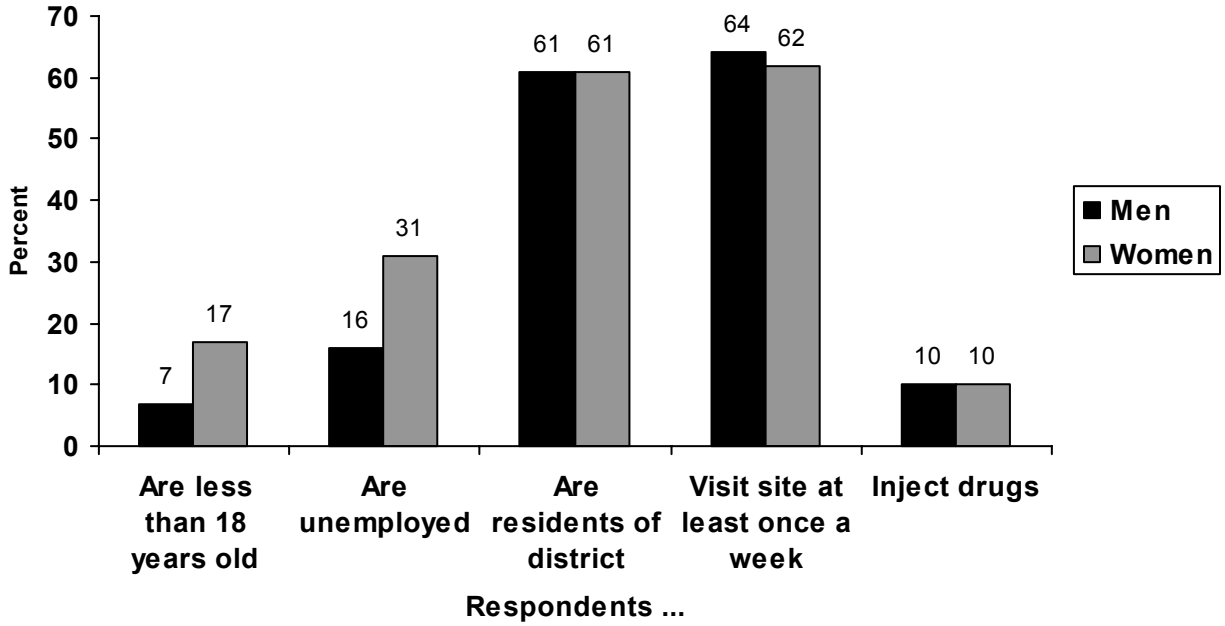
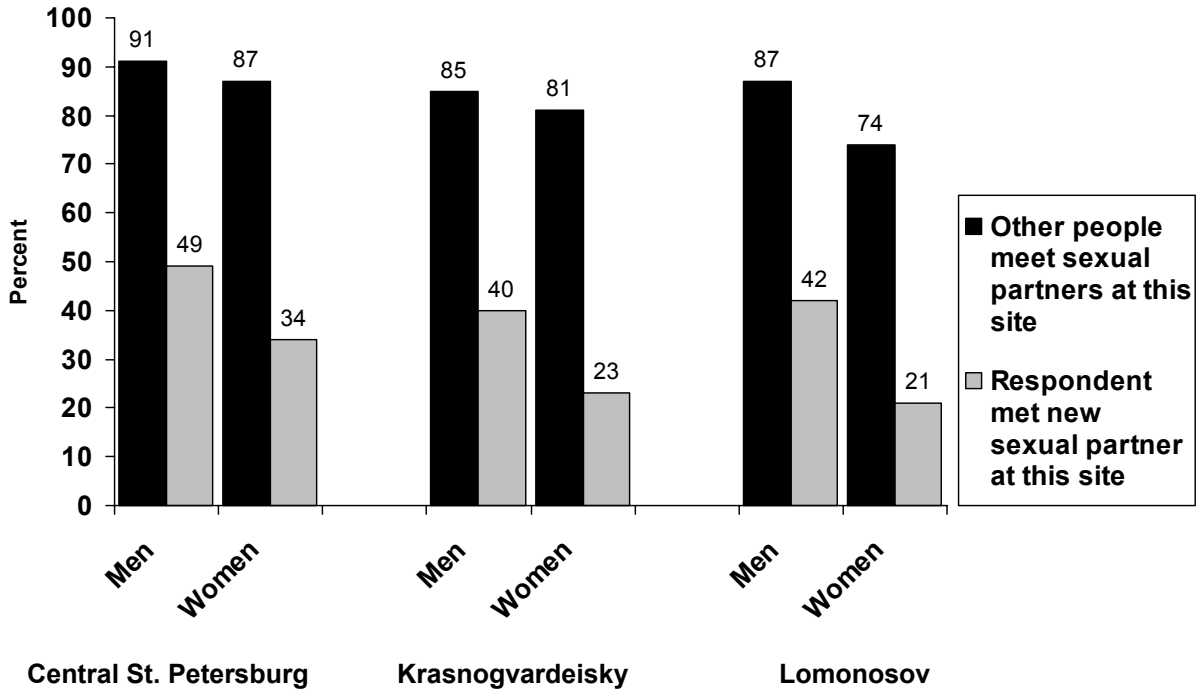


Figure 19. Social interactions reported by individuals socializing at sites by assessment area.



Eighty-eight percent of the men and 81% of the women interviewed reported that they had had a sexual partner during the four weeks prior to the interview (appendix Table C3). Forty-two percent of the men and 58% of the women had had only one partner. Almost half of the men (46%) and about one-quarter of the women (24%) interviewed had had more than one partner during this period. Most men (70%) and women (74%) said that they had a "steady" sexual partner (appendix Table C3).

About half of the men (51%) and about one-third of the women (31%) reported that they had had a *new* sexual partner in the four weeks prior to the interview (Figure 20). Multiple new partnerships were relatively more common in men than in women. Similar proportions of men and women (5%) reported that they had had more than 5 new partners in the four weeks prior to the interview. Curiously, almost no one reported having had more than five new partners in the 12 months prior to the interview (Figure 21). In both men and women, the highest proportion of people reported having had three to five new partners in the preceding 12 months. This proportion was much higher in men (65%) than in women (36%), however.

AIDS Prevention Activities — Almost all of the men (90%) and women (88%) interviewed had used a condom before (Figure 22). In general, men were more likely than women to have used a condom with their last new partner. Men were less likely than women to have attended an AIDS educational session during the three months prior to the interview.

Injection Drug Use — Most men (78%) and women (83%) said that injection drug use was "very common" or "somewhat common" in the assessment areas (Figure 23). The majority of men and women also reported that other people who socialized at the site of the interview were injection drug users. Around 10% of men and women said that they had ever used injection drugs.

However, only a very small proportion of men (2%) and women (5%) reported that they had used injection drugs during the 7 days preceding the interview. The proportions of men and women that reported using injection drugs during the 12 months prior to the interview were only slightly higher. A greater proportion of women identified themselves as injection drug users when compared to men.

Additional Priority Sites — In addition to the priority sites identified using information from the site verification visits, other priority sites were identified based on interviews with people socializing at these sites. Specifically, sites where 50% or more of the men and women interviewed had had a new sex partner in the four weeks preceding the interview were considered priority sites for AIDS prevention programs. Thirteen sites in central St. Petersburg and eight sites in Krasnogvardeisky met this criterium. Eight of the 13 priority sites (62%) in central St. Petersburg were within two blocks of the metro. Seven of the eight priority sites (88%) in Krasnogvardeisky were within two blocks of a main route.

Figure 20. Number of new sexual partners in the last four weeks reported by individuals socializing at all sites.

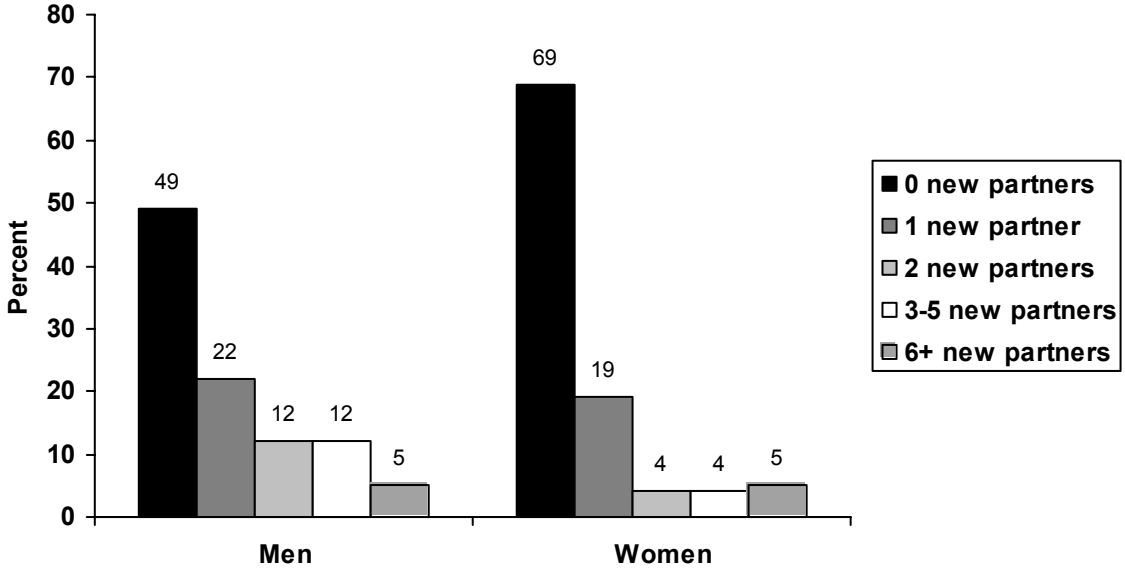


Figure 21. Number of new sexual partners in the last 12 months reported by individuals socializing at all sites.

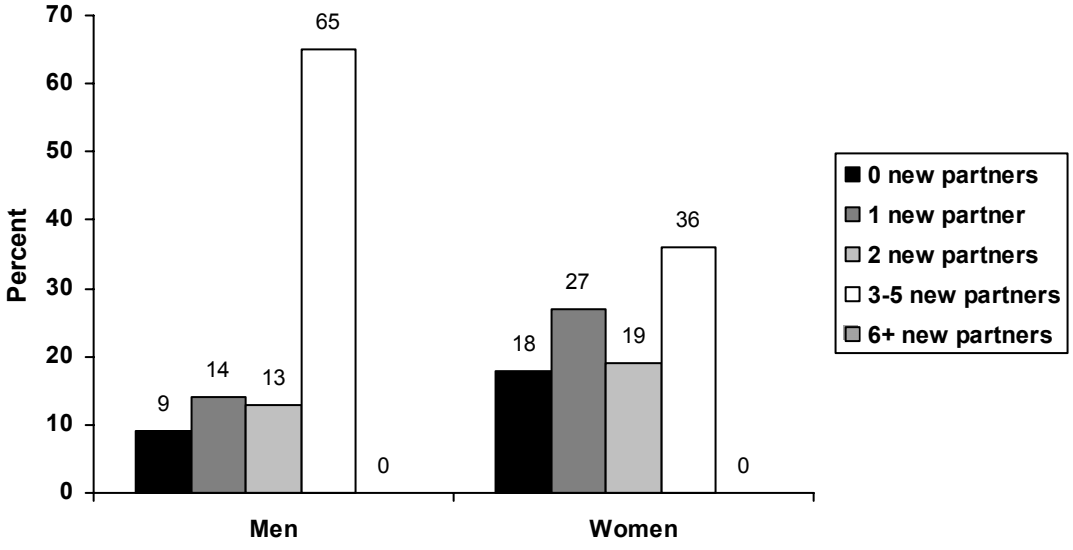


Figure 22. AIDS prevention activities reported by individuals socializing at all sites.

