

Risk Behaviours and Service Needs of Marginalized People Who Use Drugs in Edmonton's Inner City:

Results from the Edmonton Drug Use and Health Survey

Elaine Hyshka

Assistant Professor

Jalene Anderson

Research Assistant

Zing-Wae Wong

Research Assistant

T. Cameron Wild

Professor



UNIVERSITY OF ALBERTA
SCHOOL OF PUBLIC HEALTH

January 7, 2016

Acknowledgements

The Edmonton Drug Use and Health Survey (EDUHS) was conducted in partnership with AMSISE (Access to Medically Supervised Injection Services Edmonton). AMSISE is a coalition of local agencies and organizations exploring the need and feasibility of implementing medically supervised injection services in Edmonton, as part of a continuum of services and supports for socially marginalized people who use illicit drugs. AMSISE is chaired by HIV Edmonton, and its main working group includes representatives from Alberta Addicts Who Educate and Advocate Responsibly, Alberta Health Services, Boyle McCauley Health Centre, Boyle Street Community Services, City of Edmonton Housing and Homelessness, George Spady Centre, Northern Alberta HIV Program, Royal Alexandra Hospital, Streetworks Edmonton, and the University of Alberta's School of Public Health. AMSISE activities are also informed by a larger reference group of approximately 30 health, social service, and public safety organizations.

Beyond the research partnership with AMSISE, several individuals and organizations deserve recognition for their contributions to the research outlined in this report. We are grateful to Karen Turner, Marliss Taylor and the entire Streetworks Edmonton team for their assistance recruiting participants for this study. Boyle Street Community Services, Boyle McCauley Health Centre, and the Bissell Centre also generously provided space for data collection activities. Additionally, many of the survey instruments and measures used in this project were provided by Drs. Thomas Kerr and Evan Wood, both from the British Columbia Centre for Excellence in HIV/AIDS, and also by Jennifer Gratrix (Alberta Health Services), Sabrina Plitt (Public Health Agency of Canada), and other members of the I-TRACK Edmonton site team. Ann Goldblatt, Jody Wolfe, Colin Sui, and members of the Alberta Addicts Who Educate and Advocate Responsibly (AAWEAR) provided additional project support.

The research in this report was funded by contributions from Alberta Health, the Edmonton Homeless Commission, and the Canadian Institutes of Health Research. The authors gratefully acknowledge these funding sources and would also like to specifically thank Dr. James Talbot for his help securing funding for this project.

Finally, we are grateful to the 324 EDUHS participants who generously shared their time, experience, and personal information with us to help improve our understanding of drug use and health in Edmonton's inner city.

List of Abbreviations

AUDIT-C	Alcohol Use Disorders Identification Test - Consumption
BMHC	Boyle McCauley Health Centre
BSCS	Boyle Street Community Services
DUDIT	Drug Use Disorders Identification Test
EDUHS	Edmonton Drug Use and Health Survey
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
PNCQ	Perceived Need for Care Questionnaire
PWID	People Who Inject Drugs
PWUD	People Who Use Drugs
SIS	Medically Supervised Injection Services
STI	Sexually Transmitted Infection

Table of Contents

1. Executive Summary	1
1.1 <i>Rationale</i>	1
1.2 <i>Methods</i>	1
1.3 <i>Main Findings and Recommendations</i>	1
Findings	1
Recommendations	2
2. Background and Rationale for the Edmonton Drug Use and Health Survey	5
3. Research Methods	6
<i>The study protocol received ethical approval from the University of Alberta's Health Research Ethics Board, Panel B.</i>	6
3.1 <i>Study design</i>	6
3.2 <i>Participants and eligibility</i>	6
3.3 <i>Measures</i>	6
3.4 <i>Analyses</i>	7
4. Findings	7
4.1 <i>Sociodemographic characteristics of EDUHS participants</i>	7
4.2 <i>Housing</i>	7
4.3 <i>Substance use patterns and frequency of use</i>	8
Alcohol use	8
Non-injection drug use	9
Injection drug use	11
4.4 <i>Substance use risk behaviours</i>	14
Sharing syringes and other injection drug use equipment	14
Sharing crack pipes and/or mouthpieces	19
Public injection	21
Public crack cocaine smoking	23
Injecting alone	25
Requiring assistance to inject	26
Jugular injection	27
4.5 <i>Mental health and substance use problems</i>	27
Problematic alcohol use	27
Problematic drug use and drug dependence	28
4.6 <i>Overdose</i>	29
4.7 <i>Experiences of violence</i>	30
4.8 <i>Physical health problems</i>	30
4.9 <i>Sexual health</i>	31
4.10 <i>HIV and HCV status</i>	33
HIV testing and treatment	33
HCV testing and status	34
4.11 <i>Access to health and social services</i>	34
General health and social services for mental health and substance use problems	34
Specialty care for substance use and mental health problems	37
Hospital care	39
Harm reduction services	40
Sexual health services	40
4.12 <i>New interventions to mitigate the negative health impacts of substance use</i>	41
Safer inhalation supplies	41
Take-home Naloxone	41
Medically supervised injection services	41

Supervised inhalation services	44
5. Conclusion	44
Study Limitations	44
Recommendations	45
6. References	51
7. Appendix	57

List of Figures

Figure 4.1. Self-reported current housing stability amongst EDUHS participants (n = 320)	8
Figure 4.2. Self-reported housing satisfaction amongst EDUHS participants (n = 320)	8
Figure 4.3. Self-reported frequency of alcohol use amongst EDUHS participants (n = 320)	9
Figure 4.4. Non-injection drug use reported by participants in the past six months (n = 284)	10
Figure 4.5. Participants' most frequently used non-injection drug in past six months (n = 277)	11
Figure 4.6. Injection drug use reported by participants in the past six months (n = 284)	12
Figure 4.7. Participants' most frequently injected drug (by type) during past six months (n = 276)	13
Figure 4.8. Frequency of injecting 'main injection drug' during previous six months (n = 279)	14
Figure 4.9. Sources of sterile syringes reported by participants who injected drugs in the past six months (n = 278)	16
Figure 4.10. Difficulty accessing sterile syringes amongst participants who injected drugs in the past six months (n = 279)	17
Figure 4.11. Self-assessed barriers to accessing sterile syringes reported by participants who injected drugs in the past six months (n = 130)	17
Figure 4.12. Syringe disposal methods reported by participants who injected drugs in the past six months (n = 276)	18
Figure 4.13. Crack pipe acquisition by source reported by participants who smoked crack cocaine in the past six months (n = 182)	19
Figure 4.14. Source of crack-smoking supplies reported by participants who smoked crack cocaine in the past six months (n = 182)	20
Figure 4.15. Reported difficulty accessing crack pipes reported by participants who smoked crack cocaine in the past six months (n = 182)	20
Figure 4.16. Difficulty accessing other crack use supplies reported by participants who smoked crack cocaine in the past six months (n = 180)	21
Figure 4.17. Frequency of public injection reported by participants who injected drugs in the past six months (n = 278)	21
Figure 4.18. Main public injection locations reported by participants who injected drugs in the past six months (n = 214)	22
Figure 4.19. Reasons for public injection reported by participants who injected drugs in the past six months (n = 214)	23
Figure 4.20. Frequency of public crack use reported by participants who smoked crack in the past six months (n = 182)	24
Figure 4.21. Average length of injection drug binges reported by participants who injected drugs in the past six months (n = 144) N.B. Participants who reported binge injection drug use in the previous six months were asked to indicate on average, how long their binges last.	25
Figure 4.22. Frequency of injecting alone in the past six months amongst people who injected drugs in the past six months (n = 277)	26
Figure 4.23. Frequency of needing help injecting amongst people who injected drugs in the past six months (n = 157)	26
Figure 4.24. Participants' AUDIT-C Scores (amongst participants reporting current alcohol consumption) (n = 218)	28
Figure 4.25. Participants' DUDIT Scores (n = 292)	28
Figure 4.26. Main injection drug involved in last overdose episode in the previous six months (n = 49)	30
Figure 4.27. Health problems experienced by participants while smoking crack in the past six months (n = 176)	31
Figure 4.28. Self-reported frequency of condom use amongst sexually active participants (n = 250)	32
Figure 4.29. Reported reasons for exchanging sex in the previous six months (n = 40)	33
Figure 4.30. Participants' overall levels of perceived need, service use, and fully met needs for care for general substance use and mental health-related services in the past 12 months, by percent (N = 320)	35

Figure 4.31. Proportion of participants reporting perceived need, service use, and unmet need across seven services in the past 12 months, by percent (N = 320)	35
Figure 4.32. Number of previous substance use treatment episodes amongst participants who had ever attended treatment (n = 238)	37
Figure 4.33. Participants' response to "in the last 12 months, have you tried to access any drug or alcohol treatment programs but were unable to?" (n = 305)	38
Figure 4.34. Hospitals used by participants in the previous six months (n = 306)	40
Figure 4.35. Participants' views on the potential benefits of opening a medically supervised injection service in Edmonton (n = 257)	43

List of Tables

Table 4.1. Participants' self-reported reasons for perceived unmet need for care across all services, for social interventions, and for counseling (N=320).	36
Table 4.2. Participants' views on potential SIS rules (n = 261)	43

1. Executive Summary

1.1 Rationale

Increasing recognition of the high health and social costs of substance misuse has led several cities and provinces to consider how to improve access to health services for PWUD and reduce morbidity and mortality in this population. To date, however, little research has examined the health status and health service needs of PWUD in Alberta, particularly those living in Edmonton's inner city. This has resulted in a poor understanding of health service needs and barriers to care amongst this population, and has made improving health and social outcomes for PWUD in Edmonton challenging.

The Edmonton Drug Use and Health Survey (EDUHS) was designed to address this knowledge gap. To our knowledge, EDUHS is the largest survey of socially marginalized PWUD ever completed in Edmonton. Results provided in this report provide current (i.e., 2014) data on the extent to which PWUD in Edmonton's inner city: (1) engage in HIV/AIDS, HCV, and overdose-related risk behaviours; (2) experience negative health outcomes related to their substance use; (3) regularly access healthcare services; (4) experience unmet healthcare needs; and (5) are willing to access potential new health service interventions designed to reduce drug related harms.

1.2 Methods

Between April and October 2014, an interviewer-assisted structured survey was completed with 320 PWUD (65% men; 65% Aboriginal and First Nations) living in Edmonton's inner city. Participants were recruited from in and around three inner city agencies (two of which included embedded needle exchange programs) using street outreach and snowball sampling methods. A peer outreach worker recruited and screened participants for this study. All people aged 15 or older who regularly use illicit drugs and spend time in the inner city were eligible for the survey, but efforts were made to oversample people who inject drugs. Participants were provided with a \$20 cash honorarium for their time and expertise.

EDUHS included 121 single and multi-item measures, divided into four sections: (1) sociodemographic information; (2) substance use, associated risk behaviours and experiences of harm; (3) participants' health service utilization and unmet health care needs; and (4) acceptability of potential new interventions designed to reduce the burden of disease associated with illicit substance use.

1.3 Main Findings and Recommendations

Findings

- **Addiction rates and comorbid mental health problems are high.** All but one participant met clinical criteria for problematic drug use, and 61.6% ($n = 180$) met clinical criteria for drug dependence. Comorbidity was high: most respondents (55.7%; $n = 167$) also reported a past-year diagnosed or undiagnosed mental health problem.

- **A broad range of opioids and stimulants are injected.** In the six months preceding the survey, 91.2% ($n = 279$) of EDUHS participants reported injecting drugs. The most commonly used injection drugs were opioids (e.g. Morphine and Dilaudid; 60.5%, $n = 167$) and methamphetamine (27.2%; $n = 75$). Few participants reported using non-injection (9.5%; $n = 27$) or injection fentanyl (12.5%; $n = 35$) in the six months preceding the survey.
- **Access to clean needles is problematic.** Almost half (46.6%) of respondents who reported injection drug use in the 6 months preceding EDUHS reported that they either always or sometimes experience difficulty accessing sterile syringes.
- **Risk behaviours associated with infectious disease transmission are common.** EDUHS participants reported engaging high rates of risk behaviours, including: syringe sharing (26% of those who injected drugs in the 6 months preceding EDUHS), public injection (48% of respondents who injected drugs), crack pipe sharing (70% of those who reported using crack), and experiences of overdose (23%). Amongst participants who had been previously tested for HIV or HCV, 17.3% ($n = 52$) reported being HIV positive and 67.3% ($n = 202$) stated that they had been diagnosed with HCV. In terms of HIV and HCV co-infection, 14.1% ($n = 41$) of participants self-reported a positive status for both.
- **Unmet service needs are very common.** Almost all EDUHS participants perceived a need for services to help them with substance use and/or mental health problems in the 12 months preceding the survey. However, only 14.6%, ($n = 45$) reported having these service needs fully met. Only 20% of EDUHS participants reported accessing detoxification or specialty addiction treatment services (excluding opioid dependence treatment) in the 12 months preceding the survey. Nearly as many participants (18.0%, $n = 55$) had tried to access these services and been unable to.

These findings document an urgent need to improve health and social outcomes amongst PWUD in Edmonton's inner city. Unfortunately, Edmonton lags behind other Canadian jurisdictions with regard to implementing evidence-based interventions that could reduce these risk behaviours and improve the health of people who use drugs. High rates of risk behaviours and levels of unmet need for care amongst EDUHS participants can be mitigated through evidence-based policy and service changes, including the following specific recommendations.

Recommendations

1. **Expand access to sterile syringes.** Results from EDUHS indicate that current syringe exchange efforts are not fully meeting the needs of people who inject drugs (PWID) in Edmonton's inner city.
 - a. In the six months preceding the survey, 91.2% ($n = 279$) of EDUHS participants reported injecting drugs.
 - b. Amongst these participants, 26.1% ($n = 71$) reported either borrowing or lending previously used syringes in the same time period. These rates are higher than those observed in many other Canadian jurisdictions (e.g. less than 10% in Vancouver report syringe borrowing or lending) and are concerning, because syringe sharing is an important contributor to new HIV and HCV infections.
 - c. Almost half (46.6%, $n = 130$) of respondents reported that they regularly or sometimes experience difficulty accessing new syringes. Amongst participants who reported difficulty accessing sterile syringes, 74.6% ($n = 97$) cited needle exchange operating hours as an access barrier.

- d. Opening a 24-hour fixed site syringe exchange in Edmonton's inner city could significantly improve access to sterile syringes on evenings and weekends when Edmonton's harm reduction programs are either closed or operating at very limited capacity.

2. Implement medically supervised injection services (SIS). EDUHS results document considerable interest in this service, which could mitigate negative personal and community impacts of public injecting.

- a. Almost half (47.5%) of participants who injected drugs in the previous six months reported that they always or usually inject in public.
- b. 91% ($n = 248$) of EDUHS participants who recently injected drugs were interested in attending a medically supervised injection service, suggesting that this service would be acceptable to a majority of PWID in Edmonton's inner city. A further 97.6% ($n = 285$) believed that a SIS would reduce injection with used needles.
- c. Implementing medically supervised injection services in Edmonton's inner city, as part of a comprehensive model of care for PWID, could help reduce rates of public injecting and associated health risks.

3. Expand access to overdose prevention services. EDUHS data indicate that PWID in Edmonton's inner city experience high rates of overdose.

- a. In total, 22.9% ($n = 69$) of EDUHS participants reported experiencing an overdose in the previous six months, while 35.7% ($n = 110$) reported witnessing an overdose.
- b. Many of these overdoses involved injection and non-injection opioids. Methamphetamines were also an important contributor to overdose events. However, only one participant (0.2%) reported taking Fentanyl prior to their most recent overdose.
- c. Naloxone hydrochloride is an opioid antagonist, which can reverse the effects of an overdose from opioids. Permanently expanding access to take home naloxone in Edmonton's inner city could help further prevent overdose morbidity and mortality.
- d. Interest in naloxone was very high amongst participants, with 69.2% ($n = 155$) indicating they would be interested in obtaining a take-home naloxone kit and being trained on how to use the drug to help someone experiencing an opioid overdose.

4. Implement a safer inhalation service. EDUHS results document high rates of non-injection drug related risk behaviours.

- a. In the previous six months, 89.2% ($n = 282$) of EDUHS participants had used some type of non-injection illicit drug, by smoking, snorting or swallowing.
- b. Methamphetamine (smoked) was the most common non-injection drug, with 23.8% ($n = 66$) of participants reporting this as the drug they used most frequently. This was followed by crack cocaine (23.1%, $n = 64$).
- c. Of participants who reported smoking crack cocaine in the previous six months, 69.7% ($n = 131$) reported borrowing, lending, or sharing a crack pipe or mouthpiece in that time.
- d. Amongst those who smoked crack in the past six months, 39.0% ($n = 71$) of people said they found it difficult to find new crack pipes when needed.

- e. Safer inhalation programs may also benefit people who smoke methamphetamine.

5. Increase access to adequate general and specialized treatment services for substance use and mental health problems. Existing access to general and specialty care for substance use and or/mental health problems is inadequate to meet the needs of EDUHS participants.

- a. Almost all EDUHS participants perceived a need for services for their substance use and/or mental health problems in the past 12 months.
- b. However, amongst this group, only 14.6% ($n = 45$) reported having these needs fully met. Rates of unmet need were much higher than those reported amongst Alberta adults experiencing substance use disorders in the general population.
- c. Participants reported the highest levels of unmet need for social interventions and counseling.
- d. In terms of specialty care for substance use problems, only 20% of EDUHS participants reported accessing detoxification or specialty addiction treatment services (excluding opioid dependence treatment) in the 12 months preceding the survey. Nearly as many participants (18.0%, $n = 55$) had tried to access these services and been unable to.
- e. Uptake into opioid dependence treatment programs (32.9%; $n = 47$) amongst regular opioid users, and uptake into specialized mental health care (8.5%; $n = 26$) in the last 12 months was also relatively low, suggesting a need to expand access and/or better connect this population to specialty care.

6. Expand access to permanent supportive housing within a harm reduction model.

EDUHS participants reported high rates of homelessness and unstable housing.

- a. Over half (56.9%; $n = 182$) of participants reported that their current housing situation was unstable, and almost two-thirds (61.9%; $n = 198$) indicated they were unsatisfied with their current housing situation.
- b. The results of this study show a clear link between unstable housing and drug-related risk behaviours. The most frequently stated reason for public injection was homelessness, reported by 45.7% ($n = 100$) of those who injected in public. The main reason for smoking crack in public was also homelessness, reported by 36.8% ($n = 57$) of those who reported smoking in public.
- c. Alleviating homelessness amongst PWUD in Edmonton's inner city will likely lead to significant reductions in public drug use and associated negative health outcomes.

2. Background and Rationale for the Edmonton Drug Use and Health Survey

The misuse of illicit drugs is a major public health challenge, which results in significant morbidity, mortality, economic costs,¹⁻³ and social and community impacts.⁴ Although a relatively small proportion of Canadians engage in illicit substance use, it is estimated that in 2008, drug use accounted for roughly \$1.3 billion in health care costs, \$2 billion in justice-related costs, and \$5.3 billion in productivity losses.⁵ The misuse of illicit drugs represents a particularly large burden on Canada's medical system, from acute hospital care to the treatment of long-term illness. For example, in 2011, 1.2% of all hospital stays in Canada were related to a primary diagnosis of mental or behavioural disorders due to substance use. This accounted for 34,746 hospital stays, and is conservatively estimated to have cost \$267 million.³

People who use illicit drugs (PWUD) (in particular, opioids, cocaine, and amphetamines) are at increased risk of contracting blood borne pathogens and account for approximately 15-20% of new human immunodeficiency virus (HIV) infections and over 60% of new hepatitis C virus (HCV) infections in Canada, each year.⁶ Amongst PWUD, people who inject drugs (PWID) are at particular risk for acquiring HIV, HCV and blood-borne pathogens, through use of contaminated injecting equipment. Additionally, PWUD are at increased risk of experiencing respiratory problems, accidental injury, cutaneous and subcutaneous abscesses, sexually transmitted infections, endocarditis, talcosis, and morbidity and mortality due to overdose.¹

Beyond physical health problems, a significant proportion of PWUD also experience mental illness and/or substance use disorders. Many PWUD face major difficulties in accessing health and social supports, including the diagnosis and treatment of drug use disorders.^{7,8} Most health expenditures spent mitigating the population burden of illicit substance misuse in Canada have been allocated to demand reduction, through provision of substance use treatment – the vast majority of which requires patients to abstain from drug use in order to qualify for services.^{9,10} Unfortunately, despite expansion of treatment programs over the past several decades, most Albertans and Canadians experiencing problematic substance use are unable or unwilling to access substance use treatment services.^{7,11-13}

The negative health and social outcomes associated with illicit drug use are exacerbated for those experiencing socio-economic marginalization. Socially marginalized PWUD face many challenges in their daily lives including experiences of stigma and discrimination, unstable housing, food insecurity, social exclusion, and past and current experiences of violence and trauma.^{1,6,14,15}

Given the high health, social, and economic costs of illicit substance use in Canada, several jurisdictions have recently intensified efforts to better understand and mitigate harm amongst local populations of PWUD, particularly those experiencing problematic substance use. A number of recent projects have examined local patterns of substance use and related harm, as well as the feasibility and effectiveness of scaling up existing health services (e.g. syringe exchange programs) and/or introducing a variety of new health interventions (e.g. naloxone distribution and overdose prevention programming), ultimately designed to reduce the health and social costs of illicit substance use amongst PWUD.¹⁶⁻²⁴ However, this research has been centralized in large Canadian cities (i.e., Vancouver, Toronto, and Montreal). To date, little research has examined the health status and health service needs of PWUD, particularly socially marginalized PWUD residing in Edmonton's inner city.

The Edmonton Drug Use and Health Survey (EDUHS) was conducted to address this gap. The findings outlined in this report provide current (2014) data on the extent to which PWUD in Edmonton's inner city: (1) engage in HIV/AIDS, HCV, and overdose-related risk behaviours; (2) experience negative health outcomes related to their substance use; (3) regularly access generalist and specialized health services; (4) experience unmet care needs; and (5) would access potential new health service interventions designed to reduce drug related harms. Our overall intent was to compile these data in order to help inform policy and practice changes designed to improve health and social outcomes for vulnerable PWUD in Edmonton.

3. Research Methods

The study protocol received ethical approval from the University of Alberta's Health Research Ethics Board, Panel B.

3.1 Study design

EDUHS was a cross-sectional survey of PWUD in Edmonton's inner city, conducted between April and October 2014. A convenience sample of participants was recruited from in and around three inner city agencies (Boyle Street Community Services; BSCS, Boyle McCauley Health Centre; BMHC, and the Bissell Centre). BSCS and BMHC included embedded needle exchange programs. Although all people who regularly use illicit drugs were potentially eligible for the survey, an effort was made to oversample PWID, due to the significant health and social risks associated with this route of drug administration.

3.2 Participants and eligibility

To be eligible to participate in the survey, individuals had to report (1) regular use of illicit drugs over the past six months (at least once per month); and (2) spending time in Edmonton's inner city (at least two days per week). Participants also had to be at least 15 years of age, and assessed as capable of providing informed consent. A peer outreach worker screened potential participants for eligibility. Participants were excluded if they were acutely intoxicated or appeared to lack the cognitive capacity to understand and complete the informed consent process. Two authors (Hyshka and Anderson) administered the face-to-face survey to participants. Both have experience working or volunteering in the inner city. The average survey took between 40 and 60 minutes to complete. Surveys were administered in private rooms at one of the three inner city agencies where recruitment took place. Participants were provided with a \$20 cash honorarium for their time and expertise, whenever their survey ended. In total, 324 individuals participated in the survey, although four individuals were eventually excluded due to delayed onset of acute intoxication. This report is based on data collected from the remaining 320 participants, making EDUHS the largest study with socially marginalized PWUD ever conducted in Edmonton.

3.3 Measures

EDUHS employed a structured survey instrument, including 121 single and multi-item measures, divided into four sections (see Appendix 1 for the survey instrument). These sections measured (1) basic demographic characteristics, (2) illicit substance use, associated risk behaviours and

experience of harm, (3) participants' health service utilization and unmet health care needs, and (4) the acceptability of potential new interventions designed to reduce the burden of disease associated with illicit substance use. EDUHS incorporated previously validated tools including the Perceived Need for Care Questionnaire (PNCQ),²⁵ the Drug Use Disorders Identification Test (DUDIT),²⁶ and the Alcohol Use Disorders Identification Test Consumption (AUDIT-C).²⁷ Wherever possible, we employed standardized and/or previously-used measures in order to facilitate comparisons between Edmonton and other Canadian jurisdictions. Thus, many of the items and instruments were incorporated or adapted from measures used by the Public Health Agency of Canada, the University of Alberta's Addiction and Mental Health Research Laboratory, and the British Columbia Centre for Excellence in HIV/AIDS.

3.4 Analyses

Data were entered into a statistical software package (SPSS Version 22.0), cleaned and checked. Data analysis consisted of univariate descriptive statistics to answer each of the research questions. Standard transformations of the variables were performed as appropriate.

4. Findings

In total, 324 participants were recruited for the EDUHS. Data from 4 participants were excluded due to delayed onset of acute intoxication after providing informed consent. Of the remaining participants, 182 were recruited from in and around Boyle Street Community Services, 129 from in and around the Boyle McCauley Health Centre, and 9 from in and around the Bissell Centre.

4.1 Sociodemographic characteristics of EDUHS participants

Self-reported demographic characteristics were collected from survey participants. The sample ranged in age from 19 to 67 years old, with a median age of 43 years. The majority of survey participants, 64.6% (n = 206) of the sample were male, while 35.4% (n = 113) were female. This gender ratio is consistent with other research involving PWUD.¹⁴ Nearly all participants (98.4%, n = 316) were current residents of Edmonton, and over 90% (n = 285) reported living in the city for more than one year. The vast majority of participants (90.4%, n = 290) reported spending most of their time in the downtown or inner city area of Edmonton.