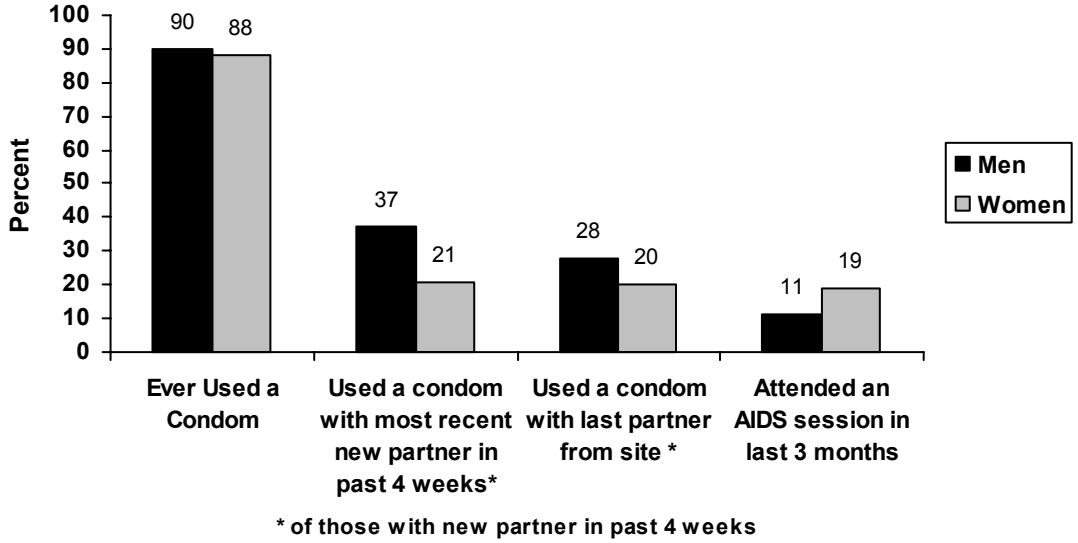
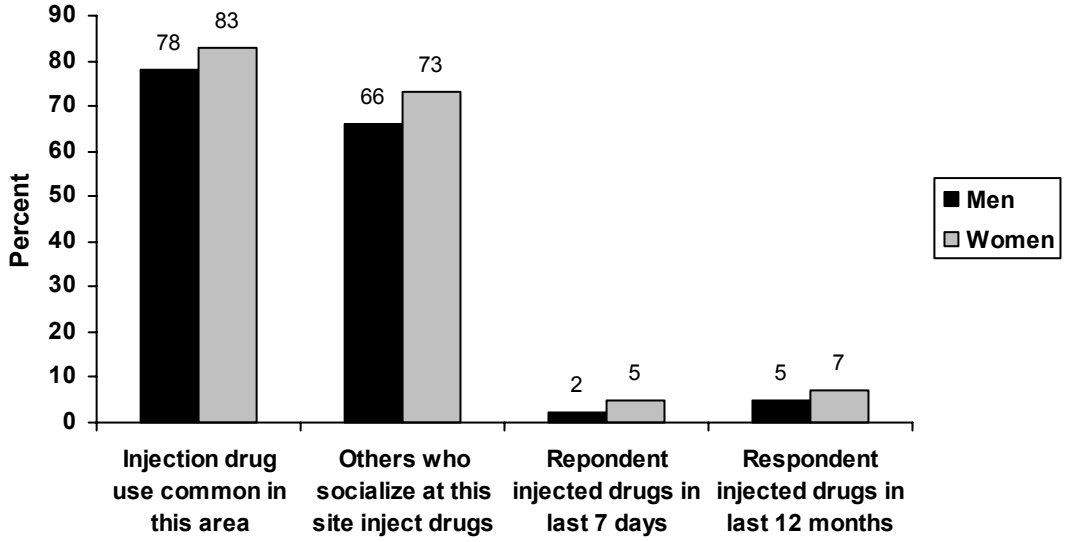


Figure 23. Injection drug use reported by individuals socializing at all sites.



Area-Specific Results

Central St. Petersburg — In central St. Petersburg, most men (80%) and women (88%) interviewed were between 16 and 29 years old. Thirty-eight percent of the women were between 16 and 19 years old, while only 23% of the men were within this age group. Eighteen percent of men and 36% of women interviewed were unemployed; 37% of the men and 45% of the women were students. Approximately 42% of men and 32% of women interviewed in central St. Petersburg reported that they were residents of the assessment area, while 47% of men and 59% of women lived in other districts of St. Petersburg (appendix Table C1). About 5% of the men and women interviewed in central St. Petersburg resided elsewhere in Russia, and a small number of men (2%) were foreigners. Nearly all of the men and women (92%) in this area had lived at their current residences for at least one year, and 41% of men and 45% of women had lived there all of their lives. Most men (68%) and women (61%) reported that they visited the site of interview at least once a week, with 24% of men and 18% of women saying that they visited every day.

Large proportions of men (91%) and women (87%) said that other people came to the site of interview to meet new sex partners. About half of the men (49%) and one-third of the women (34%) interviewed said that they themselves had met new sex partners at the site. Eighty-nine percent of men and 82% of women said that they had had at least one sex partner in the four weeks preceding the interview. About half of the men (51%) and one-third of the women (34%) had had at least one new sex partner during this period. Thirty-two percent of the men and 14% of the women interviewed had had more than one new recent sex partner. Twenty percent of the men interviewed reported that they had exchanged money or gifts for sex in the four weeks preceding the interview. Ten percent of the men reported that they had recently had sex with another man. Similar proportions of men and women (93%) reported that they had ever used a condom. However, only 38% of the men and 23% of the women interviewed reported using a condom with their last new sex partner. Eleven percent of the men and 17% of the women said that they had attended an HIV educational session in the three months preceding the interview.

Approximately three-quarters of the men (75%) and women (77%) interviewed thought that injection drug use was “very common” or “somewhat common” in central St. Petersburg. Large proportions of men (66%) and women (76%) thought that injection drug users socialized at the site of interview. Only 9% of the men and 11% of the women interviewed reported that they had ever injected drugs.

Sites where 50% or more of the men and women interviewed had had a new sex partner in the four weeks preceding the interview were considered high-risk sites for HIV transmission. Eight of the 13 priority sites (62%) in central St. Petersburg were within two blocks of the metro. High rates of new partnership acquisition were reported by men and women at both types of sites. Men and women interviewed at street sites, however, were more likely to have had a new sexual partner than their peers at structured sites and were much more likely to have both had a new sexual partner and injected drugs. Men and women interviewed at street sites were more likely to report injecting drugs. Almost all women who reported injecting drugs also reported having had a new sexual partner in the past four weeks.

***Krasnogvardeisky* —** Three-quarters of the men (75%) and 86% of the women interviewed in Krasnogvardeisky were between 16 and 29 years old. Seventeen percent of the men and 32% of the women were between 16 and 19 years old. Fifteen percent of men and 26% of women interviewed were unemployed; about one-third of the men (31%) and nearly half of the women (46%) were students. Around three-quarters of the men (73%) and women (76%) interviewed were residents of the district, while 26% of men and 21% of women lived elsewhere in St. Petersburg. Almost all of the men (95%) and women (92%) had lived at their current residences for at least one year. Thirty-four percent of men and 18% of women had lived there all of their lives. Approximately two-thirds of men and women (66%) reported that they visited the site at least once a week, with around one-third of men (30%) and women (34%) saying that they visited every day.

Eighty-five percent of the men and 81% of the women said that other people came to the site of interview to meet new sex partners. About 40% of the men and 23% of the women interviewed said that they themselves had met new sex partners at the site. Most men (86%) and women (82%) said that they had had at least one sex partner in the four weeks preceding the interview. About half of the men (52%) and one-third of the women (31%) had had at least one new sex partner during this period. One-quarter of the men (25%) and 13% of the women interviewed had had more than one new recent sex partner. Twenty-seven percent of the men interviewed reported that they had exchanged money or gifts for sex in the four weeks preceding the interview. Less than one percent of the men reported that they had recently had sex with another man.

Similar proportions of men (88%) and women (87%) reported that they had ever used a condom. However, only 36% of the men and 23% of the women interviewed reported using a condom with their last new sex partner. Eleven percent of the men and 22% of the women said that they had attended an HIV educational session in the three months preceding the interview.

Most of the men (77%) and women (84%) interviewed thought that injection drug use was "very common" or "somewhat common" in Krasnogvardeisky. Large proportions of men (65%) and women (69%) thought that injection drug users socialized at the site of interview. Only 11% of the men and 9% of the women interviewed reported that they had ever injected drugs.

Sites where 50% or more of the men and women interviewed had had a new sex partner in the four weeks preceding the interview were considered high-risk sites for HIV transmission. Seven of the eight priority sites (88%) in Krasnogvardeisky were within two blocks of a main route.

High rates of new partner acquisition were reported by both men and women. Men and women interviewed at street sites, however, were more likely to have had a new sexual partner than their peers at structured sites and were much more likely to have both had a new sexual partner and injected drugs.

Men and women interviewed at street sites were more likely to report injecting drugs. Almost all women who reported injecting drugs also reported having had a new sexual partner within the past four weeks.

***Lomonosov* —** Because Lomonosov has a much lower population density than central St. Petersburg or Krasnogvardeisky, there

were fewer sites verified in Lomonosov than in the other two assessment areas. Consequently, comparisons between Lomonosov and other areas should be made with caution. Two-thirds of the men (66%) and 72% of the women interviewed in Lomonosov were between 16 and 29 years old. Eighteen percent of the men and 39% of the women were between 16 and 19 years old. Thirteen percent of men and 31% of women were unemployed. Only 19% of the men and 28% of the women were students. Nearly all of the men (90%) and women (98%) interviewed in Lomonosov were local residents. Almost all men (91%) and women (89%) had lived at their current residences for at least one year, and about half of the men (50%) and women (55%) had lived there all of their lives. Less than half of the men (49%) and women (46%) reported that they visited the site at least once a week, with only 9% of men and 15% of women saying that they visited every day.

Most men (87%) and women (74%) said that other people came to the site of interview to meet new sex partners. About 42% of the men and 21% of the women interviewed said that they themselves had met new sex partners at the site. The majority of men (88%) and women (76%) said that they had had at least one sex partner within the four weeks preceding the interview. Nearly half of the men (48%) and one-fifth of the women (21%) had had at least one new sex partner during this period. Thirty-two percent of the men and 3% of the women interviewed had had more than one new recent sex partner. Fourteen percent of the men interviewed reported that they had exchanged money or gifts for sex in the four weeks preceding the interview. About 1 percent of the men reported that they had recently had sex with another man.

A smaller proportion of women (76%) than men (89%) reported that they had ever used a condom. Thirty-five percent of the men and only 9% of the women interviewed reported using a condom with their last new sex partner. Eight percent of the men and 17% of the women said that they had attended an HIV educational session in the three months preceding the interview.

Most of the men (89%) and women (90%) interviewed thought that injection drug use was "very common" or "somewhat common" in Lomonosov. Large proportions of men (71%) and women (81%) thought that injection drug users socialized at the site of interview. Only 11% of the men and women interviewed reported that they had ever injected drugs.

Step 5: Data Interpretation and Recommendations

Data Interpretation

The PLACE Method Was Acceptable to the Study Populations

The PLACE method is designed to encourage participation. Respondents are not asked to provide their names, addresses, or other identifying information. Criteria for participation eligibility are broad in order to prevent deductive disclosure of identity. The interview questions are not difficult to answer. Interviews are conducted in a discreet manner, and participants are assured of the confidentiality of their responses. Community informants and site representatives are not asked to discuss their personal behavior. People socializing at sites are asked questions about their sexual behavior and injection drug use, but there has been no indication that respondents find these questions offensive.

Over 2,800 people in St. Petersburg participated in this assessment, including 819 community informants, 358 site representatives, and 1,669 people socializing at sites. Refusal rates ranged from 4% to 14% among community informants and from none to 17% among site representatives. There was a negligible number of refusals among people socializing at sites. It would have been possible for people to avoid participating by eluding interviewers, but there is no evidence that this was done. The high level of participation suggests that the method was generally acceptable to those interviewed. It would therefore be feasible to conduct repeat studies in St. Petersburg for monitoring purposes.

Useful for Planning Site-based Prevention Programs

> *The PLACE method provided new and useful information about sites and patrons that can be used to plan site-based prevention programs. Although implementing AIDS prevention activities at the sites will be challenging, there are some features of the sites (stable patronage and site stability) that suggest intervention footholds exist.*

Certain outdoor sites, such as streets, yards, and garbage dumps, were named almost as frequently as formal or structure sites, such as bars and taverns. Other public areas such as stairwells, parks, and metro stops were also frequently named by community informants. It is apparent that site-based intervention strategies should not be limited to traditional social gatherings; however, implementing interventions at nontraditional sites will require creativity and a willingness to visit sites that may be socially undesirable, dangerous, or not readily conducive to a structured approach. For example, many site representatives reported that it would be inappropriate to sell condoms at certain sites.

Most sites had been established in the community for three years or more. It is not surprising that the sites in central St. Petersburg had generally been in operation longer than the sites in the other two assessment areas.

These sites are likely sustained by the high population density in the economic and cultural center of the city. The longevity of the sites is encouraging because this facilitates the implementation and monitoring of interventions.

Consumption of beer and hard alcohol was reported at a very large proportion of sites. This is significant because alcohol has been identified as a barrier to consistent condom use.

In Krasnogvardeisky and Lomonosov, most people socializing at sites were residents of the district. In central St. Petersburg, large proportions of visitors came from other districts, but most site visitors were St. Petersburg residents. Most people socializing at sites had lived at their current residences for over a year, and visited the site of interview at least once a week. Over half of participants had been visiting the site for a year or more. This stable pattern of social behavior would allow many people to be reached by site-based interventions. Moreover, interventions implemented in central St. Petersburg would have a large impact, since they would reach residents of several districts.