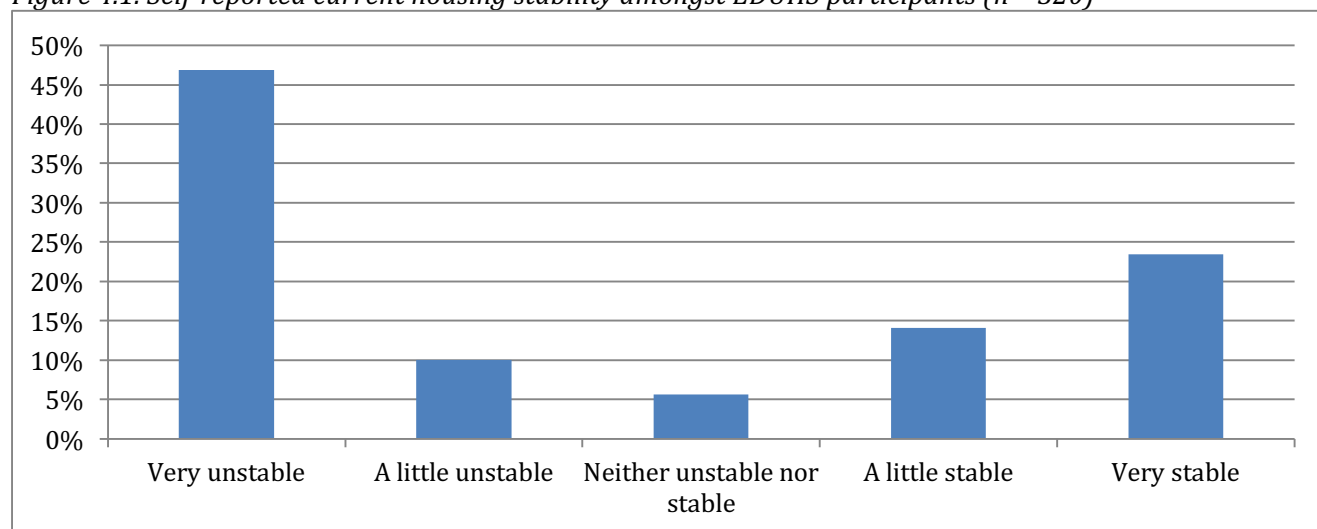
Just over 65.4% (n = 202) of participants self-identified as Aboriginal (First Nations, Inuit, or Metis). Amongst participants who identified as Aboriginal and responded to questions regarding residential school involvement, 73.5% (n = 147) reported that a family member had attended a residential school, while 20.2% (n = 40) reported attending a residential school themselves.

4.2 Housing

A complex relationship exists between inadequate housing, substance use, and poor health outcomes. Individuals who are homeless and use substances are more likely to experience premature mortality, chronic physical illness, and have unmet health care needs.^{28,29} Substance use is also a noted barrier to stable housing and contributes to longer episodes of homelessness.^{29,30}

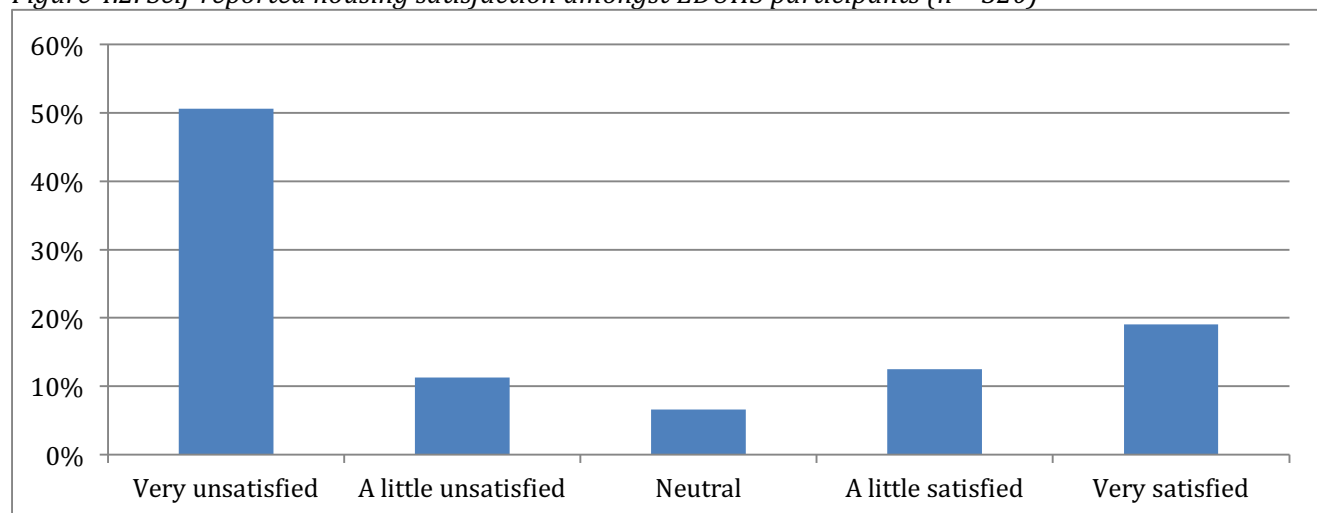
Over half (56.9%; $n = 182$) of EDUHS participants reported that their current housing situation was unstable (Figure 4.1), and 61.9%, ($n = 198$) indicated they were unsatisfied with their current housing situation (Figure 4.2). In terms of transitory sleeping, 72.5% ($n = 232$) of participants had slept at least one night in a shelter, on the street, in an outdoor camp, or walked all night (nowhere to sleep) in the previous six months. Additionally, 42% (136) of participants indicated that they had slept in six or more different places in the previous six months.

Figure 4.1. Self-reported current housing stability amongst EDUHS participants ($n = 320$)



N.B. Participants' response to: "How would you rate your current housing stability?"

Figure 4.2. Self-reported housing satisfaction amongst EDUHS participants ($n = 320$)



N.B. Participants' response to: "How would you rate your current housing satisfaction?"

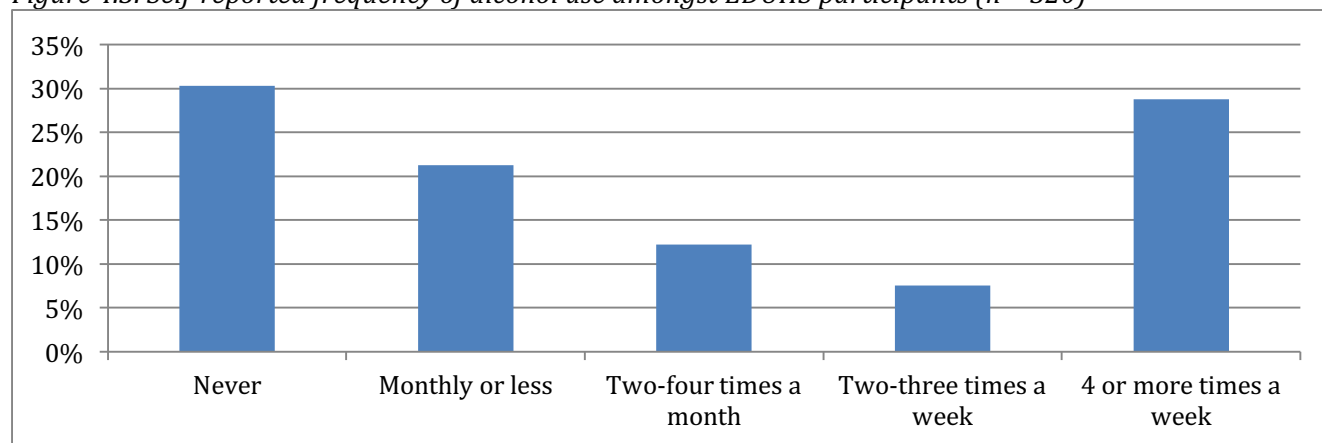
4.3 Substance use patterns and frequency of use

Alcohol use

Alcohol is one of the most common substances used simultaneously with illicit drugs.³¹ Evidence suggests that the simultaneous use of alcohol and other drugs is related to negative health consequences, including alcohol dependence and depression,³² as well as acute harms such as

increased risk of overdose and injuries.^{33,34} Overall, 69.7% (n = 223) of participants reported consuming alcohol at least occasionally. Amongst those who reported alcohol consumption, 28.8% (n = 92) reported drinking four or more times a week, while 7.5% (n = 24) reported drinking two to three times per week (Figure 4.3). Of those who drank alcohol, 11.3% (n = 25) reported consuming sources of non-beverage alcohol, such as cooking wine, rubbing alcohol, or mouthwash in the previous six months.

Figure 4.3. Self-reported frequency of alcohol use amongst EDUHS participants (n = 320)



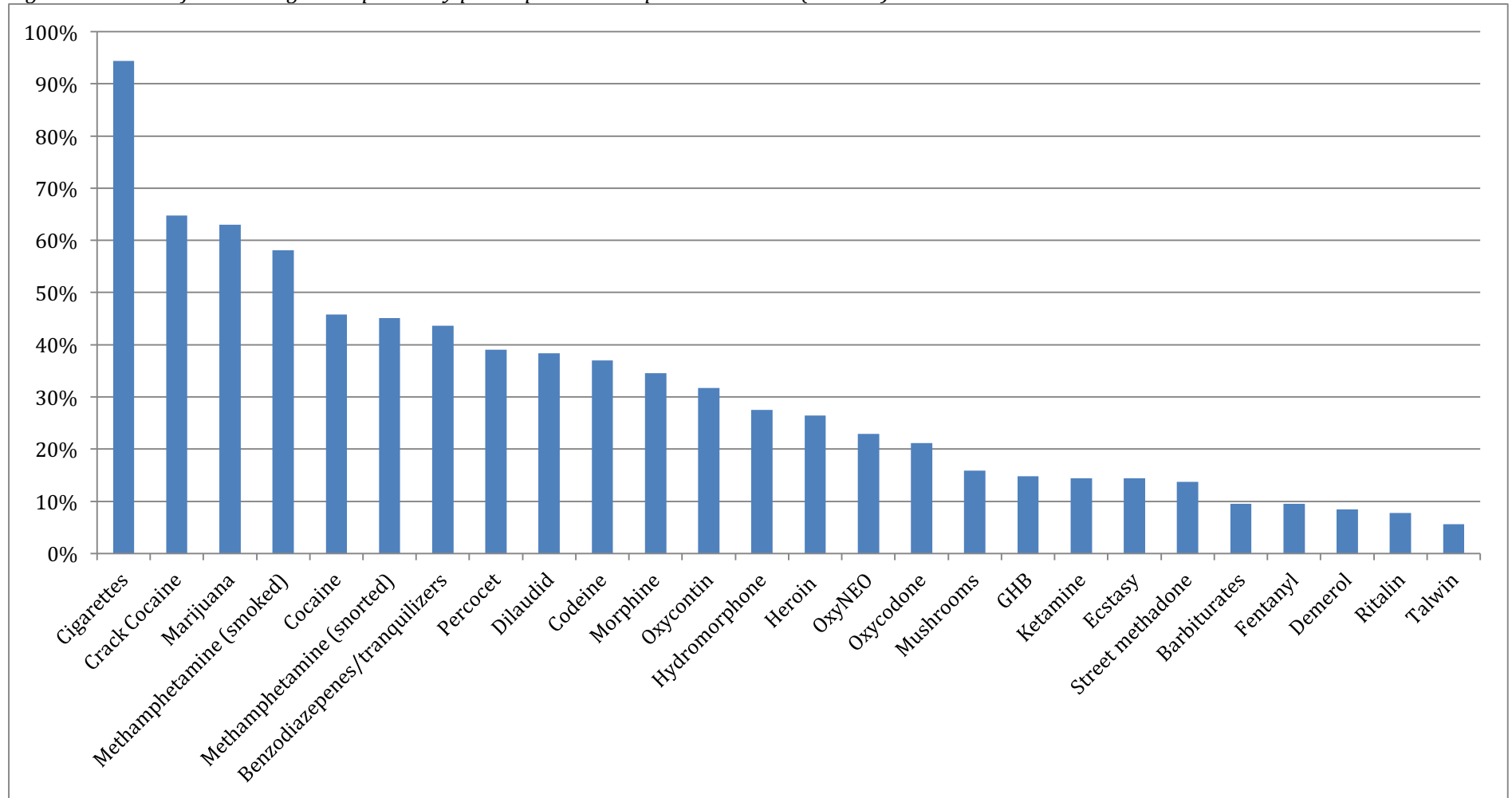
N.B. Participants' response to the question: "how often do you have a drink containing alcohol?"

Non-injection drug use

Polysubstance use, or the regular and/or simultaneous use of two or more psychoactive substances, is common amongst PWUD.³ People who are polysubstance users are at increased risk of negative health problems compared to people who are single-substance users, including acute outcomes such as injury, poisoning and overdose.³⁵ Evidence also suggests that polysubstance use often involves consuming drugs via different routes of administration, including injecting, snorting, smoking, ingesting, etc.^{24,36}

In the six months preceding EDUHS, 89.2% (n = 282) of participants had used some type of non-injection illicit drug, by smoking, snorting or swallowing. A small number of participants (8.8%, n = 27) reported using only non-injection drugs over the previous six months. Of participants reporting non-injection drug use, tobacco was the most widely used substance, with 95.0% (n = 268) reporting use in the past six months. Crack cocaine was the second most frequently used at 65.2% (n = 184), followed by marijuana (63.5%, n = 179), smoked methamphetamine (58.5%, n = 165), cocaine (46.1%, n = 130), snorted methamphetamine (45.4%, n = 128), benzodiazepenes/tranquilizers (43.7%, n = 124), Percocet (39.4%, n = 111), Codeine (37.2%, n = 105), Dilaudid (34.8%, n = 98) and Morphine (34.8%, n = 98) (Figure 4.4). Notably, only 27 (9.5%) participants reported using non-injection Fentanyl in the past six months.