Formation of New Sexual Partnerships

> *The reported rates of new sexual partnership formation are extremely high, but the rates appear internally consistent.*

Approximately half of the men and a third of the women interviewed while socializing at a site reported having had a new sexual partner in the past four weeks. It is impossible to validate this estimate. Face-to-face interviews about sexual behavior are generally thought to provide underestimates of sexual partnerships due to respondent unwillingness to report multiple partnerships and commercial sex, but it is possible that in the site environment people overestimated the number of sexual partnerships. It is difficult to believe that the reference period of four weeks posed a serious recall problem. It is also impossible to assess to what extent the reported rate would have been different had a random sample of people from all sites been interviewed. The sites where people were interviewed were expected to have a higher rate of new partnership acquisition than other sites, however, it is difficult to assess whether the extent of new sexual partnership formation was in fact lower at the other sites. In a few PLACE studies, when the rates at "special and popular" sites could be compared with the rates at a random sample of sites, the rates at the special sites were higher, but not twice as high as the rates at the randomly selected sites. It is likely that between 10% and 20% of the patrons at the other 300 sites might have reported at least one new sexual partner in the past four weeks. If a follow-up study is implemented, the rate of new partner acquisition at a random sample of sites should be estimated.

Although the rates reported by people socializing at sites was higher than expected, the findings are consistent with the information reported by the community informants and the site representatives. Every site was reported by at least one key informant to be a place where people meet new sexual partners. Representatives at about 60% of sites reported that people met new sexual partners at the site. Large proportions of men and women socializing reported that other people found new sex partners at the site of interview, and substantial proportions reported that they had done so themselves. The internal consistency between reports from key informants, site representatives, and site

patrons supports the rate of new partner acquisition reported by people at these sites.

Men Who Have Sex with Men

> *The PLACE method revealed sites where men seek male partners.*

Homosexual sex has only been legal in Russia since 1992. Since then, a gay community has emerged in St. Petersburg, but studies suggest that many men seeking men lack knowledge of HIV risk factors and engage in risky sexual behavior.[10-12] Furthermore, a 2002 study indicates that most men seeking men in St. Petersburg are bisexual and may therefore facilitate transmission of HIV into heterosexual populations. The study of men attending gay clubs in St. Petersburg found that 80% had ever had female sexual partners and almost 40% had had female partners in the preceding three months.[12] The same study also found that commercial sex work is common among men seeking men in gay clubs. Almost one-quarter of men surveyed reported that they had exchanged sex for money or goods. These men had high rates of new partnership formation with both men and women.

There are now at least five gay clubs in St. Petersburg; two of them were included in our study, both in central St. Petersburg. This may be one reason why men reported homosexual activity more frequently in central St. Petersburg than in the other two assessment areas.

Commercial Sex

> *Commercial sex is available in St. Petersburg, although it is illegal.*

Central St. Petersburg had the highest proportion of sites reporting commercial sex (27%). However, even in Krasnogvardeisky and Lomonosov, over 20% of site representatives reported that commerical sex workers solicit clients at the sites. Commercial sex is undoubtedly underreported. High proportions of men in each district reported having paid for sex within the past four weeks. This ranged from 14% in Lomonosov to 27% in Krasnogvardeisky. This finding dispels the myth that commerical sex is concentrated in the downtown central districts of large cities like St. Petersburg. The suburban areas also have substantial commerical sex. Commercial sex workers require focused, thoughtful intervention programs that include condom promotion, distribution, and support groups for leaving sex work. Prevention resources cannot be exclusively focused on commercial sex workers, however, as doing so will miss the majority of new sexual partnerships. Given the high rate of new partner acquisition among people socializing at sites, it is likely that most new infections are acquired through social networks, not commercial sex.

Injection Drug Use

> *Injection drug use was widespread.*

The prevalence of HIV among injection drug users was found to be 56% in one study, and about three-quarters of those tested were not aware that they were infected.[6] Most officially reported cases of HIV infection have been associated with injection drug use, but drug users also engage in risky sexual behavior. Russian injection drug users are young compared to Western users. They are likely to be sexually active, to have large numbers of sex partners, and to have unprotected sex.[4] One study found that over 40% of users had shared needles in the last month, and that 36% had had multiple sex partners during the same period.[4]

In our study, injection drug use was perceived to be common by a large proportion of key informants, site representatives, and people socializing at sites. Large proportions of men and women said that other people at the sites used injection drugs, but few admitted doing so themselves. Given the universal perception that injection drug use was common in the assessment areas, it seems likely that people were underreporting their own drug use. This may be due to the fact that acknowledging drug use is a socially undesirable response or because participants feared arrest. Under a July 2002 law, suspected injection drug users can be arrested, subjected to involuntary drug testing, detained for up to 15 days, and fined.

Women were slightly more likely than men to report injection drug use in our study, even though it is estimated that 70% of users are men.[16] This may be because our sample was not representative of all injection drug users. Female injection drug users may be overrepresented at sites where people seek new sex partners if they intend to trade sex for drugs.

One-third of representatives reported that both injection drug users and people seeking new sex partners socialized at their sites. The overlap of these two risk groups indicates that injection drug users are another important bridge population for HIV transmission. HIV prevention interventions for injection drug users, such as needle exchange programs, must therefore also emphasize reduction of risky sexual activities.

Self-Reported Condom Use

A 2002 study found that 70% of sexually active injection drug users had had unprotected vaginal intercourse during the preceding month.[4] Other studies have found low rates of condom use in adolescents and in the general population of St. Petersburg.[3,7]

In our study, over 60% of men and women (except women in Lomonosov) reported using a condom with their most recent new partner. It is possible that people over-reported condom use. Commercial sex workers often do not have the social leverage to insist that their clients use condoms, or they make more money for a sex act performed without a condom.[8] Alcohol and injection drug use, often found at these sites, can also be barriers to condom use for both men and women. If a follow-up study were conducted, special effort should be taken to assess the validity of the self-reported condom use data.

Transit-Based Interventions

> *Transit-based interventions would be effective.*

Interventions based on main transit routes would be effective in both central St. Petersburg and Krasnogvardeisky, for different reasons. Most sites were within two blocks of main transit routes in Krasnogvardeisky. Sites where representatives reported large numbers of young patrons or injection drug users were associated with main routes. Most sites where over half of the men and women socializing reported a new sex partner in the four weeks preceding the interview were within two blocks of a main route.

Half of the sites in St. Petersburg were also within two blocks of the metro, including most of the priority sites. Many site representatives reported that the metro was important in site accessibility. Most sites where representatives reported men seeking

men and commercial sex work were within two blocks of the metro, and nearly three-quarters of site representatives in this area reported that some male patrons arrived by train or metro. Most sites where over half of the men and women socializing reported a new sex partner in the four weeks preceding the interview were within two blocks of the metro.

The site distribution with regard to transit routes was similar for both the most common roofed sites, such as formal bars and taverns, and the most common open sites, such as outdoor areas or stairwells. Interventions based on main transit routes would therefore be a good way to reach people who seek new sex partners at open sites, where providing educational materials would be impractical.

We used geographic proximity to main transit routes to determine the importance of mass transit in site accessibility. However, some of the sites where representatives reported that their patrons arrived by train or metro were not close to main transit routes. This indicates that some patrons are using mass transit to reach sites that are some distance away from transit stops. The impact of interventions implemented at train stations or metro stops is therefore not limited to people visiting sites in the immediate vicinity. If the definition of a metro-important site were changed to include those sites where representatives reported that over half of their male or female patrons arrived by train or metro, then we would catch more of the metro-important sites with our interventions.

Sources of Bias

The most common community informants were youth, market and street vendors, the homeless, HIV outreach workers, and health care providers. These social positions and occupations made informants knowledgeable about local social networks. It is possible that some sites in the community were missed, but they are likely to be small or private sites. Developing a list of sites from many informants reduced reliance upon any single individual and minimized the likelihood that important sites were missed.

We expected that some site representatives would be reluctant to report illegal or socially unacceptable activities, such as injection drug use or commercial sex. Interviewers assured respondents that information about the site would not be provided to the city authorities. Significant underreporting of activities such as injection drug use or commercial sex does not appear to have occurred. The extent to which these activities were reported appears quite substantial.

The sites where patrons were interviewed were not selected at random. The people interviewed therefore do not constitute a representative sample of all of the people socializing at reported sites. Those who did participate may not have accurately reported their sexual behavior, introducing self-presentation bias. Participants may have been unwilling to report multiple sexual partners, payment for sex, and unprotected sex. It is also possible that people over-reported their sexual behavior. Interviews occurred at sites where people go to meet new sexual partners. In this context, some participants may have exaggerated their sexual activity. The direction and extent of self-presentation bias is difficult to assess.

Despite the problems with self-reporting of sexual activity, the internal consistency between reports from key informants, site representatives, and site patrons is strong evidence that people socializing at these

sites have a high rate of new partner acquisition. Key program indicators (for example, whether people seek new sex partners at sites, condom availability, and injection drug use) are derived primarily from key informant and site representative interviews and only secondarily from site patron interviews.

Recommendations

AIDS prevention programs need to reach people at the hundreds of sites where people seek new sexual partners in these three districts of St. Petersburg. The sites vary in size, type and characteristics of patrons. Consequently, a variety of approaches will be required to reach patrons at these sites. All approaches should be youth-friendly approaches as youth frequent almost every type of site.

Approximately 350 sites were located and characterized in the three districts. Both indoor sites, such as bars and taverns, and outdoor sites, such as streets, yards, and garbage dumps, were common. Sites ranged from having fewer than 10 patrons to over 200 patrons. Most sites had been in existence for several years. Beer and alcohol consumption were reported at a very large proportion of sites. The majority of site visitors were between 16 and 29 years old, and the women tended to be younger than the men.

AIDS prevention messages should focus on the risk of acquiring HIV from sexual contact without a condom. People interviewed at sites report extremely high rates of new sexual partnership formation and inconsistent condom use.

Community informants, site representatives, and people socializing at sites all reported that people met new sex partners at sites. About half of the men and one-third of the women socializing at a subset of sites had had at least one new sex partner in the four weeks preceding the interview. About 20% of men and 10% of women interviewed at 70 sites had found a new sex partner at the site during this period. About one-fifth of men reported that they had paid for sex in the 4 weeks prior to the interview.

Although it may not be possible to intervene at all sites, the priority sites identified in this report should be targeted for intervention as soon as possible. Health information blitzes at sites along transportation routes could be easily mounted and would reach critical populations. Sites clustered around transportation routes, particularly in Krasnogvardeisky where 70% of sites were within two blocks of the main route. Interventions at sites that cater to mobile populations have the advantage of reaching people from all over the city.

Over half of all sites and over three-fourths of priority sites were close to the main street in Krasnogvardeisky and Lomonosov or to the metro stops in central St. Petersburg. Sites in central St. Petersburg had more visitors from other districts, and this was the only assessment area where foreigners were interviewed.

Injection drug use is universally perceived to be common in St. Petersburg. Users socialize at sites where new sexual partnerships are formed. The sites identified in this study serve as potential points for HIV transmission between injecting drug users and people with many new sexual partners. The AIDS

prevention program in St. Petersburg would be well served to target these sites for harm-reduction programs to reduce the likelihood of transmission via needles and for "sexual harm-reduction programs" to reduce HIV transmission via unprotected sex.

Community informants, site representatives, and people socializing at sites all reported that injection drug use was common in the assessment areas. Between one-half and two-thirds of site representatives had seen used syringes at their sites. Most visitors reported that injection drug users socialized at the site of interview.

Condoms are not consistently available at most sites. Most people had used condoms before, but were not always using them with new partners. St. Petersburg needs an aggressive condom promotion program targeting youth, sex workers, sex worker clients, and injecting drug users. These people can be reached at the sites identified in this study.

Most sites did not have condoms available, but many sites perceived as feasible for condom sales were willing to sell condoms. About 90% of men and women had used a condom before, but only about one-third of men and one-fifth of women had used a condom with their last new sex partners.

Conclusion

The PLACE method identified a network of sites where residents of St. Petersburg go to meet new sexual partners and where injection drug users socialize. Representatives at a substantial proportion of sites were supportive of HIV interventions. About half reported that they would be willing to have an AIDS prevention program at their site, and around 30% to 40% reported that they would be willing to sell condoms. Because most sites are well established in the community and many patrons visit frequently, site-based interventions could reach a large number of people in a high-risk population. Site-based interventions also have the advantage of reaching individuals at a critical time in condom use negotiation. Program planners will need to think creatively to overcome the challenges of reaching people that socialize at public sites; one possible solution is to implement interventions associated with main transit routes. Site-based HIV interventions within this sexual network are feasible and would have a large impact on HIV incidence in this population.

References

1. Kalichman SC, Kelly JA, Sikkem KJ, Koslov AP, Shaboltas A, Granskaya J. The emerging AIDS crisis in Russia: review of enabling factors and prevention needs. *Int J STD AIDS* 2000;11(2):71-75.

2. United Nations Programme on HIV/AIDS (UNAIDS). *AIDS Epidemic Update*. Geneva: UNAIDS; 2002.

3. Amirkhanian YA, Kelly JA, Issayer DD, et al. AIDS knowledge, attitudes, and behaviour in Russia: results of a population-based, random-digit telephone survey in St. Petersburg. *Int J STD AIDS* 2001;12(1):50-57.