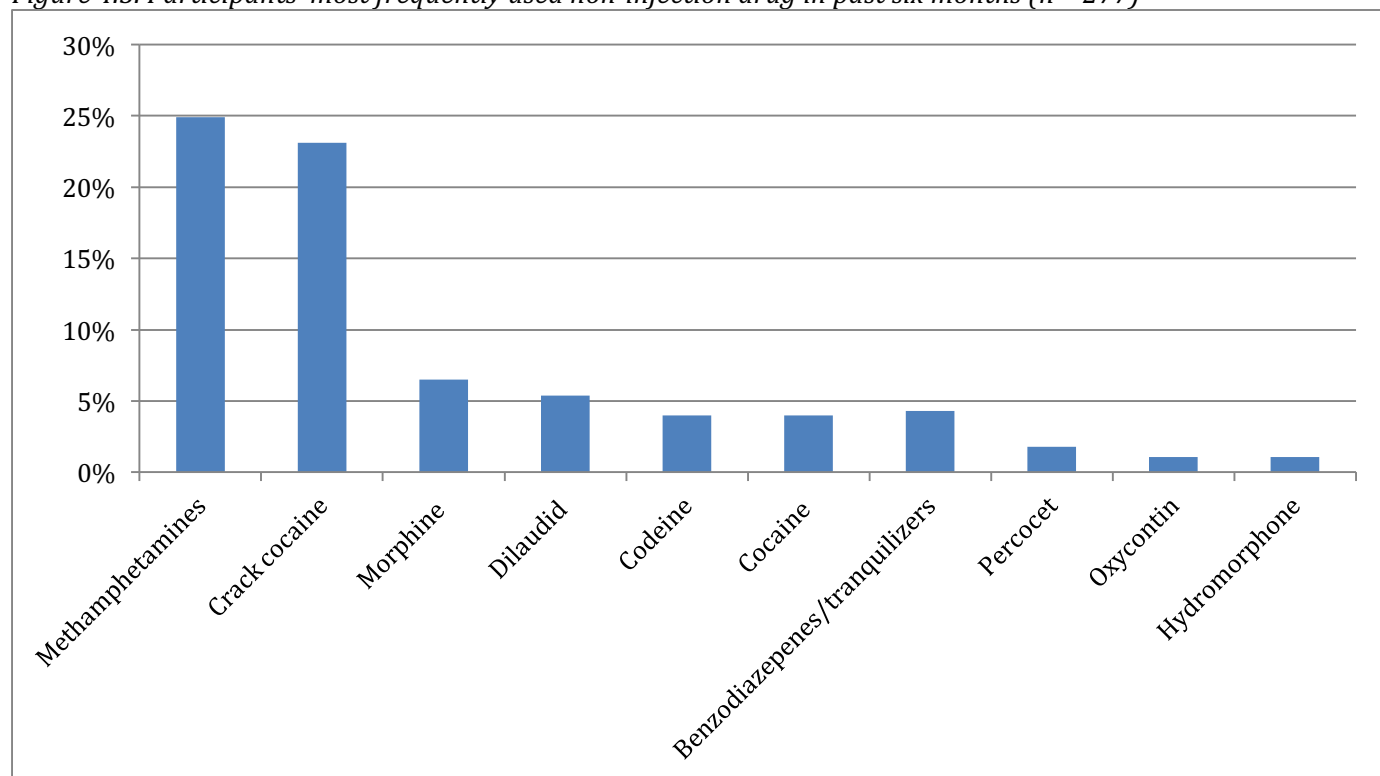
Figure 4.4. Non-injection drug use reported by participants in the past six months (n = 284)



N.B. Participants who reported non-injection drug use in the previous six months were asked to list all non-injection drugs they had used at least once during this time. Responses do not add up to 100% as participants could specify using more than one drug. Drugs reported by less than 5% of participants are excluded from this figure. This figure also excludes prescription drugs taken as prescribed by a physician.

When asked which non-injection illicit drug they used most frequently, 24.9% of participants (n = 69) reported methamphetamine (smoked or snorted), followed by crack cocaine (23.1%, n = 64), Morphine (7%, n = 18), Dilaudid (5.4%, n = 15), Codeine (4.0%, n = 11), and cocaine (smoked or snorted) (4.0%, n = 11) (Figure 4.5). Notably, only one participant indicated that their main non-injection drug was Fentanyl [data not shown].

Figure 4.5. Participants' most frequently used non-injection drug in past six months (n = 277)

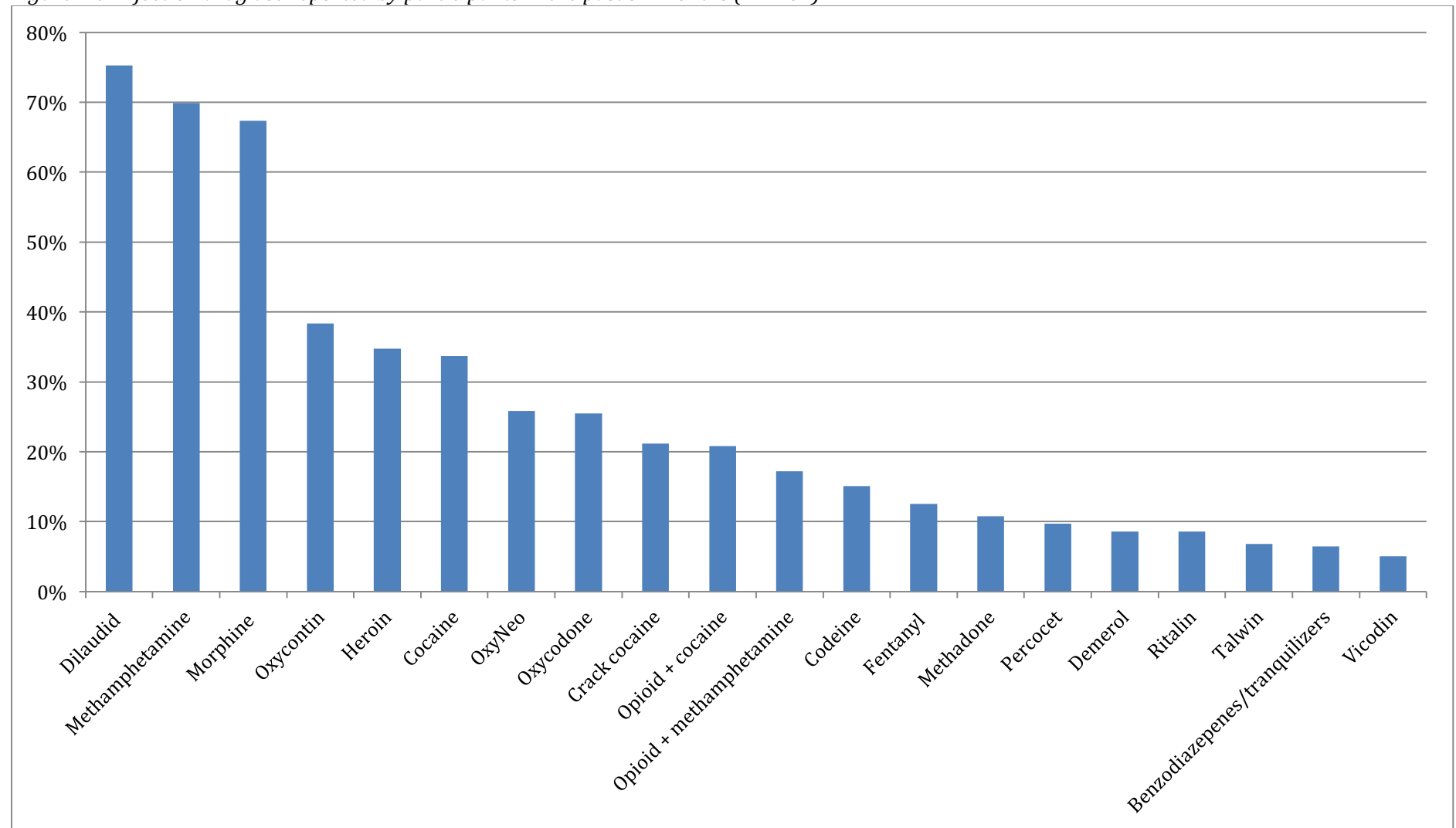


N.B. Participants who reported non-injection drug use in the previous six months were asked which non-injection drug they used most frequently during this time period. Percentages do not add up to 100% as cannabis, tobacco, and infrequently used illicit drugs were excluded from this figure. Alcohol, and prescription drugs taken as prescribed by a physician, were not considered valid responses to this question. Note that methamphetamine refers to both smoked and snorted routes of administration in this figure, however, almost all individuals indicating methamphetamine (95.6%) reported smoking (rather than snorting).

Injection drug use

The injection of illicit drugs is a considerable health concern in Canada. PWID may be at risk of a number of complications including HIV and/or HCV infection, skin infections, abscesses, and endocarditis, as well as other social and environmental factors that may lead to additional negative health outcomes.^{37,38} As such, PWID were purposely oversampled for participation in EDUHS. It is important to note that the proportion of injection drug users to non-injection drug users in this sample does not reflect actual rates of use in the community.

Figure 4.6. Injection drug use reported by participants in the past six months (n = 284)

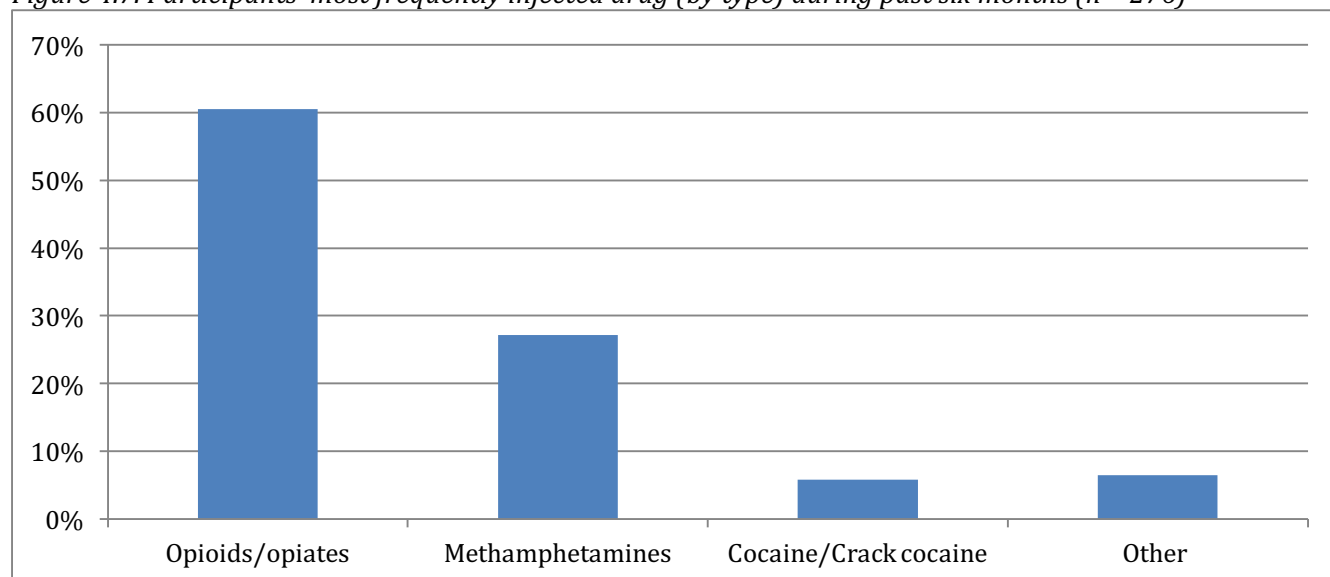


N.B. Participants who reported injection drug use in the previous six months were asked to list all injection drugs they had used at least once during this time. Responses do not add up to 100% as participants could specify using more than one drug. Drugs reported by less than 5% of participants are excluded from this figure. This figure also excludes prescription drugs taken as prescribed by a physician.

In total, 95.4% of survey participants (n = 293) reported having injected drugs in their lifetime. A slightly lower proportion, 91.2% (n = 279), reported using injection drugs within the previous six-month period. Amongst participants who reported recent injection drug use, Dilaudid was the most commonly injected drug (75.3%, n = 210), followed by methamphetamine (69.9%, n = 195), Morphine (67.4%, n = 188), Oxycontin (38.4%, n = 107), heroin (34.8%, n = 97), and cocaine (33.7%, n = 94) (Figure 4.6). Notably, only 35 (12.5%) participants reported injecting Fentanyl in the previous six months.

The survey asked each participant who reported recent injection drug use to specify which drug they injected most frequently. In the previous six months, Dilaudid (29.3%; n = 81) was the drug injected most frequently, followed by Morphine (27.5%; n = 76), methamphetamines (27.2%, n = 75), and powder or crack cocaine (3.3%, n = 9). No participants indicated that their main injection drug was Fentanyl [data not shown]. Participants' main injection drugs are broken down by type in Figure 4.7. Most participants (60.5%; n = 167) reported that they mainly injected opioids/opiates, followed by methamphetamines (27.2%; n = 75), cocaine (5.8%; n = 16) and other drugs (6.5%; n = 18). These data contrast with data collected from a similar target population in 2008, which indicated that crack cocaine was the second most commonly injected drug in Edmonton's inner city;¹⁴ and appear to reflect a trend of increasing methamphetamine injection.

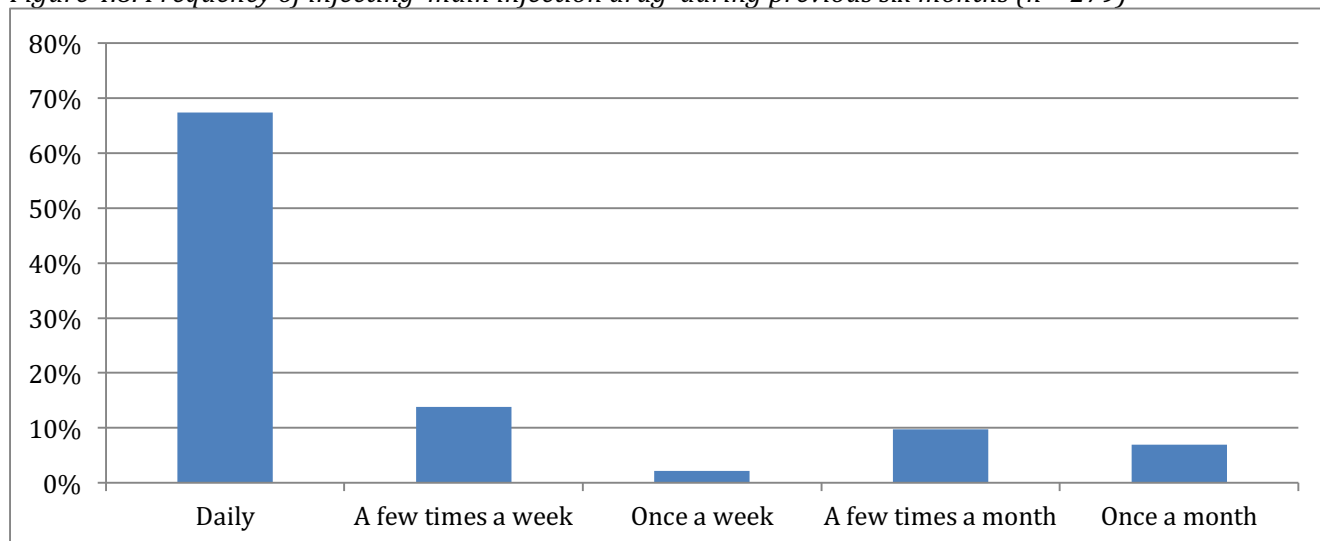
Figure 4.7. Participants' most frequently injected drug (by type) during past six months (n = 276)



N.B. Participants who reported injection drug use in the previous six months were asked to name the injection drug they use most frequently. Percentages do not add up to 100% as some participants reported they 'did not know'.

Participants were also asked to specify how often they injected their 'most frequently used' injection drug. Results of the survey revealed a high rate of daily injection, with 67.4% of participants (n = 186) reporting using their 'most frequently used' injection drug daily. 13.8% (n = 38) reported injecting a few times a week. Only 2.2% (n = 6) reported using their main injection drug once a week, 9.8% (n = 27) reported using it few times a month, and 6.9% (n = 19) reported using it once per month (Figure 4.8).

Figure 4.8. Frequency of injecting 'main injection drug' during previous six months (n = 279)



N.B. Participants were asked to specify how often they inject the drug they injected “most frequently” in the previous six months.

4.4 Substance use risk behaviours

Many people who use substances do so without significant problems,^{39,40} but a variety of environmental and behavioural factors put PWUD at increased risk for poorer health outcomes. A risk behaviour is an activity that increases the likelihood that a person experiences illness or injury, while the risk environment refers to the spaces in which a variety of factors interact to increase the chances of drug-related harm.⁴¹ It is important to note that features of the risk environment such as social relationships, perceived social norms, income inequities, neighborhood context, and enforcement activities, can greatly increase the likelihood that PWUD will engage in risk behaviours.^{41,42}

Sharing syringes and other injection drug use equipment

The borrowing and lending of injection equipment increases the risk of HIV and HCV transmission, and is considered a major contributor to HIV and HCV morbidity and mortality worldwide.⁴³ Amongst participants who reported injecting drugs in the previous six months, 50.5% (n = 141) indicated that they had seen another individual inject with a syringe previously used by someone else during that period. Specifically, 13.5% (n = 19) of participants reported witnessing syringe sharing over 100 times in the past six months, 36.2% (n = 51) reported 11 to 100 times, 14.2% (n = 20) reported six to ten times, and 36.2% (n = 51) reported witnessing syringe sharing between one and five times.

Participants who reporting injection drug use were also asked whether they had injected with a syringe that was already used by someone else in the previous six months. In total, 17.2% (n = 48) indicated yes, they had injected with a used syringe. Of these participants, 6.3% (n = 3) reported injecting with a used syringe more than 100 times, 25% (n = 12) reported 11 to 100 times, 10.4% (n = 5) reported six to ten times, and 58.3% (n = 28) reported between one and five

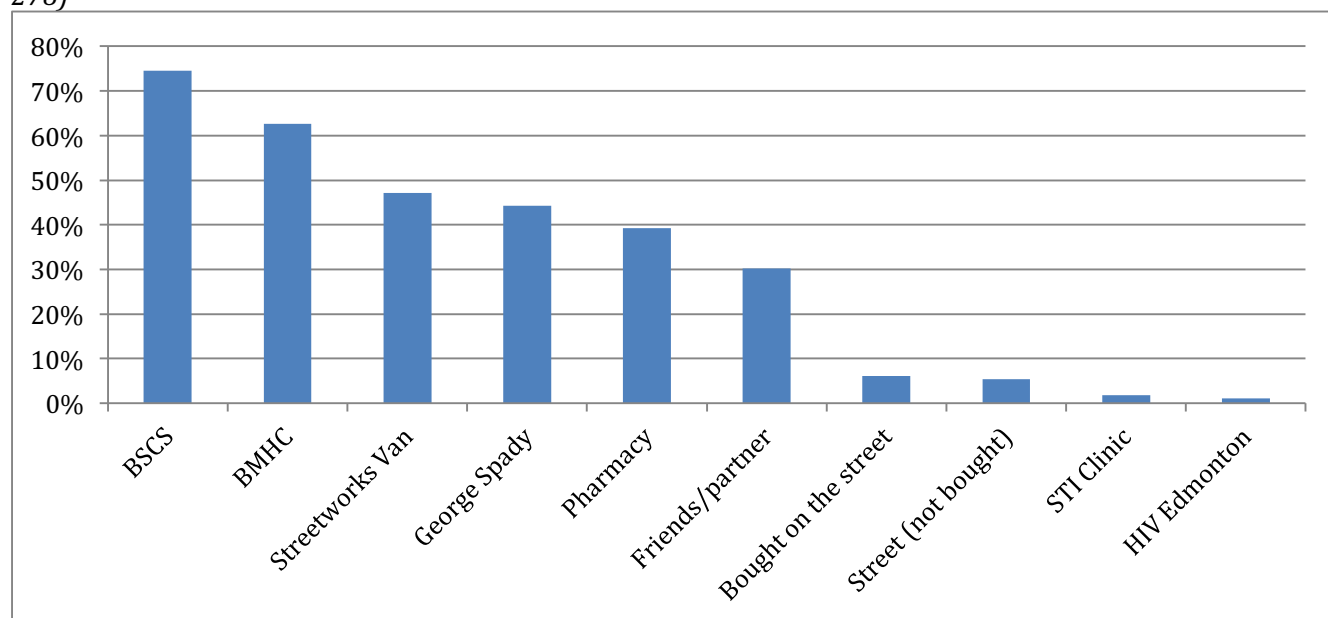
times. Additionally, 18.5% (n = 51) of participants reported lending a used syringe to someone in the previous six months. Only one participant indicated they had done this more than 100 times, while 22.4% indicated between 11 and 100 times. 75.5% reported lending their used syringe to someone else between one and ten times in the previous six months. Overall, 26.1% (n = 71) of participants reported borrowing and/or lending previously used syringes in the past six months.

In addition to syringes, participants were asked about the sharing of other injection supplies, including cookers/spoons, water, filters, bleach, plungers and barrels. Approximately one third of participants (30.9%, n = 84) stated that in the previous six months, they had used injecting equipment that was already used by someone else. Of these, 8.3% (n = 7) of participants indicated they had utilized previously used injecting equipment more than 100 times in the past six months, 27.4% (n = 23) indicated between 11 and 100 times, while 64.3% (n = 54) indicated between one and ten times. A further 24.9% (n = 69) of participants reported lending their used injection equipment to someone else in the previous six months. Of these, 4.3% indicated they had lent equipment more than 100 times in this period, 27.5% (n = 19) indicated between 11 and 100 times, and 68.1% (n = 47) between one and ten times.

Access to sterile syringes and injection equipment

A large majority of participants who injected drugs in the previous six months reported obtaining sterile syringes from one of six Streetworks fixed or mobile needle exchange sites (N.B. since these data were collected Streetworks has added additional sites to their program). This (at least in part) reflects the fact that survey participants were primarily recruited in the immediate vicinity of two of these sites (Boyle Street Community Services Society, and Boyle McCauley Health Centre). Participants reported accessing Streetworks locations at Boyle Street Community Services (74.5% of participants, n = 207), the Boyle McCauley Health Centre (62.6%, n = 174), the Streetworks van (47.1%, n = 131), the George Spady Centre (44.2%, n = 123), the Edmonton STI clinic (1.8%, n = 5), and HIV Edmonton (1.1%, n = 3). Additional sources of sterile syringes include pharmacies (39.2%, n = 109), friends or intimate partners (30.2%, n = 84), and purchased from someone on the street by 6.1% (n = 17) of participants (Figure 4.9).

Figure 4.9. Sources of sterile syringes reported by participants who injected drugs in the past six months (n = 278)

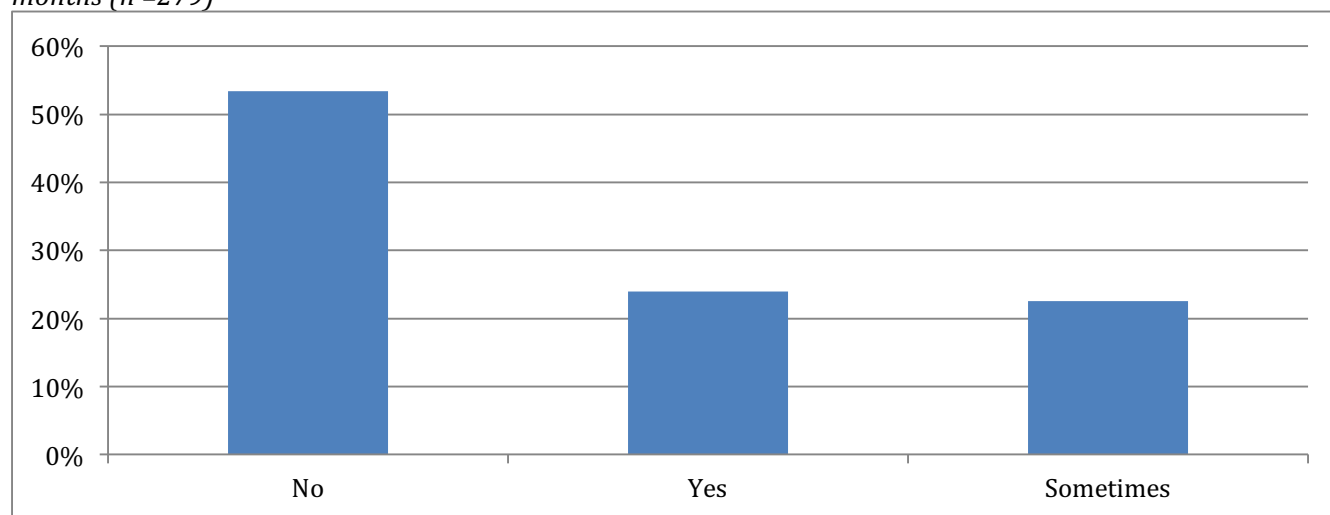


N.B. Participants were asked to list all the places where they had acquired new syringes in the past six months. These percentages do not equal 100% as categories are not mutually exclusive; participants could specify multiple sources.

Most participants who injected drugs in the previous six months reported mainly accessing sterile syringes from a needle exchange program during that time period. More specifically, 41.0% (n = 114) reported obtaining 'all' of their clean syringes from a needle exchange, 47.5% (n = 132) obtained 'most' (more than 75%), 3.6% (n = 10) obtained 'some' (26% to 74%), and 2.9% (n = 8) obtained them 'occasionally' (less than 25%). Only 5.0% (n = 14) reported never accessing sterile syringes from a needle exchange.

Almost half of participants who are current injectors reported difficulty accessing new syringes. Nearly a quarter of participants (24.0%, n = 67) who injected drugs in the previous six months said they experience regular difficulty accessing new syringes, and an additional 22.6% (n = 63) said they 'sometimes' experience difficulty (Figure 4.10).