4. Somlai AM, Kelly JA, Benotsch E, et al. Characteristics and predictors of HIV risk behaviors among injection-drug-using men and women in St. Petersburg, Russia. *AIDS Educ Prev* 2002;14(4):295-305.

5. United Nations Programme on HIV/AIDS (UNAIDS). Epidemiological fact sheets on HIV/AIDS and sexually transmitted infections: Russian Federation [fact sheet]. Geneva: UNAIDS; 2002.

6. Rhodes T, Lowndes C, Judd A, et al. Explosive spread and high prevalence of HIV infection among injecting drug users in Togliatti City, Russia. *AIDS* 2002;16(13):F25-F31.

7. Amirkhanian YA, Tiunov DV, Kelly JA. Risk factors for HIV and other sexually transmitted diseases among adolescents in St. Petersburg, Russia. *Fam Plann Perspect* 2001;33(3):106-112.

8. Karapetyan AF, Sokolovsky YV, Araviyskara ER, Zvartau EE, Ostrovsky DV, Hagan H. Syphilis among intravenous drug-using population: epidemiological situation in St. Petersburg, Russia. *Intern J STD AIDS* 2002;13(9):618-623.

9. Aral SO, St. Lawrence JS. *The Ecology of Sex Work and Drug Use in Saratov Oblast, Russia.* Atlanta, GA: Centers for Disease Control and Prevention; 2002.

10. Amirkhanian YA, Kelly JA, Kukharsky AA, et al. Predictors of HIV risk behavior among Russian men who have sex with men: an emerging epidemic. *AIDS* 2001;15(3):407-412.

11. Kelly JA, Amirkhanian YA, McAuliffe TL, et al. HIV risk behavior and risk-related characteristics of young Russian men who exchange sex for money or valuables from other men. *AIDS Educ Preven* 2001;13(2):175-188.

12. Kelly JA, Amirkhanian YA, McAuliffe TL, et al. HIV risk characteristics and prevention needs in a community sample of bisexual men in ST. Petersburg, Russia. *AIDS Care* 2002; 14(1):63-76.

13. Wasserheit JN, Aral SO. The dynamic topology of sexually transmitted disease epidemics: implications for prevention strategies. *J Infect Dis* 1996;174(Suppl 2):S201-S213.

14. MEASURE *Evaluation*, Carolina Population Center, University of North Carolina at Chapel Hill. *PLACE: Priorities for Local AIDS Control Efforts. A Pilot Study of the PLACE Method in a Township in Cape Town, South Africa.* TR-02-10. Chapel Hill, NC: MEASURE *Evaluation*; 2002.

15. MEASURE *Evaluation,* Carolina Population Center, University of North Carolina at Chapel Hill. A new tool to focus and monitor AIDS prevention efforts: the PLACE method. *MEASURE* Evaluation *Bulletin* 2002;(4):1-46.

16. Ostrovsky D. Program of HIV/AIDS prevention for drug addicts in St. Petersburg, Russia. Presented at the International Conference on Harm Reduction, Geneva, Switzerland, March 1999.

Appendix 1: Additional Tables

Additional tables are arranged under the following categories:

- **A Tables** provide key informant data;
- **B Tables** give site verification data; and
- **C Tables** offer data from individuals socializing at sites.

A Tables – Key Informant Data

Table A1. Summary of key informant interview results, St. Petersburg PLACE assessment 2002

	Central St. Petersburg	Krasnogvardeisky	Lomonosov
Field work			
Number of days of key informant interviewing	9 days	9 days	1 day
Number of interviewers	11	12	10
Number of Key informant reports	1846	1787	81
Number of reports of sites inside area	1258	1095	81
Number of reports of sites outside area	588	692	0
Number of Key Informants who refused	35	18	3

Table A2. Self-reported characteristics of key informants, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men (n=273)	Women (n=125)	Men (n=223)	Women (n=177)	Men (n=12)	Women (n=7)	Men (n=508)	Women (n=309)
	%	%	%	%	%	%	%	%
Type of key informant								
Taxi driver	0.7	0.8	5.0	0	0	0	2.6	0.3
Public transport driver	1.8	0	1.4	0	0	0	1.6	0
Sex worker	0	0	0	2.3	0	0	0	1.3
Injection drug user	0.4	0	0	0.6	0	0	0.4	0.3
CBO/NGO staff and associates	0.7	0.8	3.6	6.8	0	0	2.0	4.2
Police officer	2.2	.8	0.9	1.1	8.3	0	1.6	1.0
Health care /pharmacy worker	0.7	3.2	1.4	5.1	0	0	1.0	4.2
Youth	55.3	70.4	53.6	49.7	58.3	85.7	54.5	58.9
Market seller/street vendor	2.9	2.4	6.3	18.6	25.0	14.3	4.9	12.0
Homeless/unemployed	6.6	2.4	5.9	2.3	0	0	6.1	2.3
Foreigners	7	0	1.4	1.1	0	0	1.0	0.7
Street cleaners	1.5	8	0.9	1.1	0	0	1.2	1.0
Dormitory residents	7	0	2.3	0	0	0	1.4	0
Futbol fans	5.1	0	1.4	0	0	0	3.4	0
Other	20.2	17.6	16.2	11.3	8.3	0	18.1	13.6
Missing	0.4	0	0	0	0	0	0.4	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Age groups								
<=15	0	0	0	0	0	0	0	0
16-19	26.0	43.2	19.8	29.9	25.0	57.1	23.2	36.0
20-24	35.5	32.8	42.4	32.2	50.0	42.9	38.8	32.7
25-29	18.0	9.6	15.3	18.1	25.0	0	17.1	14.2
30-34	9.5	6.4	13.9	5.7	0	0	11.2	5.8
35-39	7.0	2.4	3.2	6.2	0	0	5.1	4.5
>=40	3.6	5.6	5.4	7.9	0	0	4.3	6.8
Missing	0.4	0	0	0	0	0	0.4	0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table A2. Self-reported characteristics of key informants, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men (n=273)	Women (n=125)	Men (n=223)	Women (n=177)	Men (n=12)	Women (n=7)	Men (n=508)	Women (n=309)
Opinion on how common injection drug use is in the area								
Very common	70.6	76.8	70.3	76.3	58.3	71.4	70.1	76.4
Somewhat common	14.3	8.8	12.6	12.4	25.0	28.6	13.8	11.3
Not very common	14.3	13.6	13.5	6.2	16.7	0	14.0	9.1
Does not occur in district	0.7	0.8	3.2	5.1	0	0	1.2	3.2
Missing	0.4	0	0.5	0	0	0	0.4	0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sites reported by key informants								
1-2	3.7	5.6	9.9	6.8	25.0	14.3	6.9	6.5
3-4	30.8	28.0	35.9	37.9	41.7	57.1	33.3	34.3
5-6	65.6	66.4	54.3	55.4	33.3	28.6	59.8	59.2
Missing	0	0	0	0	0	0	0	0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table A3. Number of sites reported by type of key informant, St. Petersburg PLACE assessment 2002

	Number of Key Informants	Total Sites	% Total	Mean	Range
All districts					
Taxi driver	14	65	1.8	4.6	1-6
Public transportation driver	8	31	0.9	3.9	1-6
Sex worker	4	22	0.6	5.5	4-6
Injection drug user	3	11	0.3	3.7	3-4
CBO/NGO staff and associates	23	106	2.9	4.6	2-6
Police officer	11	50	1.4	4.5	2-6
Health care /pharmacy worker	18	75	2.1	4.2	2-6
Youth	460	2181	60.4	4.7	2-6
Market seller/street vendor	63	172	4.8	2.7	2-6
Homeless/unemployed	38	31	0.9	0.8	1-6
Foreigners	7	84	2.3	12.0	2-6
Street cleaners	9	35	1.0	3.9	12-6
Dormitory residents	7	32	0.9	4.6	6-6
Futbol fans	17	84	2.3	4.9	4-6
Other	134	622	17.2	4.6	1
Missing	2	11	0.3	5.5	1
Total	100.0	100.0	100.0	100.0	100.0

B Tables – Site Verification Interview Results

Table B1. Summary of site verification field work, St. Petersburg PLACE assessment 2002

	Central St. Petersburg (n = 181)	Krasnogvardeisky (n = 158)	Lomonosov (n = 19)
Field work			
Number of days of site verification	16 days	11 days	1 day
Number of interviewers	12	11	9
Outcome of site verification visits (%)			
Site found and respondent interviewed	43.1	52.6	94.4
Site found but no willing respondent	9.0	3.6	0
Site closed temporarily	1.9	2.6	0
Site not found	41.2	38.8	5.6
No longer a site	1.4	0.7	0
No access to the site	3.3	1.6	0
Missing	0.1	0.1	0
Total	100.0	100.0	100.0
Initial estimate of number of unique sites in area	422	304	20
Number of verified unique sites where a site representative was interviewed	181	158	19
Number of verified sites at which individual interviews performed	30	30	10

Table B2. Characteristics of found and verified sites, interviews with a site representative, St. Petersburg PLACE assessment 2002				
	Central St. Petersburg (n = 181)	**Krasnogvardeisky (n = 158)**	**Lomonosov (n = 19)**	**Total (n = 358)**
Location of site where interviews conducted (%)				
Within 2 blocks of main route/metro	53.3	70.0	42.1	60.1
Not within 2 blocks of main route/metro	46.7	30.0	57.9	39.9
Type of site where interviews conducted (%)				
Formal bar/tavern	24.9	27.2	52.6	27.4
Night club	11.1	5.7	5.3	8.4
Gay Club	1.1	0	0	0.6
Dormitory	0	2.5	0	1.1
Private dwelling	0	0.6	0	0.3
Public transportation parking lots	0	0.6	0	0.3
High school	0.6	0.6	0	0.6
Street/waste/yard	27.6	25.3	15.8	26.0
Technical school	0.6	0.6	0	0.6
Unused/abandoned building	0	0.6	0	0.3
Hotel	2.8	0	0	1.4
Market	2.2	3.8	0	2.8
Railway stations	1.1	1.3	0	1.1
Street tunnel	0.6	0	0	0.3
Metro stop	5.5	1.3	0	3.4
Basement/roof	0.6	0.6	0	0.6
Stairwells	6.1	17.1	0	10.6
Park	8.3	3.8	10.5	6.4
Casino	0.6	0	0	0.3
Other	6.6	8.2	10.5	7.5
Missing	0	0.0	5.3	0.3
Total	100.0	100.0	100.0	100.0
Activities on-site (%)				
Beer consumed	88.9	87.4	94.7	88.6
Hard alcohol consumed	71.3	69.7	78.9	80.1
TV or video viewing	25.4	24.1	42.1	25.7
Dancing	34.3	27.2	52.6	32.1
Music	58.0	62.0	84.2	61.2
Computer games	12.2	20.9	15.8	16.2
Eating food	61.9	50.0	78.9	57.5
Striptease show	9.4	8.9	15.8	9.5

Table B2. Characteristics of found and verified sites, interviews with a site representative, St. Petersburg PLACE assessment 2002				
	Central St. Petersburg (n = 181)	**Krasnogvardeisky (n = 158)**	**Lomonosov (n = 19)**	**Total (n = 358)**
On-site social interactions (%)				
Men meet new female sexual partners here	63.5	60.8	89.5	63.7
Women meet new male sexual partners here	59.7	58.9	89.5	60.9
Men meet new male (gay) sexual partners here	12.7	5.7	26.3	10.3
Person on-site facilitates meeting partners	9.4	7.6	15.8	8.9
Sex workers solicit customers onsite	26.5	22.8	21.1	24.6
Number of years site has been a place where people socialize (%)				
Less than one year	2.8	6.3	10.5	4.8
1-2 years	12.2	23.4	21.1	17.6
3-5 years	30.9	29.1	26.3	29.9
6-10 years	14.9	14.6	10.5	14.5
More than 10 years	39.2	26.6	31.6	33.2
Total	100.0	100.0	100.0	100.0

Table B3. Characteristics of patrons coming to site, interviews with a site representative, St. Petersburg PLACE assessment 2002

	Central St. Petersburg (n=181)		Krasnogvardeisky (n=158)		Lomonosov (n=19)		Total (n=358)	
	Men	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
Proportion of patrons who are unemployed (%)								
None	29.3	22.1	30.4	23.4	36.8	21.1	30.2	22.6
< Half	50.3	53.0	47.5	45.6	42.1	47.4	48.6	49.4
Half	12.2	11.1	7.6	7.6	15.8	0	10.3	8.9
> Half	6.6	8.3	8.2	15.2	5.3	31.6	7.3	12.6
Almost All/All	1.7	5.5	6.3	8.2	0	0	3.6	6.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proportion of patrons who are students (%)								
None	12.2	16.0	5.7	12.7	0	5.3	8.7	14.0
< Half	42.0	42.0	59.5	57.6	47.4	57.9	50.0	49.7
Half	19.9	19.9	19.6	17.1	26.3	21.1	20.1	18.7
> Half	24.3	19.9	12.7	10.8	26.3	15.8	19.3	15.6
Almost All/All	1.7	2.2	2.5	1.9	0	0	2.0	2.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proportion of patrons who are less than 18 years old (%)								
None	33.7	29.3	32.3	25.3	36.8	31.6	33.2	27.7
< Half	40.9	43.1	36.7	41.8	42.1	42.1	39.1	42.5
Half	17.1	19.3	12.0	10.1	15.8	10.5	14.8	14.8
> Half	6.6	7.2	15.8	19.0	5.3	15.8	10.6	12.9
Almost All/All	1.7	1.1	3.2	3.8	0	0.0	2.2	2.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proportion of patrons who live within a 10 minute walk of here (%)								
None	4.4	7.2	1.9	3.2	0	0	3.1	5.0
< Half	32.6	31.5	10.1	11.4	10.5	5.6	21.5	21.3
Half	30.9	30.9	18.4	18.4	15.8	22.2	24.6	24.9
> Half	23.8	21.0	25.3	29.1	31.6	38.9	24.9	25.5
Almost All/All	8.3	9.4	44.3	38.0	42.1	33.3	26.0	23.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proportion of patrons who are residents of this district (%)								
None	3.3	5.5	2.5	3.8	0	0	2.8	4.5
< Half	21.6	24.9	2.5	3.2	0	0	12.0	14.0
Half	27.1	20.4	16.5	11.4	0	10.5	20.9	15.9
> Half	24.3	28.7	23.4	27.2	47.4	57.9	25.1	29.6
Almost All/All	23.8	20.4	55.1	54.4	52.6	31.6	39.1	36.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table B3. Characteristics of patrons coming to site, interviews with a site representative, St. Petersburg PLACE assessment 2002

	Central St. Petersburg (n=181)		Krasnogvardeisky (n=158)		Lomonosov (n=19)		Total (n=358)	
	Men	Women	Men	Women	Men	Women	Men	Women
Proportion of patrons who come here at least once a week (%)								
None	0	2.2	1.3	3.2	0	5.6	0.6	2.8
< Half	26.5	25.9	9.5	7.0	21.1	11.1	18.7	16.8
Half	30.9	29.8	15.8	15.2	21.1	11.1	23.7	22.4
> Half	30.4	26.5	25.3	24.1	52.6	61.1	29.3	27.2
Almost All/All	12.2	15.5	48.1	50.6	5.3	11.1	27.7	30.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proportion of patrons who come here by train or by metro (%)								
None	24.3	42.1	51.3	51.3	42.1	23.8	37.2	36.9
< Half	34.8	42.1	38.6	36.7	52.6	34.8	37.4	36.0
Half	25.4	15.8	6.9	8.2	5.3	25.4	16.2	17.3
> Half	13.8	0	2.5	3.8	0	14.9	8.1	9.2
Almost All/All	1.7	0	0.6	0.0	0	1.1	1.1	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proportion of patrons who drink alcohol here (%)								
None	4.4	9.4	6.9	10.8	5.3	5.3	5.6	9.8
< Half	23.8	23.8	19.6	22.8	10.5	15.8	21.2	22.9
Half	18.2	24.9	20.3	17.1	10.5	5.3	18.7	20.4
> Half	34.3	28.2	20.3	24.7	52.6	52.6	29.1	27.9
Almost All/All	19.3	13.8	32.9	24.7	21.1	21.1	25.4	19.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proportion of patrons who find a new sexual partner while they are here (%)								
None	28.7	29.8	25.3	21.5	10.5	15.8	26.3	25.4
< Half	47.0	47.5	54.4	50.0	63.2	63.2	51.1	49.4
Half	10.5	9.4	9.5	16.5	15.8	15.8	10.3	12.9
> Half	5.5	5.5	3.2	3.8	5.3	0	4.5	4.5
Almost All/All	8.3	7.7	7.6	8.2	5.3	5.3	7.8	7.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Proportion of patrons who appear to be injection drug users (%)								
None	43.7	50.8	31.6	39.2	47.4	57.9	38.5	46.0
< Half	43.7	38.1	44.3	38.0	52.6	42.1	44.4	38.3
Half	5.5	6.1	6.3	5.7	0	0	5.6	5.6
> Half	5.5	2.8	13.3	10.8	0	0	8.7	6.2
Almost All/All	1.6	2.2	4.4	6.3	0	0	2.8	3.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table B4. Site patrons and busy times at sites, interviews with a site representative, St. Petersburg PLACE assessment 2002				
	Central St. Petersburg (n=181)	**Krasnogvardeisky (n=158)**	**Lomonosov (n=19)**	**Total (n=358)**
Male patrons (%)				
<10	14.9	19.6	0	16.2
11-20	21.0	20.9	21.1	21.0
21-50	18.8	24.7	36.8	22.3
51-100	17.7	19.6	15.8	18.4
101-300	14.4	8.2	0	10.9
301-500	6.6	6.3	15.8	7.0
501-1000	6.6	0.6	10.5	4.2
Missing	0	0.5	0	0
Total	100.0	100.0	100.0	100.0
Female patrons (%)				
<10	24.9	31.7	15.8	27.4
11-20	17.7	19.0	15.8	18.2
21-50	16.6	18.4	26.3	17.9
51-100	18.2	15.2	15.8	16.8
101-300	10.5	7.6	0	8.7
301-500	5.5	6.9	15.8	6.7
501-1000	6.6	1.3	10.5	4.5
Missing	0	0	0	0
Total	100.0	100.0	100.0	100.0
Busiest times Monday (%)				
Morning	11.5	7.5	10.5	9.7
Afternoon	24.7	19.4	15.8	21.9
Evening	63.2	54.4	36.8	57.9
Late night	14.3	13.1	0	13.0
Busiest times Tuesday (%)				
Morning	10.4	7.5	5.3	8.9
Afternoon	25.8	21.3	10.5	23.0
Evening	62.6	55.0	26.3	57.3
Late night	14.8	13.8	0	13.6
Busiest times Wednesday (%)				
Morning	10.4	7.5	5.3	8.9
Afternoon	26.4	21.8	10.5	23.6
Evening	64.3	56.9	26.3	59.0
Late night	15.9	13.8	0	14.1

Table B4. Site patrons and busy times at sites, interviews with a site representative, St. Petersburg PLACE assessment 2002				
	Central St. Petersburg (n=181)	**Krasnogvardeisky (n=158)**	**Lomonosov (n=19)**	**Total (n=358)**
Busiest times Thursday (%)				
Morning	10.4	7.5	5.3	8.9
Afternoon	26.4	20.0	21.1	23.3
Evening	67.0	61.3	47.4	63.4
Late night	17.6	15.7	0	15.8
Busiest times Friday (%)				
Morning	10.4	10.6	10.5	10.5
Afternoon	24.2	20.0	31.6	22.7
Evening	87.4	81.3	73.7	83.9
Late night	32.4	41.3	15.8	35.5
Busiest times Saturday (%)				
Morning	8.8	10.0	5.3	9.1
Afternoon	26.3	24.4	23.1	23.8
Evening	85.2	78.8	79.0	82.0
Late night	35.7	49.4	36.8	41.8
Busiest times Sunday (%)				
Morning	6.6	9.4	0	7.5
Afternoon	22.5	24.4	21.1	23.3
Evening	71.4	67.5	68.4	69.5
Late night	26.9	34.4	26.3	30.2
Busiest time of the year (%)				
Summer	54.4	56.3	63.2	55.7
Winter	29.7	53.4	42.1	40.7
School Holidays	16.5	30.0	21.1	22.7
Public Holidays	24.7	46.9	68.4	36.8
Other	37.4	9.4	42.1	25.2

Table B5. AIDS prevention activities on-site, interviews with a site representative, St. Petersburg PLACE assessment 2002

	Central St. Petersburg (n = 181)	Krasnogvardeisky (n = 158)	Lomonosov (n = 19)	Total (n = 358)
AIDS prevention activities (%)				
Yes	6.1	1.9	10.5	4.5
No	93.9	98.1	89.5	95.5
Total	100.0	100.0	100.0	100.0
Respondent willing to have AIDS prevention program on site (%)				
Yes	53.3	55.6	52.6	54.3
No	22.0	22.5	15.8	21.9
Not Applicable	24.2	20.6	31.6	23.0
Missing	0.5	1.3	0.0	0.8
Total	100.0	100.0	100.0	100.0

Table B6. Condom availability at sites, interviews with a site representative, St. Petersburg PLACE assessment 2002

	Central St. Petersburg (n = 181)	Krasnogvardeisky (n = 158)	Lomonosov (n = 19)	Total (n = 358)
Condoms on-site at time of visit (%)				
Yes, but not seen	10.4	14.4	0	11.6
Yes, condom seen	11.5	11.3	10.5	11.4
No	77.5	74.1	89.5	76.2
Missing	0.6	0.2	0	0.8
Total	100.0	100.0	100.0	100.0
Condoms can be acquired within 10 minutes of leaving site at night (%)				
Yes	88.5	83.1	73.7	85.3
No	11.0	15.6	26.3	13.9
Missing	0.6	0.3	0	0.8
Total	100.0	100.0	100.0	100.0
Respondent willing to sell condoms at site (%)				
Yes	44.5	31.9	42.1	38.8
No	23.1	25.8	26.3	24.4
Mistake	0	0.6	0	0.3
Not Applicable	31.9	40.6	31.6	35.7
Missing	0.5	0.3	0	0.8
Total	100.0	100.0	100.0	100.0
Condom availability in past year at site (%)				
Always available	28.0	28.8	10.5	27.4
Sometimes available	13.2	5.6	10.5	9.7
Never available	58.2	64.4	79.0	62.1
Missing	0.6	1.2	0	0.8
Total	100.0	100.0	100.0	100.0

Table B7. Injection drug use, interviews with a site representative, St. Petersburg PLACE assessment 2002

	Central St. Petersburg (n = 181)	Krasnogvardeisky (n = 158)	Lomonosov (n = 19)	Total (n = 358)
Frequency of injection drug use (%)				
Very common	40.3	56.3	79.0	49.4
Somewhat common	42.5	34.8	10.5	37.4
Not very common	16.0	8.2	10.5	12.3
Does not occur in this area	1.1	0.6	0	.8
Missing	0.1	0.5	0	0
Total	100.0	100.0	100.0	100.0
Used syringes (% yes)				
Respondent has seen used syringes lying around inside or outside site in past 3 months	47.4	67.1	47.0	55.9
Purpose of site (%)				
Patrons meet sexual partners only	34.8	30.4	63.2	34.4
Drug injectors socialize only	13.8	21.5	0	16.5
Both: meet new sexual partners and IDUs socialize	22.7	32.3	31.6	27.4
Neither	28.7	15.8	5.3	21.8
Total	100.0	100.0	100.0	100.0