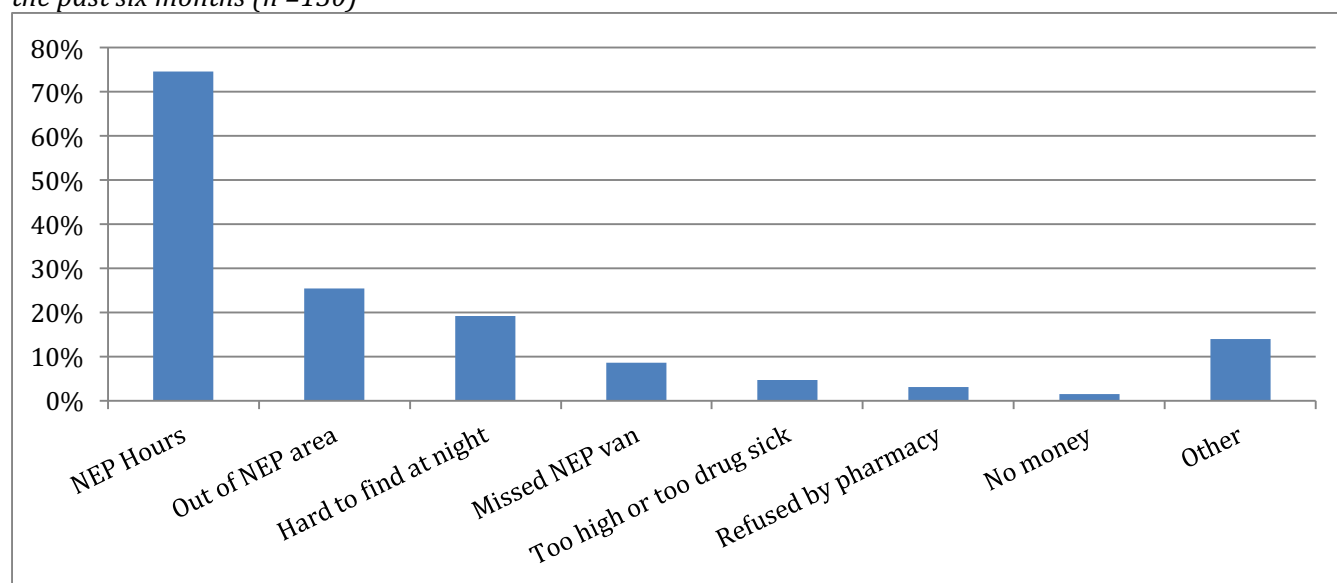
Figure 4.10. Difficulty accessing sterile syringes amongst participants who injected drugs in the past six months (n =279)



N.B. Participants who had injected drugs in the previous six months were asked to indicate if they had any difficulty accessing sterile syringes during this same time period.

Amongst participants who reported difficulty accessing sterile syringes (n = 130), 74.6% (n = 97) cited needle exchange operating hours as an access barrier. Additional barriers included being out of the NEP area (25.4%, n = 33), difficulty finding new syringes at night (19.2%, n = 25), missing the mobile needle exchange van (8.5% (n = 11), being too intoxicated or in severe withdrawal (4.6%, n = 6), being refused at the pharmacy (3.1%, n = 4), and not having money to purchase new syringes (1.5%, n =2). 14.0% (n = 18) of participants reported other, unspecified reasons (Figure 4.11).

Figure 4.11. Self-assessed barriers to accessing sterile syringes reported by participants who injected drugs in the past six months (n =130)

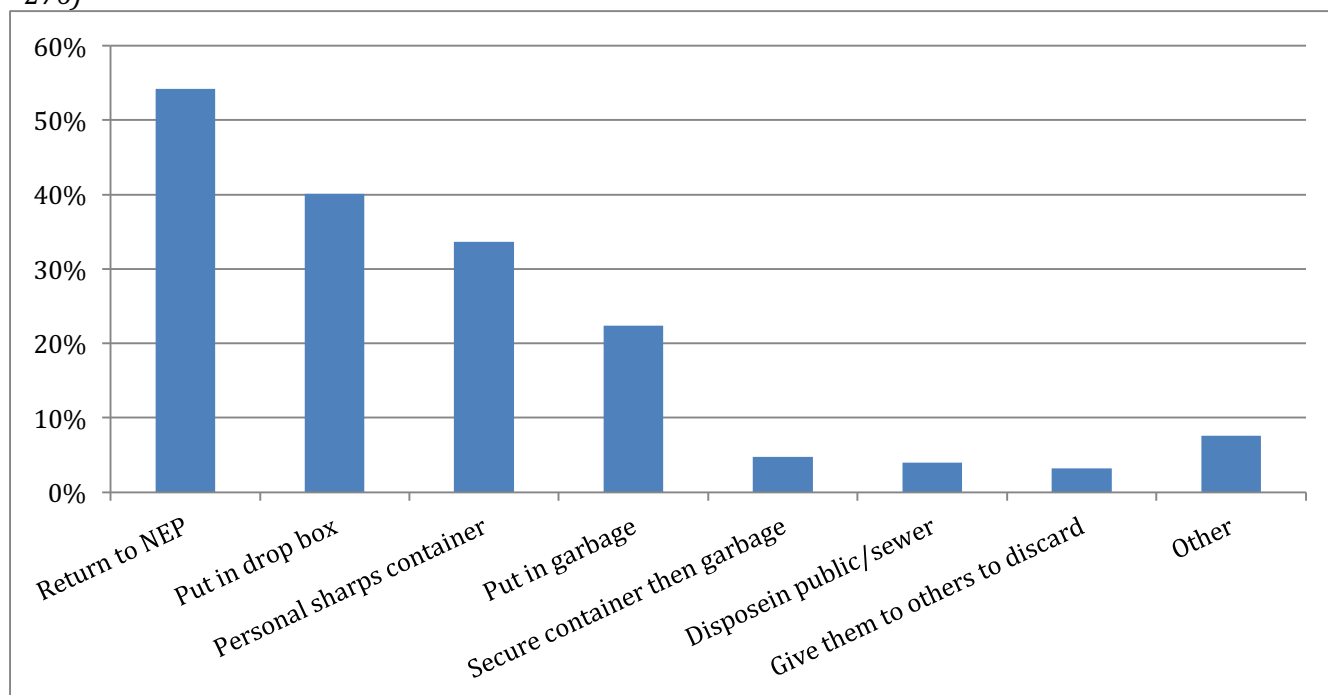


N.B. Participants were asked to list any and all reasons that they found it difficult to get new syringes when needed. These percentages do not equal 100% as categories are not mutually exclusive; participants could specify multiple barriers.

With regard to new injection equipment (such as cookers/spoons, ties, water, filters, vitamin C, etc.), the majority (70.1%, n = 195) of participants who are current injectors reported that they did not find it hard to access new injection equipment. Only 19.4% (n =54) indicated difficulty accessing new injection equipment, and 10.4% (n =29) reported they sometimes found it hard to access new equipment. Of the participants who reported difficulties with access, NEP hours of operation were the most frequently noted reason, by 70.7% (n = 58) of participants. Other barriers included being out of the NEP area (19.5%, n = 16), not knowing where to get supplies (9.8%, n = 8), hard to find supplies at night (9.8%, n = 8), missing the NEP van (8.5%, n = 7), NEP didn't have water or cookers (11%, n = 9), and being too intoxicated to access NEP (1.2%, n =1). 19.5% (n =16) of participants reported other, unspecified reasons.

Participants who reported injecting drugs in the previous six months were also asked where they disposed of their used needles/and or syringes. The majority of participants (54.2%, n = 150) reported returning them to a needle exchange program. Other safe disposal methods included, putting used syringes in a public drop box (40.0%, n = 111), or a personal sharps container (33.6%, n = 93). In terms, of unsafe syringe disposal, 34% of participants who inject drugs reported using at least one less safe syringe disposal method including: putting syringes in the garbage (22.4%, n = 62), placing syringes in a secure container and then putting them in the garbage (4.7%, n = 13), disposing of syringes in streets, alleys, parks or sewers (4.0%, n = 11), and giving needles to others to discard (3.2%, n = 9). A further 7.6% (n = 21) of participants also reported other non-specified unsafe disposal methods (Figure 4.12).

Figure 4.12. Syringe disposal methods reported by participants who injected drugs in the past six months (n =276)



N.B. Participants were asked to list locations where they disposed of used needles and/or syringes most often. These percentages do not equal 100% as categories are not mutually exclusive; participants could specify multiple disposal methods.

Sharing crack pipes and/or mouthpieces

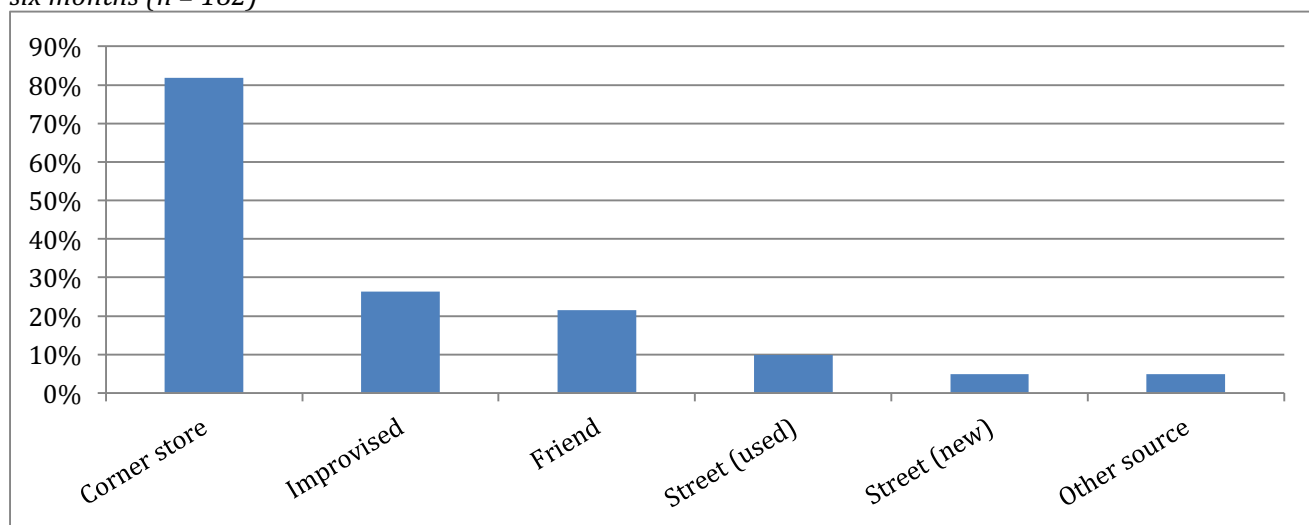
Sharing crack cocaine pipes and other equipment is associated with the transmission of HCV and other infectious diseases such as tuberculosis.^{16,44} Amongst participants who smoked crack in the previous six months (n = 184), 69.7% (n = 131), reported borrowing, lending or sharing a crack pipe or mouthpiece during that same period.

Access to safer crack smoking supplies

Experiencing difficulty accessing crack pipes has been linked to a higher prevalence of crack pipe sharing.¹⁶ When safer smoking supplies are unavailable, makeshift pipes may also be constructed from commonly found items such as glass bottles or metal pipes. This results in hot jagged surfaces that may cause cuts, burns or sores to fingers, hands, lips or mouths, leading to an elevated risk of HIV or HCV transmission.^{45,46}

The majority of EDUHS participants (81.9%, n = 149) who smoked crack in the past six months reported acquiring crack pipes from a corner store (such as convenience store, dollar store, etc.). A further 26.4% (n = 48) reported making their own crack pipes from found items (cans, car antennas, etc.), 21.4% (n = 39) acquired pipes from a friend, 9.9% (n = 18) obtained a used pipe from someone on the street, 5.0% (n = 9) obtained a new pipe from someone on the street, and 5.0% (n = 9) reported acquiring a crack pipe from another source (Figure 4.13).

Figure 4.13. Crack pipe acquisition by source reported by participants who smoked crack cocaine in the past six months (n = 182)

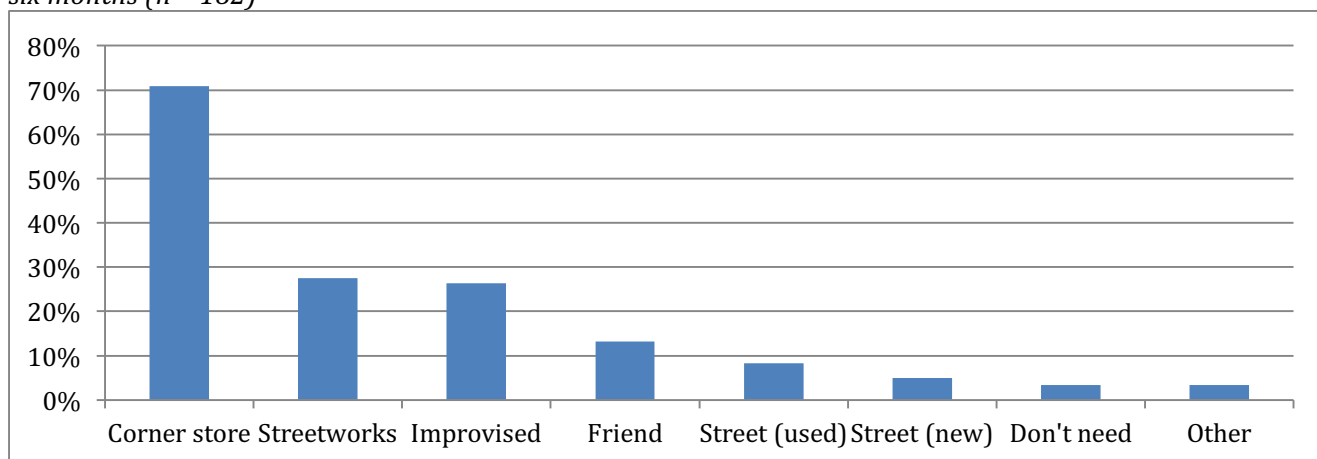


N.B. Participant response to, “Where do you get your crack pipes?” These percentages do not equal 100% as categories are not mutually exclusive; participants could specify multiple sources.

Participants were asked to report where they acquired ‘other’ crack smoking supplies, such as screens, push sticks, mouthpieces and lip balm. Note that this could include both safer (e.g. sterile mouthpieces) and unsafe or makeshift (e.g. steel wool) supplies. A high proportion of participants (70.9%, n = 129) reported obtaining crack smoking supplies at a corner store. In addition, 35.2% (n = 50) reported obtaining supplies from Streetworks, 33.8% (n = 48) made supplies from found items (such as steel wool for filters), 16.9% (n = 24) from a friend, 10.6% (n = 15) from someone on the street (used), 6.3% (n = 9) from someone on the street (new), 4.2%

(n = 6) stated they did not need any other supplies, and 4.2% (n = 6) reported another source (Figure 4.14).

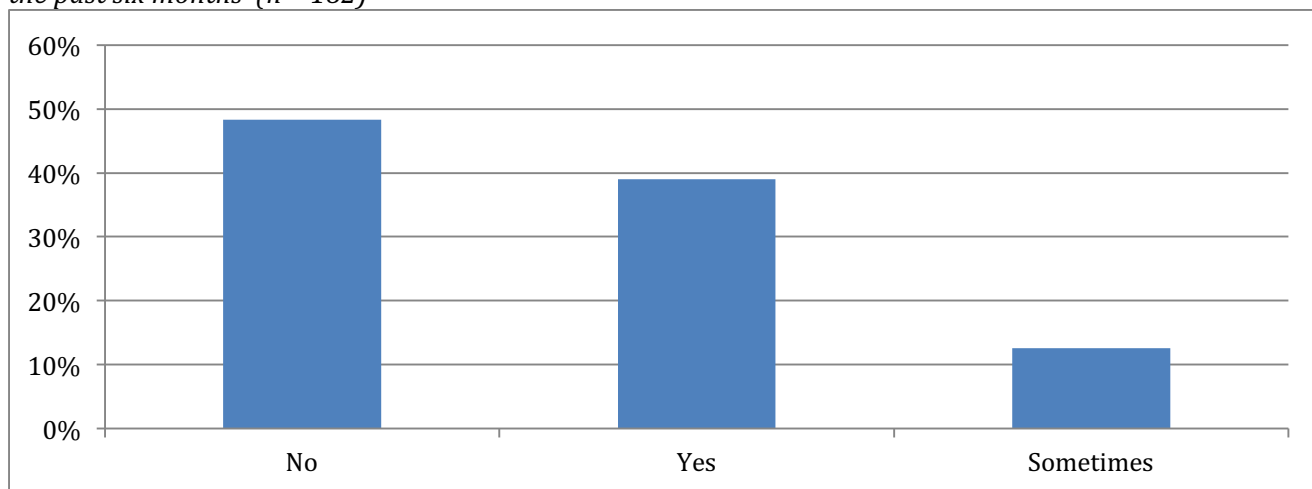
Figure 4.14. Source of crack-smoking supplies reported by participants who smoked crack cocaine in the past six months (n = 182)



N.B. Participant response to, “Where do you get your other crack-smoking supplies?” These percentages do not equal 100% as categories are not mutually exclusive; participants could specify multiple sources.

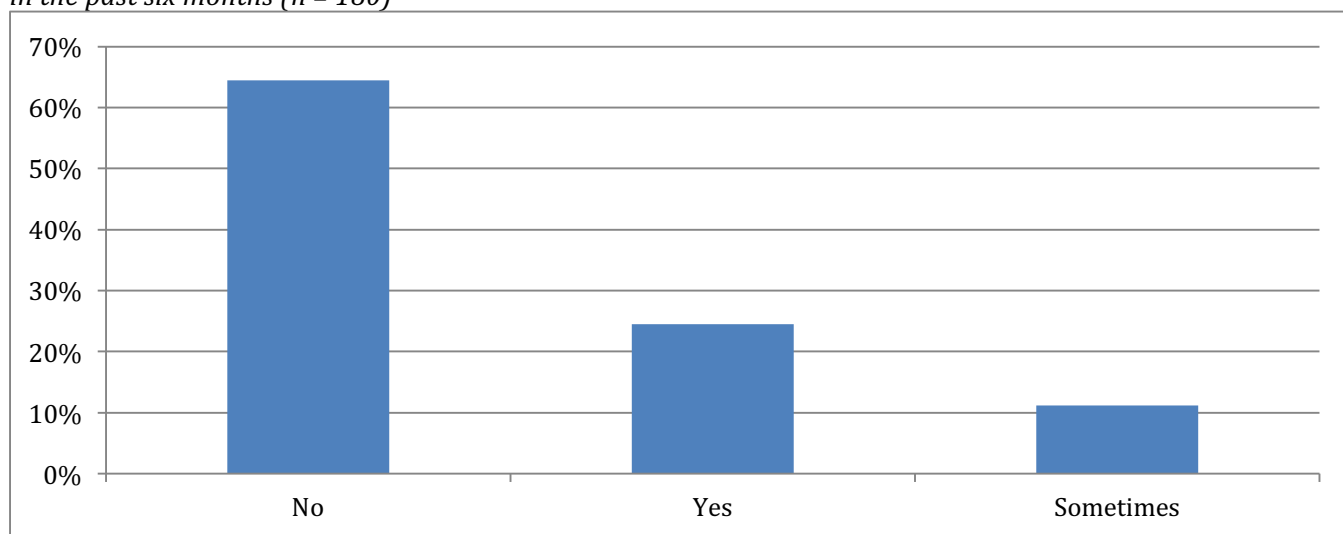
Participants reported more trouble in accessing crack pipes than accessing other needed supplies. Amongst those who smoked crack in the past six months, 39.0% (n = 71) of people who reported recent crack smoking said they found it difficult to find new crack pipes, with an additional 12.6% (n = 23) indicating that they ‘sometimes’ found this difficult (Figure 4.15). In terms of other supplies, only 24.4% (n = 44) of people who reported recent crack smoking said it was hard to access other crack smoking supplies, with 11.1% (n = 20) additionally indicating they found it hard only ‘sometimes’ (Figure 4.16). The smaller number of people reporting difficulty accessing crack smoking supplies relative to those reporting difficulty accessing crack pipes may reflect the fact that other supplies are seen as less essential for crack consumption, or more easily improvised.

Figure 4.15. Reported difficulty accessing crack pipes reported by participants who smoked crack cocaine in the past six months (n = 182)



N.B. Participants who reported smoking crack cocaine in the previous six months were asked if they experienced difficulty accessing crack pipes during the same time period.

Figure 4.16. Difficulty accessing other crack use supplies reported by participants who smoked crack cocaine in the past six months (n = 180)

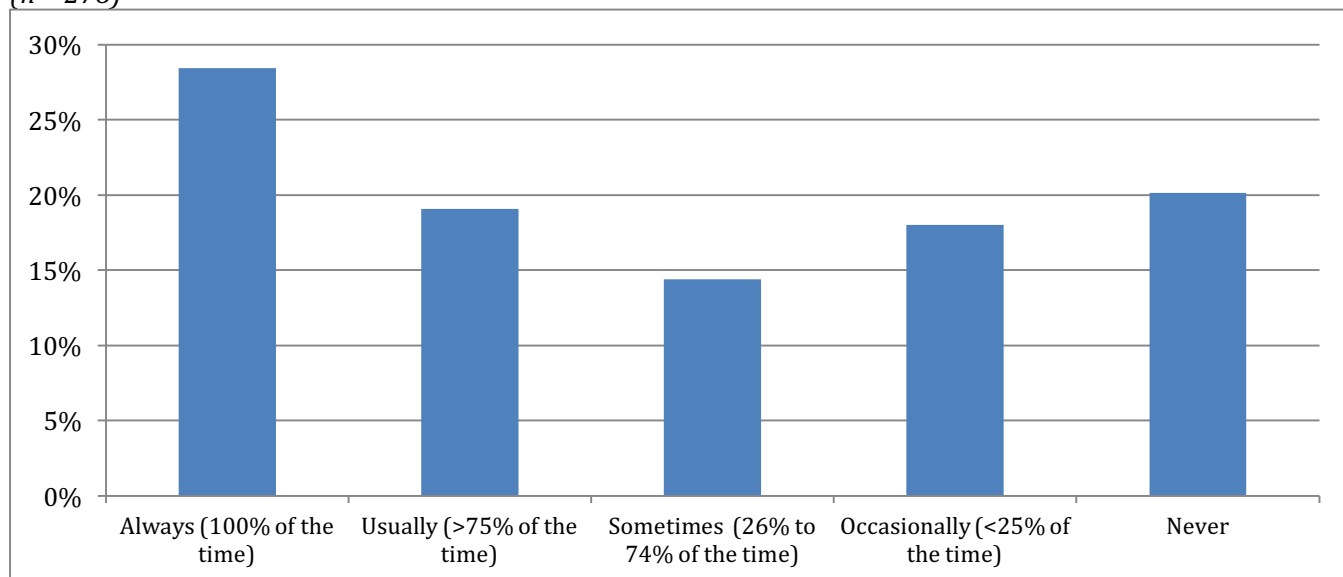


N.B. Participants who reported smoking crack cocaine in the previous six months were asked if they experienced difficulty accessing other crack smoking supplies during the same time period.

Public injection

People who smoke or inject illicit drugs in public are less likely to have access to sterile drug use supplies and are at an increased risk of violent victimization, abscesses, syringe sharing, HCV and HIV infection, and overdose mortality.⁴⁷ Studies suggest that people who inject drugs in public may engage riskier injecting practices (e.g. rushing) than those injecting in a private and safe environment, and may contribute to the presence of drug-related debris such as discarded needles and syringes.⁴⁸

Figure 4.17. Frequency of public injection reported by participants who injected drugs in the past six months (n = 278)

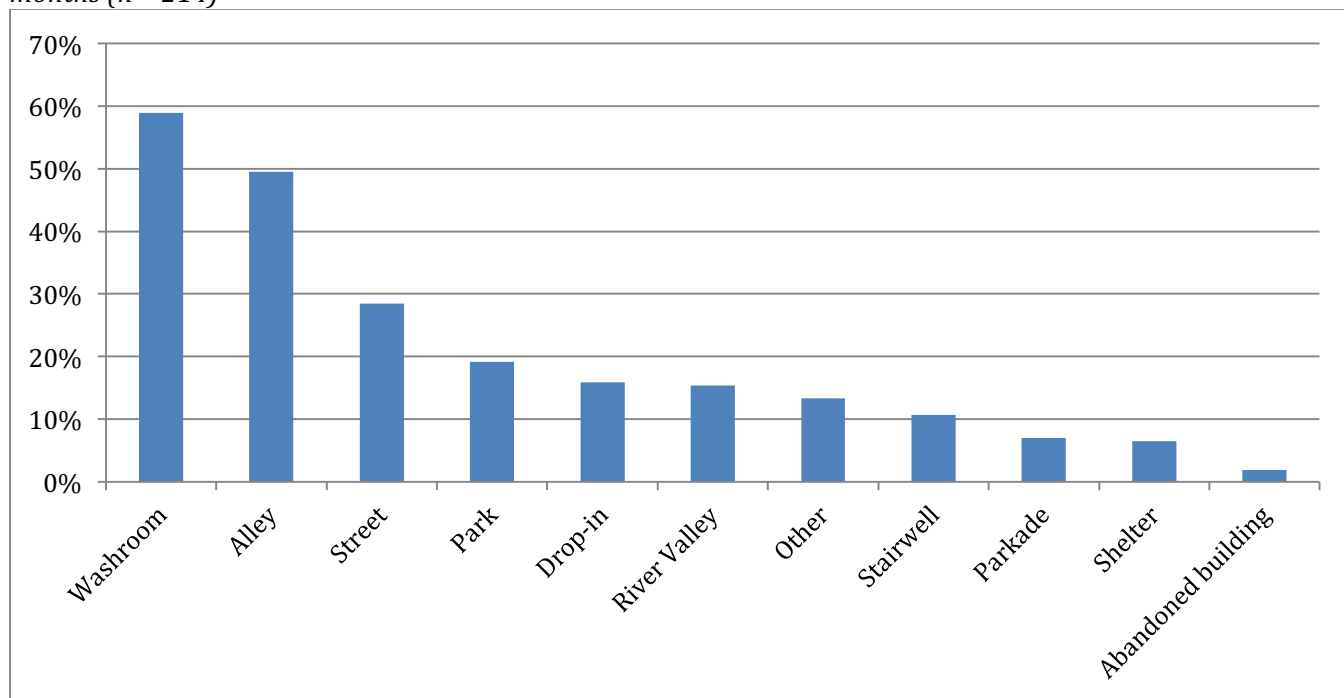


N.B. Participants who reported public injection in the previous six months were asked how often they had injected in public over the same time period.