C Tables – Data from Individuals Socializing at Sites

Table C1. Self-reported socio-demographic characteristics, interviews with individuals socializing at sites, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men (n=459)	Women (n=262)	Men (n=410)	Women (n=304)	Men (n=150)	Women (n=89)	Men (n=1019)	Women (n=655)
Age of respondent (%)								
<=15	0	0	0.4	0.6	0.7	0	0.2	0.4
16-19	22.8	37.8	16.9	32.2	18.0	39.3	19.9	36
20-24	38.6	35.8	36.8	36.9	48.1	32.5	37.0	34.9
25-29	18.2	14.5	21.3	17.1	16.7	15.7	20.1	16.4
30-34	11.2	6.1	13.5	7.8	7.9	8.9	12.8	7.2
35-39	3.8	2.7	5.5	1.9	4.1	2.2	5.3	2.4
40 +	4.8	3.1	5.6	2.5	4.7	1.1	3.4	2.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Current residence (%)								
Krasnogvardeisky	5.4	3.8	72.7	76.4	0	0	31.5	36.8
Rzhevka	n/a	n/a	43.5	53.1	n/a	n/a	n/a	n/a
Ohta	n/a	n/a	16.0	14.2	n/a	n/a	n/a	n/a
Porohovie	n/a	n/a	11.8	6.6	n/a	n/a	n/a	n/a
Polustrovo	n/a	n/a	0.2	0.3	n/a	n/a	n/a	n/a
Lomonosov	0	0	0	0	89.9	97.8	13.5	13.3
Low part	n/a	n/a	n/a	n/a	15.6	15.7	n/a	n/a
High part	n/a	n/a	n/a	n/a	72.8	71.9	n/a	n/a
Central St. Petersburg	41.6	32.4	0	0.3	1.4	0	20.6	14.4
Other St. Petersburg District	46.9	58.5	26.1	21.0	2.7	1.1	30.5	31.7
Elsewhere in Russia	4.6	5.3	1.0	2.3	2.0	1.1	2.8	3.4
Outside Russia	1.5	0	0	0	0	0	0.7	0
Missing	0	0	0.2	0	4.0	0	0.4	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Years residing in district (%)								
<1 year	8.3	7.6	4.6	8.6	9.4	5.6	7.0	7.8
1 year	8.7	6.9	4.9	3.9	4.7	2.2	6.6	4.9
2-4 years	14.4	11.4	13.1	10.5	6.7	7.8	12.7	10.5
5-10 years	14.6	16.3	20.3	17.5	12.7	11.1	16.7	16.2
>10 years	13.5	12.8	23.4	41.4	16.5	13.2	17.8	16.0
All of life	40.5	45.0	33.7	18.4	50.3	55.1	39.2	44.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table C1. Self-reported socio-demographic characteristics, interviews with individuals socializing at sites, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men (n=459)	Women (n=262)	Men (n=410)	Women (n=304)	Men (n=150)	Women (n=89)	Men (n=1019)	Women (n=655)
Employment status (%)								
Unemployed, looking for work	7.0	13.7	5.6	7.9	4.7	11.2	6.1	10.7
Unemployed, not looking for work	10.9	22.1	9.0	18.1	8.0	20.2	9.7	20.0
Employed, part-time or occasional	14.2	10.7	12.4	14.1	8.7	12.4	12.7	12.5
Employed full time	68.0	53.4	72.7	59.9	78.7	56.2	71.4	56.8
Missing	0	0	0.2	0	0	0	0.1	0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table C2. Self-reported partner selection, interviews with individuals socializing at sites, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men	Women	Men	Women	Men	Women	Men	Women
Frequency of attendance at site (%)								
Every day	24.2	17.6	30.3	34.2	9.4	14.6	24.5	24.9
4-6 times per week	14.2	11.1	10.0	13.8	1.3	2.2	10.6	11.1
2-3 times per week	20.3	22.9	15.6	11.2	15.4	9.0	17.7	15.6
One time per week	9.6	9.5	9.8	7.2	22.8	20.2	11.6	9.9
2-3 time per month	5.9	6.5	8.3	7.6	9.4	9.0	7.4	7.3
One time per month	8.5	6.1	9.8	8.2	19.5	18.0	10.6	8.7
Less than once a month	10.5	10.7	9.5	9.9	18.8	22.5	11.3	11.9
This is my first time	7.0	15.6	6.6	7.9	3.4	3.4	6.3	10.4
Missing	0	0	0	0	0	1.1	0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Patron first came to site (%)								
This is my first visit	6.5	14.9	8.1	9.5	4.0	3.4	6.8	10.9
Within past 4 weeks	4.1	7.6	7.8	10.2	6.0	3.4	5.9	8.3
Within past 2-6 months	12.2	12.6	17.4	18.8	16.8	14.8	14.9	15.7
Within past 7-12 months	8.5	9.2	8.1	11.2	8.7	10.2	8.4	10.2
Over a year ago	36.6	35.1	36.2	36.5	47.7	36.4	38.1	35.9
Over 5 years ago	32.0	20.2	22.2	13.8	16.8	31.8	25.9	18.8
Missing	0	0.4	0.2	0	0	0	0.1	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Believe people come to meet new partner? (%)								
Yes	91.3	87.4	84.8	80.9	87.2	74.2	88.1	82.6
No	8.7	12.6	14.5	18.4	12.8	23.6	11.6	16.8
Missing	0	0	0.7	0.7	0	2.2	0.3	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Ever attracted partner at site (%)								
Yes	48.6	33.6	40.0	23.1	41.6	21.3	44.1	27.1
No	51.4	66.4	58.6	74.6	57.0	77.5	55.1	71.7
Missing	0	0	1.4	2.3	1.4	1.1	0.8	1.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table C2. Self-reported partner selection, interviews with individuals socializing at sites, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
Last attracted new partner at site (%)								
Within past 7 days	11.6	8.4	7.4	8.3	2.7	4.5	8.6	7.8
Within past 2-4 weeks	11.4	6.9	11.5	4.6	10.7	5.6	11.3	5.7
Within past 2-3 months	7.2	5.0	6.4	2	11.4	1.1	7.5	3.1
Within past 4-6 months	6.6	6.5	4.2	1.3	3.4	0	5.1	3.2
Within past 7-12 months	3.7	1.5	2.9	2.3	3.4	2.2	3.4	2.0
Over a year ago	8.1	4.6	7.1	4.6	11.4	10.1	8.2	5.4
Never	51.4	66.4	60.5	76.9	57.0	76.4	55.9	72.6
Missing	0	0.8	0	0	0	0	0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Used condom with most recent partner from site? (%)								
Yes	31.3	24.0	24.1	20.8	30.9	6.8	28.4	20.2
No	15.8	8.8	13.8	5.3	9.4	14.8	14.0	8.0
Don't remember	1.3	0	1.2	0.7	0.7	1.1	1.2	0.5
Never met partner here	51.4	66.4	66.0	72.3	57.7	77.3	56.0	70.6
Missing	0.2	0.8	0.2	1	1.4	0	0.4	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Do you have a condom with you? (%)								
Yes, but can't see	6.5	2.7	5.6	3.9	2.0	3.4	5.5	3.4
Yes and seen	17.6	13.0	11.0	15.8	11.3	10.1	14.0	13.9
No	75.2	84.4	80.2	77.6	86.0	85.4	78.8	81.4
Missing	0.6	0	3.2	2.6	0.7	1.1	1.7	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table C3. Rate of partnership acquisition and condom use, interviews with individuals socializing at sites, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
Ever used a condom? (%)								
Yes	93.0	92.4	88.0	87.2	88.7	76.4	90,4	87.8
No	6.5	7.6	8.8	9.9	10.7	21.3	8.1	10.5
Missing	0.4	0	3.0	2.9	0.7	2.2	2.6	1.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of partners in past 4 weeks (%)								
0	11.1	17.9	13.6	17.6	12.2	23.6	12.3	18.6
1	40.6	53.8	43.0	61.0	41.2	57.3	41.6	57.6
2	17.0	10.3	20.9	6.1	16.2	13.5	18.4	8.8
3-5	20.9	11.8	16.1	6.7	22.3	2.2	19.3	8.1
6-10	7.9	2.3	4.1	1.3	3.4	2.2	5.7	2.0
>10	5.0	5.0	2.3	7.3	4.7	1.1	2.8	5.0
Total	100.0	100.0	0	100.0	100.0	100.0	100.0	100.0
Mean number	2.6	2.9	3.0	11.3	2.7	3.4	2.8	6.8
±st dev	±3.9	±10.5	±16.0	±46.2	±4.2	±22.2	±10.6	±33.2
Number of new partners in past 4 weeks (%)								
0	49.3	65.6	47.9	69.0	52.3	78.7	49.2	69.0
1	19.2	20.6	27.2	17.8	16.1	18.0	21.9	19.0
2	10.7	4.2	11.5	3.3	15.4	2.2	11.7	3.5
3-5	14.2	4.1	9.4	3.6	11.4	1.1	11.9	3.5
6-10	5	1.6	2.7	0.3	1.3	0	3.6	0.9
>10	2.5	3.8	2.2	5.9	3.4	0	1.7	4.3
Total	100.0	100.0	0	100.0	100.0	100.0	100.0	100.0
Mean number	1.6	2.1	1.2	7.8	1.6	0.3	1.5	4.5
± st dev	±3.0	±10.6	±2.1	±35.3	±3.5	±0.6	±2.8	±25.1
Condom used during last sex with new partner? (%)								
Yes	37.6	22.9	36.2	22.9	34.7	9.0	36.6	21.0
No	14.8	12.6	20.8	13.0	12.0	12.4	16.8	12.7
No new partners in last 4 weeks	47.6	64.5	42.7	64.1	52.7	78.7	46.4	66.3
Missing	0	0	0.2	0	0.7	0	0.2	0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table C3. Rate of partnership acquisition and condom use, interviews with individuals socializing at sites, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
Do you have a steady partner? (%)								
Yes	64.6	71.8	74.8	74.3	73.3	76.4	70.0	73.6
No	35.4	28.2	24.7	25.0	26.7	22.5	29.8	26.0
Missing	0	0	0.5	0.6	0	1.1	0.2	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of new partners in past 12 months (%)								
0	6.6	15.7	9.4	20.9	12.0	15.7	8.5	18.1
1	11.8	22.2	14.9	26.8	15.3	39.3	13.5	26.7
2	12.0	16.9	15.1	20.2	7.3	21.3	12.5	19.0
3-5	69.4	45.2	64.0	31.7	65.3	23.5	65.2	36.0
6-10	0.2	0	0.2	0.3	0	0	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table C4. AIDS education sessions attended by individuals socializing at sites, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
Number of AIDS sessions attended in past three months (%)								
0	88.4	82.4	88.9	77.6	92.2	83.0	89.2	80.3
1	5.9	9.5	5.0	9.7	4.3	6.8	5.3	9.2
2	1.7	3.4	3.5	4.3	0.7	3.4	2.3	3.9
3	1.1	1.9	1.3	3.3	2.8	1.1	1.4	2.5
4	0.2	0.4	0.3	0.7	0	0	0.2	0.5
5+	2.0	1.9	1.0	4.3	0	5.7	2.2	2.6
Missing	0.6	0.4	0	0	0	0	0.3	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table C5. Injection drug use, interviews with individuals socializing at sites, St. Petersburg PLACE assessment 2002

	Central St. Petersburg		Krasnogvardeisky		Lomonosov		Total	
	Men	**Women**	**Men**	**Women**	**Men**	**Women**	**Men**	**Women**
How common is drug injection in this area? (%)								
Very common	49.2	59.9	56.2	65.5	74.0	80.9	55.7	65.3
Somewhat common	25.3	17.2	21.0	18.8	14.7	15.7	22.0	17.7
Not very common	9.8	6.5	8.1	6.9	5.3	1.1	8.4	6.0
Does not occur in this area	1.7	1.5	1.0	0.7	0	0	1.2	0.9
Don't know	13.9	14.9	13.7	7.9	6.0	2.2	12.7	9.9
Missing	0	0	0	0.3	0	0	0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Do you believe that people who inject drugs socialize here? (%)								
Yes	66.0	75.6	64.9	68.8	70.7	80.9	66.2	73.1
No	16.3	12.2	16.1	14.8	10.0	6.7	15.3	12.7
Don't know	17.6	12.2	18.8	16.4	19.3	12.4	18.4	14.2
Missing	0	0	0.2	0	0	0	0.1	0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Have you ever injected drugs? (%)								
Yes	8.7	10.7	11.2	8.6	10.7	11.2	10.0	9.8
Never	90.0	88.5	87.1	90.5	89.3	88.8	88.7	89.5
Missing	1.3	0.8	1.7	1	0	0	1.3	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
When did you last inject drugs? (%)								
Within past 7 days	0.7	2.3	2.0	7.0	3.4	6.8	1.6	5.1
Within past 2-4 weeks	0.4	0.8	1.5	0	0.7	0	0.9	0.3
Within past 2-3 months	0.7	0.4	0.7	0.7	0	0	0.6	0.5
Within past 4-6 months	0.4	0.4	1.0	0.7	0	0	0.6	0.5
Within past 7-12 months	1.5	1.5	0.7	0.7	0	0	1.0	0.9
Over a year ago	5.4	5.0	7.8	2.3	8.1	5.7	6.8	3.8
Never injected drugs	90.8	89.7	86.3	88.7	87.9	87.5	88.6	88.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
The last time you injected drugs, did you share a needle or syringe (%)								
Yes, shared needles	2.6	1.9	1.0	3.6	2.7	2.3	2.0	2.8
No, did not share	8.1	11.1	14.0	12.9	9.4	11.4	10.6	12.0
Never injected drugs	89.3	87.0	84.3	82.8	87.9	86.4	87.1	85.0
Missing	0	0	0.7	0.7	0	0	0.3	0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table C6. Sex work, interviews with males socializing at sites, St. Petersburg PLACE assessment 2002				
	Central St. Petersburg	**Krasnogvardeisky**	**Lomonosov**	**Total**
Have you ever given money or gifts in exchange for sex in the past four weeks? (%)				
Yes	19.5	26.9	14.1	21.7
No	79.0	71.6	83.9	76.7
Don't remember	0.4	1.5	0.7	0.9
Missing	1.1	0	1.3	0.7
Total	100.0	100.0	100.0	100.0
Have you had sex with a man in the past four weeks? (%)				
Yes	10.0	0.5	1.3	4.9
No	88.7	99.3	97.3	94.2
Don't remember	0.2	0.2	0	0.2
Missing	1.1	0	1.3	0.7
Total	100.0	100.0	100.0	100.0

Table C7. Sexual partners in past four weeks by age and gender, interviews with individuals in Krasnogvardeisky, St. Petersburg PLACE assessment 2002						
	Age (Years)					
	16-19	**20-24**	**25-29**	**30-34**	**35-39**	**40+**
Total number of partners – men (%)						
	(n = 69)	(n = 128)	(n = 97)	(n =66)	(n =25)	(n =22)
0	21.7	12.5	9.3	6.1	12.0	31.8
1	36.2	42.2	45.4	42.4	44.0	31.8
2	23.2	20.3	18.6	16.7	32.0	18.2
3	7.3	9.4	9.3	13.6	4.0	4.6
4	1.5	4.7	2.1	3.0	0	0
5+	7.3	9.4	10.3	16.7	4.0	9.0
Missing	2.9	9.4	5.2	1.5	4.0	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total number of partners – women (%)						
	(n = 102)	(n = 106)	(n = 56)	(n = 23)	(n = 6)	(n = 9)
0	25.5	9.4	14.3	13.0	0	44.4
1	52.0	63.2	58.9	69.6	100.0	44.4
2	7.8	5.7	7.1	0	0	0
3	2.0	4.7	3.6	8.7	0	0
4	3.9	0.9	0	4.4	0	0
5+	2.9	14.2	14.3	4.4	0	11.1
Missing	5.9	1.9	1.8	0	0	0
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table C7. Sexual partners in past four weeks by age and gender, interviews with individuals in Krasnogvardeisky, St. Petersburg PLACE assessment 2002

	Age (Years)					
	16-19	**20-24**	**25-29**	**30-34**	**35-39**	**40+**
Number of new partners – men (%)						
	(n = 69)	(n = 128)	(n = 97)	(n = 66)	(n = 25)	(n = 22)
0	47.8	41.4	49.5	51.5	44.0	54.6
1	23.2	32.8	22.7	19.7	32.0	31.8
2	17.4	10.2	13.4	6.1	12.0	4.6
3	4.4	4.7	6.2	9.1	4.0	0
4	0	3.1	0	3.0	4.0	0
5+	5.8	6.3	4.1	10.6	0	4.6
Missing	1.5	1.6	4.1	0	4.0	4.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of new partners – women (%)						
	(n = 102)	(n = 106)	(n = 56)	(n = 23)	(n = 6)	(n = 9)
0	64.7	66.0	73.2	73.9	83.3	100.0
1	26.5	16.0	8.9	13.0	16.7	0
2	2.9	3.8	3.6	4.4	0	0
3	1.0	1.9	0	4.4	0	0
4	2.0	0.9	0	0	0	0
5+	2.0	11.3	14.3	4.4	0	0
Missing	1.0	0	0	0	0	0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Drug use – men (%)						
	(n = 69)	(n = 128)	(n = 97)	(n = 66)	(n = 25)	(n = 22)
Ever inject drugs	10.1	11.7	10.3	10.6	16.0	9.1
Shared needle	2.9	0	0	1.5	4.0	0
Drug use – women (%)						
	(n = 102)	(n = 106)	(n = 56)	(n = 23)	(n = 6)	(n = 9)
Ever inject drugs	2.9	12.3	16.7	0	0	11.1
Shared needle	1.0	5.7	7.1	0	0	0

Table C8. Sexual partners in past four weeks by age and gender, interviews with individuals in central St. Petersburg, St. Petersburg PLACE assessment 2002

	Age (Years)					
	16-19	**20-24**	**25-29**	**30-34**	**35-39**	**40+**
Total number of partners – men (%)						
	(n = 105)	(n = 177)	(n = 83)	(n = 51)	(n = 21)	(n = 21)
0	11.4	12.4	12.1	5.9	9.5	9.5
1	36.2	40.1	41.0	51.0	38.1	42.9
2	20.0	15.8	18.1	15.7	14.3	14.3
3	13.3	9.0	12.1	15.7	9.5	23.8
4	5.7	7.3	3.6	0	4.8	0.0
5+	13.3	15.3	12.1	11.8	23.8	9.5
Missing	0	0	1.2	0	0	0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total number of partners – women (%)						
	(n = 99)	(n = 93)	(n = 38)	(n = 16)	(n = 7)	(n = 8)
0	23.2	12.9	10.5	18.8	42.9	25.0
1	53.5	57.0	44.7	50.0	57.1	62.5
2	12.1	9.7	15.8	0.0	0	0
3	5.1	6.5	7.9	6.3	0	0
4	4.0	3.2	5.3	0.0	0	0
5+	2.0	10.8	15.8	25.0	0	12.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of new partners – men (%)						
	(n = 105)	(n = 177)	(n = 83)	(n = 51)	(n = 21)	(n = 21)
0	43.8	46.9	55.4	62.8	47.6	42.9
1	19.1	19.2	18.1	11.8	28.6	28.6
2	12.4	11.3	8.4	9.8	9.5	9.5
3	13.3	6.8	6.0	9.8	4.8	9.5
4	4.8	4.5	2.4	0	4.8	0
5+	6.7	11.3	8.4	5.9	4.8	9.5
Missing	0	0	1.2	0	0	0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of new partners – women (%)						
	(n = 99)	(n = 93)	(n = 38)	(n = 16)	(n = 7)	(n = 8)
0	63.4	67.7	60.5	62.5	85.7	75.0
1	29.3	18.3	10.5	12.5	14.3	12.5
2	4.0	5.4	5.3	0	0	0
3	1.0	1.1	5.3	0	0	0
4	0	2.2	5.3	0	0	0
5+	2.0	5.4	13.2	25.0	0	12.5
Total	100.0	100.0	100.0	100.0	100.0	100.0

Table C8. Sexual partners in past four weeks by age and gender, interviews with individuals in central St. Petersburg, St. Petersburg PLACE assessment 2002						
	Age (Years)					
	16-19	**20-24**	**25-29**	**30-34**	**35-39**	**40+**
Drug use – men (%)						
Men	(n = 105)	(n = 177)	(n = 83)	(n = 51)	(n = 21)	(n = 21)
Ever inject drugs	5.7	9.0	15.7	5.9	0	9.5
Shared needle	0	3.4	6.0	2.0	0	0
Drug use – women (%)						
	(n = 99)	(n = 93)	(n = 38)	(n = 16)	(n = 7)	(n = 8)
Ever inject drugs	4.0	17.2	15.8	6.3	0	12.5
Shared needle	0	4.3	0	0	0	12.5

Appendix 2: Questionnaires

KEY INFORMANT CHARACTERISTICS (9/10/01)

No.	Questions	Coding categories
K1	Assessment District	Krasnogvardeisky 1 Admiralteisky 2 Tsentralny 3 Lomonosov 4
K2	Location of Interview	2.1 DISTRICT in St Petersburg _____ (CODE 1-4): __ **IF IN KRASNOGVARDEISKY:** 2.2 Part of the district: Polustrovo 1 Bol'shaya Ohta 2 Malaya Ohta 3 Rzhevka-Porohoviye 4 2.3 WITHIN 2 BLOCKS OF MAIN ROUTE? YES 1 NO 2 **IF IN LOMONOSOV:** 2.4 Low part 1 High part 2 2.4 WITHIN 2 BLOCKS OF MAIN ROUTE? YES 1 NO 2 **IF IN ADMIRATEISKY OR TSENTRALNY:** 2.6 NEAREST METRO/RAILWAY _____ ___ ___ 2.7 WITHIN 2 BLOCKS OF METRO? YES 1 NO 2
K3	Interviewer Number	___ ___
K4	Date	___ ___/___ ___/___ ___
K5	Gender of Key Informant	MALE 1 FEMALE 2

No.	Questions	Coding categories
K6	Type of Key Informant: TAXI DRIVER 01 PUBLIC TRANSPORTATION DRIVER 02 SEX WORKER 03 INJECTION DRUG USER 04 CBO/NGO STAFF AND ASSOCIATES 05 POLICE OFFICER 06 HEALTH CARE/ PHARMACY WORKER 07 YOUTH 08 MARKET SELLER/STREET VENDOR 09	**i. ENTER CODE: ___ ___** HOMELESS/UNEMPLOYED 10 FOREIGNERS 11 STREET CLEANERS 12 DORMITORY RESIDENTS 13 FUTBOL FANS 14 OTHER _____ 15
READ: Hello. I am working in NGO "Look to the future". Now we collect data in our city for development of healthcare programs. For this reason we talk with people and ask questions. We won't ask you for your name. Your answers will be kept confidential. We interested in where, according to your opinion, people meet sexual partners and where people who inject drugs socialize. Your participation is completely voluntary.		
K7	Are you willing to few answer a questions? *IF NO, STOP INTERVIEW.	YES 1 IF NO, STOP INTERVIEW. NO 2
K8	How old are you? *CONCLUDE INTERVIEW IF RESPONDENT IS YOUNGER THAN 16	___ ___
K9	We want to know where people socialize with the intention of meeting a new sexual partner. This will help us plan AIDS prevention programs there and have condoms available. We especially want to know: • Where youth socialize and meet new sexual partners • Where women or men sell sex • We also want to know where other people such as single men, gay men, temporary residents, migrant workers, gay or bisexual men, go to find new sexual partners. • We want to know where people in this district go to meet new partners in this district and in other districts. We also want to know where people from outside the district come to meet new sexual partners in this district.	
K9	We also want to know what you think about drug use in this district. How common is injection drug use in this district? IF INJECTION DRUG USE OCCURS AT ALL: Where can you find injection drug users in this district?	VERY COMMON 1 SOMEWHAT COMMON 2 NOT VERY COMMON 3 DOES NOT OCCUR IN DISTRICT 4

PRELIMINARY LIST OF SITES: FOR EACH SITE REPORTED, FILL OUT A SITE REPORT FORM

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

SITE VERIFICATION FORM

Unique Site Number: ____ ____

No.	Questions	Coding Categories
V1	STUDY DISTRICT	Krasnogvardeisky 1 Admiralteisky 2 Tsentralny 3 Lomonosov 4
V2	Location of Site	2.1 DISTRICT in St Petersburg _____ (CODE 1-4): __ **IF IN KRASNOGVARDEISKY:** 2.2 Part of the district: Polustrovo 1 Bol'shaya Ohta 2 Malaya Ohta 3 Rzhevka-Porohoviye 4 2.5 WITHIN 2 BLOCKS OF MAIN ROUTE? YES 1 NO 2 **IF IN LOMONOSOV:** 2.4 Low part 1 High part 2 2.6 WITHIN 2 BLOCKS OF MAIN ROUTE? YES 1 NO 2 **IF IN ADMIRATEISKY OR TSENTRALNY:** 2.6 NEAREST METRO/RAILWAY _____ ___ ___ 2.7 WITHIN 2 BLOCKS OF METRO? YES 1 NO 2
V3	List ID Number	___ ___ ___
V4	Number of Key Informants Reporting This Site	___ ___
V5	Name of Site	_____

No.	Questions	Coding Categories
V6	GPS Coordinates Correct Street Address	Latitude:_____ Longitude:_____ CORRECT ADDRESS:_____ _____
V7	Outcome of site verification	SITE NOT FOUND 0 SITE FOUND AND RESPONDENT INTERVIEWED 1 SITE FOUND BUT NO WILLING RESPONDENT 2 SITE CLOSED TEMPORARILY 3 NO LONGER A SITE 4
V8	**Type of Site** 01 INFORMAL BAR/TAVERN 02 FORMAL BAR/TAVERN 03 NIGHTCLUB 04 GAY CLUB 05 DORMITORY 06 PRIVATE DWELLING 07 TAXI STAND 08 TRUCK STOP 09 PUBLIC TRANSPORTATION PARKING LOTS 10 HIGH SCHOOL 11 INSTITUTION/UNIVERSITY CAMPUS 12 STREET/WASTE/YARD	*__**ENTER CODE:**__ ___ ___ 13 TECHNICAL SCHOOL 14 UNUSED/ ABANDONED BUILDING 15 HOTEL 16 MARKET 17 RAILWAY STATIONS 18 STREET TUNNEL 19 METRO STOP 20 BASEMENT/ROOF 21 STAIRWELLS 22 PARK 23 CASINO 24 OTHER (specify):_____
V9	Interviewer Number	___ ___
V10	Date (DD/MM/YY)	___ ___ / ___ ___ /___ ___
V11	Day of the week	MONDAY 1 TUESDAY 2 WEDNESDAY 3 THURSDAY 4 FRIDAY 5 SATURDAY 6 SUNDAY 7
V12	Time of day (24 HOUR CLOCK)	___ ___ : ___ ___
V13	Number socializing upon interviewer arrival at site	MEN: ___ ___ ___ WOMEN:___ ___ __ NOT APPLICABLE: 999

No.	Questions	Coding Categories
V14	Gender of respondent	MALE 1 FEMALE 2

READ: Hello. I am working with NGO "Look to the future". Now we collect data in the city to develop healthcare programs, including programs to prevent AIDS and other diseases. For this reason we would like to ask you a few questions. We won't ask you for your name. Your answers will be kept confidential. We interested in activities that occur at this place, the people who come here, and programs that may take place here. Your participation is completely voluntary.

V15	Are you willing to answer these questions?	YES 1 NO 2
V16	How old are you? *CONCLUDE INTERVIEW IF RESPONDENT IS YOUNGER THAN 16.	___ ___
V17	How many years has this site been in operation as a place where people socialize?	LESS THAN A YEAR 0 1 TO 2 YEARS 1 3 TO 5 YEARS 2 6 TO 10 YEARS 3 MORE THAN TEN YEARS 4

			YES	NO	DK
V18	Which types of activities take place here? READ LIST CIRCLE ONE CODE FOR EACH ACTIVITY	Beer Consumed	1	2	8
		Hard Alcohol Consumed	1	2	8
		TV Or Video Viewing	1	2	8
		Dancing	1	2	8
		Music	1	2	8
		Computer Games	1	2	8
		Eating food	1	2	8
		Striptease Show	1	2	8

			YES	NO	DK
V19	I have been told that people socialize at places like this and meet sexual partners here. READ LIST	Do men meet new female sexual partners here?	1	2	8
		Do women meet new sexual partners here?	1	2	8
		Do men meet male (gay) sexual partners?	1	2	8
		Does someone onsite facilitates partnerships?	1	2	8
		Do female Sex Workers Solicit Customers?	1	2	8

No.	Questions	Coding Categories

READ: Let's talk in more details about people who come here during the busiest times.

		None	< Half	Half	>Half	Almost All/All
V20	Among **men** who come here during the busiest times how many do you think are:					
	(a) Are Unemployed	0	1	2	3	4
	(b) Are Students	0	1	2	3	4
	(c) Are < Age 18	0	1	2	3	4
	(d) Live within a 10 minute walk of here	0	1	2	3	4
	(e) Residents of this district	0	1	2	3	4
	(f) Come here at least once a week	0	1	2	3	4
	(g) Come here by metro or train	0	1	2	3	4
	(h) Drink alcohol here	0	1	2	3	4
	(i) Find a new sexual partner while they are here	0	1	2	3	4
	(j) Appear to be injection drug users	0	1	2	3	4
V21	Among **woman** who come here during the busiest times how many do you think are:	None	< Half	Half	>Half	Almost All/All
	(a) Are Unemployed	0	1	2	3	4
	(b) Are Students	0	1	2	3	4
	(c) Are < Age 18	0	1	2	3	4
	(d) Live within a 10 minute walk of here	0	1	2	3	4
	(e) Residents of this district	0	1	2	3	4
	(f) Come here at least once a week	0	1	2	3	4
	(g) Come here by metro or train	0	1	2	3	4
	(h) Drink alcohol here	0	1	2	3	4
	(i) Find a new sexual partner while they are here	0	1	2	3	4
	(j) Appear to be injection drug users	0	1	2	3	4

			Morning	Afternoon	Evening	Late night
V22	During a typical week in the last two months, what were the busiest time(s) here? PROBE FOR DAYS AND TIMES OF DAY AND CHECK OFF BOXES	MON				
		TUES				
		WED				
		THURS				
		FRI				
		SAT				
		SUN				

No.	Questions	Coding Categories
V23	Approximately how many men come here during the course of a busy day? Try to estimate the total number of men who come at any time between opening and closing. READ OPTIONS IF NECESSARY	< 10 1 11-20 2 21-50 3 51-100 4 101-300 5 301-500 6 501-1000 7
V24	Approximately how many women come here during the course of a busy day? Try to estimate the total number of women who come at any time between opening and closing. READ OPTIONS IF NECESSARY	< 10 1 11-20 2 21-50 3 51-100 4 101-300 5 301-500 6 501-1000 7
V25	What are the busiest times of the year? CAN MARK MORE THAN ONE OPTION	YES NO SUMMER 1 2 WINTER 1 2 SCHOOL HOLIDAYS 1 2 PUBLIC HOLIDAYS 1 2 OTHER _____ 1 2 Specify
V26	Have there ever been any AIDS prevention activities at this site?	YES 1 NO 2
V27	In the past year, how often have condoms been available here?	ALWAYS 1 SOMETIMES 2 NEVER 3
V28	Are there any condoms here today? How many brands? If YES, can I see one?	YES, BUT YOU CANT SEE ONE 1 YES, AND A CONDOM WAS SEEN 2 NO 3 NUMBER OF BRANDS SEEN:_____
V29	Is it possible for someone to find a condom within 10 minutes of leaving this place at night?	YES 1 NO 2

No.	Questions	Coding Categories
V30	Would you be willing to: (1) have an AIDS prevention programme for people?	YES 1 NO 2 NOT APPLICABLE 9
	(2) sell condoms here?	YES 1 NO 2 NOT APPLICABLE 9
V31	We also want to know what you think about drug use in this area. How common is injection drug use in this area?	VERY COMMON 1 SOMEWHAT COMMON 2 NOT VERY COMMON 3 DOES NOT OCCUR IN THIS AREA 4
V32	Have you seen used syringes lying around inside or outside this site in the past 3 months?	YES 1 NO 2
V33	Is this a site where people meet new sexual partners or where drug injectors socialize or both?	PEOPLE MEET SEXUAL PARTNERS ONLY 1 DRUG INJECTORS SOCIALIZE ONLY 2 BOTH: PEOPLE MEET SEXUAL PARTNERS & DRUG INJECTORS SOCIALIZE 3
V34	Observation: Evidence of AIDS prevention activities noted by interviewer at the site	NUMBER OF AIDS POSTERS DISPLAYED ___ ____ NUMBER OF AIDS BROCHURES AT SITE ___ ____ NUMBER OF CONDOMS VISIBLE ___ ____

QUESTIONNAIRE FOR INDIVIDUALS SOCIALIZING AT SITES (09.10.01)

No.	Questions	Coding categories
Q1	Name of HTA	Krasnogvardeisky 1 Admiralteisky 2 Tsentralny 3 Lomonosov 4
Q2	Interviewer Gender and Number	MALE 1 FEMALE 2 INTERVIEWER ID NUMBER: ___ ___
Q3	Individual Interview Consecutive Number	___ ___ ___
Q4	Name of site and Unique Site Number	_____ UNIQUE SITE NUMBER: ___ ___ ___
Q5	Date (DD/MM/YY)	___ ___ / ___ ___ /___ ___
Q6	Time of day (24 hour clock)	___ ___ : ___ ___
Q7	Number socializing at site at start of interview	MEN: ___ ___ ___ WOMEN:___ ___ ___
Q8	Number of apparent drug injectors and sex workers socializing at site upon arrival. GIVE YOUR BEST ESTIMATE.	MEN BOTH SEX WORKER AND IDU:___ ___ ___ SEX WORKER ONLY:___ ___ ___ IDU ONLY:___ ___ ___ WOMEN BOTH SEX WORKER AND IDU:___ ___ ___ SEX WORKER ONLY:___ ___ ___ IDU ONLY:___ ___ ___
Q9	Gender of respondent	MALE 1 FEMALE 2
Q10	Interviewer opinion if respondent is IDU and/or CSW	IDU ONLY 1 CSW ONLY 2 BOTH IDU AND CSW 3 NEITHER 4

No.	Questions	Coding categories
READ: Hello. I am working with NGO "Look to the future". Now we collect data in the city for development better health programs for our city. We would like to ask you few questions to get some information necessary to plan and evaluate the programs, including programs to help prevent the spread of AIDS and other infectious diseases. We won't ask you for your name. Your answers will be kept confidential. We would like to ask questions about your behavior, including some intimate question about sexual behavior. Your participation is completely voluntary. If you choose to participate, you may refuse to answer any questions.		
Q11	Are you willing to answer these questions? *IF NO, STOP INTERVIEW	YES 1 NO 2
Q12	How old are you? STOP IF 15 OR YOUNGER	___ ___
Q13	Do you live in St Petersburg or elsewhere? 13.1 IF IN ST PETERSBURG: • What district do you live in? 13.2 IF IN KRASNOGVARDEISKY: • What part do you live in? 13.3 IF IN LOMONOSOV: • Which part do you live in? 13.4 IF IN ADMIRATEISKY OR TSENTRALNY: • What Metro Station is nearest where you live?	**13.1 IF IN ST PETERSBURG: DISTRICT CODE :___ ___** 13.2 IF IN KRASNOGVARDEISKY Part of District: Rzhevka 1 Ohta 2 Porohovie 3 Polustrovo 4 **13.3 IF IN LOMONOSOV:** Low part 1 High part 2 **13.4 IF IN ADMIRATEISKY OR TSENTRALNY**: 13.4 NEAREST METRO/RAILWAY___ ___ **13.5. LIVES ELSEWHERE IN RUSSIA 30** 13.6. OUTSIDE OF RUSSIA 31
Q14	How long have you lived in here / there?	LESS THAN ONE YEAR 0 NUMBER OF YEARS ___ ___ ALL MY LIFE 97
Q15	How often do you come to this place? CIRCLE ONLY ONE RESPONSE.	EVERYDAY 1 4-6 TIMES PER WEEK 2 2-3 TIMES PER WEEK 3 ONE TIME PER WEEK 4 2-3 TIMES PER MONTH 5 ONE TIME PER MONTH 6 LESS THAN ONCE A MONTH 7 THIS IS MY FIRST VISIT 8
Q16	When did you come to this place the first time?	THIS IS MY FIRST VISIT 1 WITHIN PAST 4 WEEKS 2 WITHIN PAST 2-6 MONTHS 3 WITHIN PAST 7-12 MONTHS 4 OVER A YEAR AGO 5

No.	Questions	Coding categories
Q17	Some people meet new sexual partners at places like this. Do you believe that people attract new sexual partners here? That is, people they have never had sex with before.	YES 1 NO 2
Q18	Have you ever attracted a new sexual partner here?	YES 1 NO 2
Q19	When did you last attract a new sexual partner here?	WITHIN PAST 7 DAYS 1 WITHIN PAST 2-4 WEEKS 2 WITHIN PAST 2-3 MONTHS 3 WITHIN PAST 4-6 MONTHS 4 WITHIN PAST 7-12 MONTHS 5 OVER A YEAR AGO 6 NEVER MET A NEW PARTNER HERE 9
Q20	The last time you had sex with this partner, did you use a condom?	YES 1 NO 2 DON'T REMEMBER 3 NEVER MET A NEW PARTNER HERE 9
Q21	Now I want to ask you about the people you had sex with in the past 4 weeks. How many different people have you had sex with in the past 4 weeks?	4 WEEK TOTAL ___ ___
Q22	How many of these people were new sexual partners for you in the past 4 weeks?	4 WEEK NEW ___ ___
Q23	The last time you had sex with one of these new partners, did you use a condom?	YES 1 NO 2 NO NEW PARTNERS IN PAST 4 WEEKS 9
Q24	About how many new sexual partners have you had in the past 12 months? READ OPTIONS	NONE- NO NEW SEXUAL PARTNERS 0 ONE 1 TWO 2 3-5 3 6-10 4 MORE THAN 10 5

No.	Questions	Coding categories
Q25	Do you have any regular long-term sexual partners? that is, someone with whom you have been having sex at least monthly for a year or more? IF NO NEW OR REGULAR PARTNERS IN THE PAST 12 MONTHS: Have you had any sexual partners in the past 12 months?	YES, HAVE ONE OR MORE REGULAR 1 NO REGULAR 2 YES 8 NO SEXUAL PARTNERS IN PAST YEAR 9
Q26	Have you ever used a condom?	YES 1 NO 2
Q27	Do you have a condom with you? *IF YES, May I see it?	CONDOM WITH ME BUT YOU CANT SEE 1 YES AND CONDOM SEEN 2 NO CONDOM WITH ME 3
Q28	How many AIDS educational sessions have you attended in this district in the last three months?	NUMBER OF SESSIONS : ___ ___
Q29	Are you currently employed?	NO, LOOKING FOR WORK 0 NO, NOT LOOKING FOR WORK 1 YES, OCCASIONAL / PARTTIME WORK 2 YES, FULLTIME 3
Q30	Do you currently study?	YES 1 NO 2
Q31	We also want to know what you think about drug use in this area. How common is injection drug use in this area?	VERY COMMON 1 SOMEWHAT COMMON 2 NOT VERY COMMON 3 DOES NOT OCCUR IN THIS AREA 4 DON'T KNOW 5
Q32	Do you believe that people who inject drugs socialize here?	YES 1 NO 2 DON'T KNOW 3
Q33	Have you ever injected drugs?	YES 1 NEVER INJECTED DRUGS 2 DON'T REMEMBER 3

No.	Questions	Coding categories
Q34	When did you last inject drugs?	WITHIN PAST 7 DAYS 1 WITHIN PAST 2-4 WEEKS 2 WITHIN PAST 2-3 MONTHS 3 WITHIN PAST 4-6 MONTHS 4 WITHIN PAST 7-12 MONTHS 5 OVER A YEAR AGO 6 NEVER INJECTED DRUGS 7
Q35	The last time you injected drugs, did you share a needle or syringe? IF FEMALE RESPONDENT: THANK YOU FOR YOUR HELP.	YES, SHARED NEEDLES 1 NO, DID NOT SHARE 2 NEVER INJECTED DRUGS 3
ASK MEN ONLY		
Q36	Have you given money or gifts to anyone in exchange for sex in the past 4 weeks?	YES 1 NO 2 DON'T REMEMBER 3
Q37	Have you had sex with a man in the past 4 weeks?	YES 1 NO 2 DON'T REMEMBER 3