Many PWID participating in EDUHS reported injecting in a public place at least occasionally, such as outside, in a shelter/agency, public washroom, parking lot, river valley, etc. Over one quarter of participants (28.4%, $n = 79$) reported 'always' injecting drugs in public (100% of the time). An additional 19.1% ($n = 53$) reported that they inject in public 'usually' (more than 75% of the time) and 14.4% ($n = 40$) reported injecting in public 'sometimes' (26% to 75% of the time). Only 20% ($n = 56$) of people who inject drugs in our sample reported that they never inject in public (Figure 4.17).

Participants, who reported injection drug use at least occasionally in public, were asked to identify their two most frequent locations for public injection. The main locations included public washrooms (58.9%, $n = 126$), alleys (49.5%, $n = 106$), on the street (28.5%, $n = 61$), in parks (19.2%, $n = 41$), at agencies or drop-ins (15.9%, $n = 34$), in the river valley (15.4%, $n = 33$), in stairwells (10.7%, $n = 23$), in parkades (7.0%, $n = 15$), in shelters (6.5%, $n = 14$), and abandoned buildings (1.9%, $n = 4$). A further 13.3% ($n = 28$) reported 'other' locations not on the list (Figure 20).

Figure 4.18. Main public injection locations reported by participants who injected drugs in the past six months ($n = 214$)

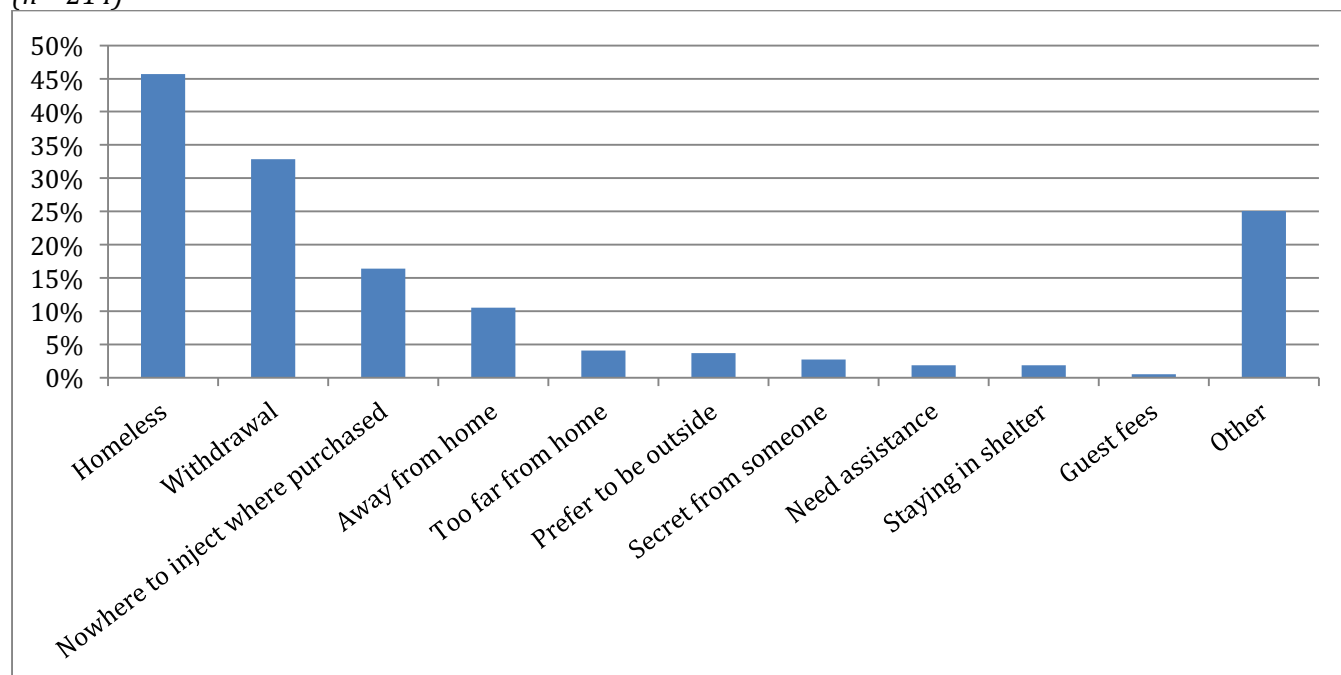


N.B. Participants who reported public injection were asked to identify the top two locations they were most likely to inject in public.

The most frequently stated reason for public injection was homelessness, reported by 45.7% ($n = 100$). Other reasons included acute withdrawal (32.9%, $n = 72$), nowhere to inject safely where drugs are purchased (16.4%, $n = 36$), being away from home at the time (10.5%, $n = 23$), too far from home (4.1%, $n = 9$), prefer to be outside (3.7%, $n = 8$), keeping drug use a secret from the person he/she was living with (2.7%, $n = 6$), needed assistance injecting (1.8%, $n = 4$), staying in a shelter (1.8%, $n = 4$), guest fees at a friend's place (0.5%, $n = 1$), and had no money (0.5%, $n = 1$).

1). 25.0% (n = 55) of participants reported an additional unspecified reason (Figure 4.19).

Figure 4.19. Reasons for public injection reported by participants who injected drugs in the past six months (n = 214)



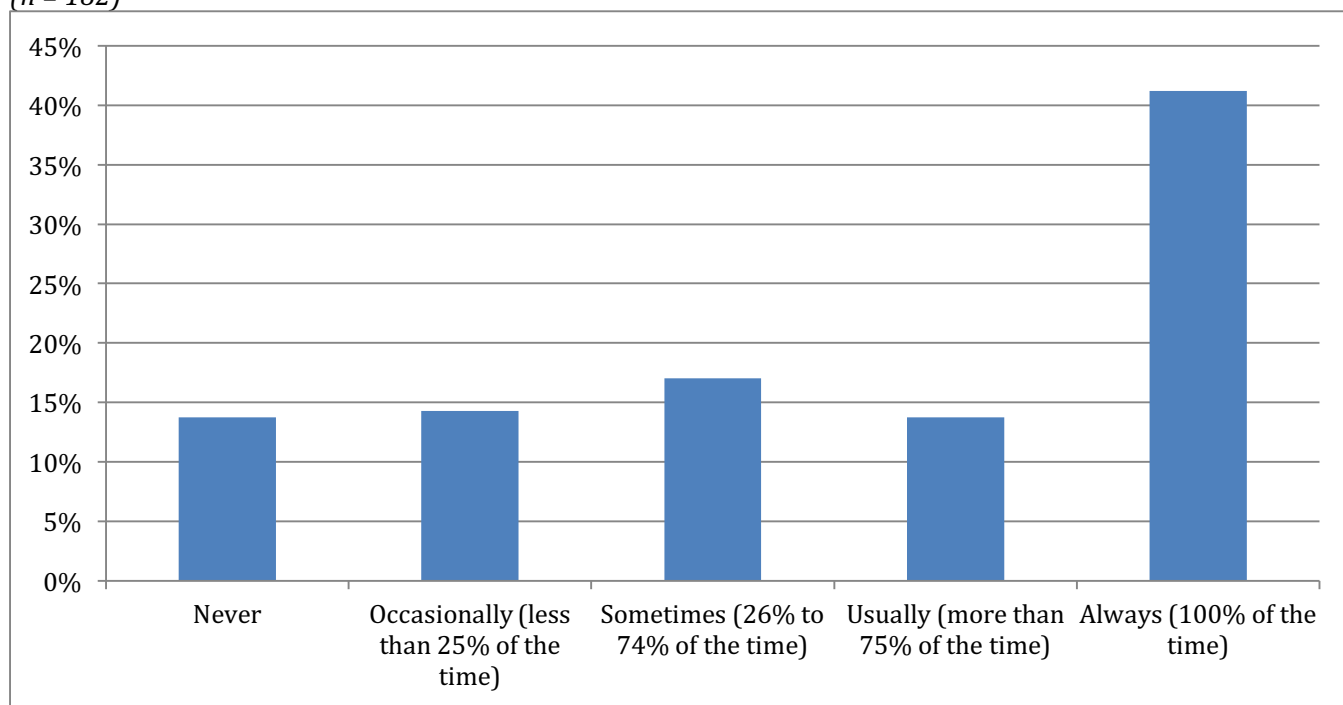
N.B. Participants who reported public injection were asked to list all of the reasons they inject in public. These percentages do not equal 100% as categories are not mutually exclusive; participants could specify multiple reasons.

Studies have shown that rushed drug use is common among those who use drugs in public, and is often related to the fear of being interrupted, being in danger, or being seen by police.^{49,50} Individuals who rush injecting are at an increased risk for overdose and other health problems.⁵⁰ Of participants who had injected in the past six months and reported public injection (n = 214), 67.3% (n = 148) reported having to rush while they were injecting in public.

Public crack cocaine smoking

Participants who reported smoking crack cocaine in the past 6 months were asked how often they smoke crack in public (e.g. on the street, in the river valley or in a parking lot). The most frequently reported response was 'always', by 41.2% (n = 75) of participants. An additional 13.7% (n = 26) reported that they 'usually' smoke crack in public (more than 75% of the time), 17.0% (n = 31) reported smoking in public 'sometimes' (26% to 75% of the time), and 14.3% (n = 26) reported occasionally smoking in public (less than 25% of the time). Only 13.7% (n = 25) of participants reported never smoking crack in public (Figure 4.20). The main reason for smoking crack in public reported by participants was homelessness (n = 57; 36.8%).

Figure 4.20. Frequency of public crack use reported by participants who smoked crack in the past six months (n = 182)



N.B. Participants who reported smoking crack in the previous six months were asked to report how often they smoked crack in a public place in the same time period.

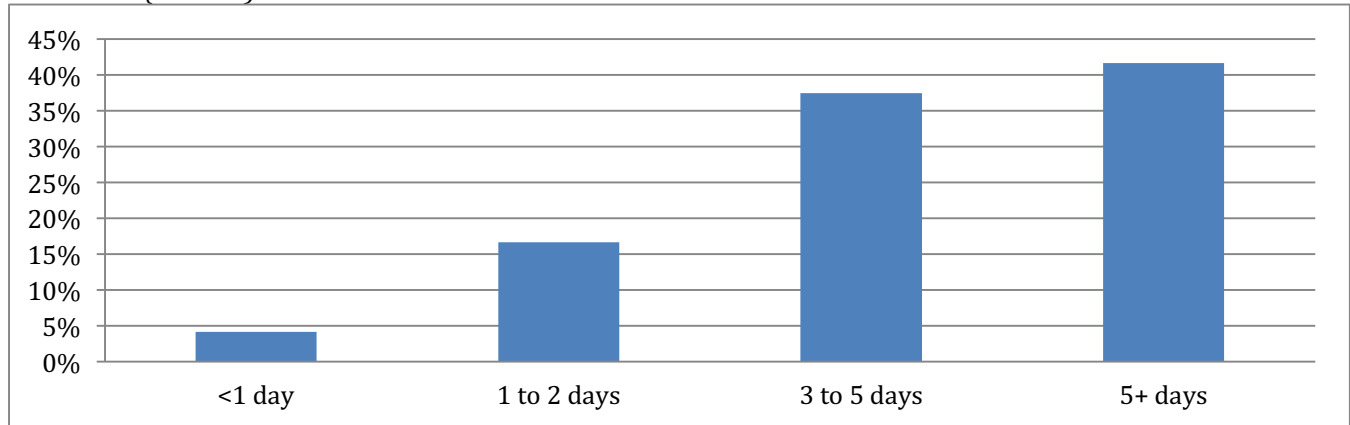
People who rush while smoking crack are at increased risk of experiencing burns or inhaling broken parts of the crack pipe or filter material (commonly, steel wool).⁴⁹ Of the participants who reported public crack use, 72.4% (n = 113) reported having to rush while smoking in public. A further 1.3% (n = 2) reported having to rush ‘sometimes.’

Binge drug use

“Binges” or “runs” refer to compulsive high-intensity drug use over longer periods of time that differ from normal patterns of drug use.⁵¹ For EDUHS, “runs” or “binges” was defined for participants as “a time when you used drugs more than usual.” The binge use of drugs has been linked to a number of health and social concerns including increased risk of overdose, HIV seroconversion, and increased sexual vulnerability, as well as participation in other risk behaviours such as crack pipe sharing and syringe sharing.^{16,52-54}

Amongst participants who reported injection drug use (n = 279), over half (53%, n = 145) indicated they had gone on an injection drug “run” or “binge” in the previous six months. 35% of participants (n = 40) reported bingeing more than once per month. In terms of binge duration, 20.9% (n = 30) of participants reported that an average binge lasted less than two days, while 37.5% (n = 54) indicated their average binge lasted three to five days. A high proportion of participants (41.7%, n = 60) reported that an average binge lasted more than five days (Figure 4.21).

Figure 4.21. Average length of injection drug binges reported by participants who injected drugs in the past six months (n = 144)



N.B. Participants who reported binge injection drug use in the previous six months were asked to indicate on average, how long their binges last.

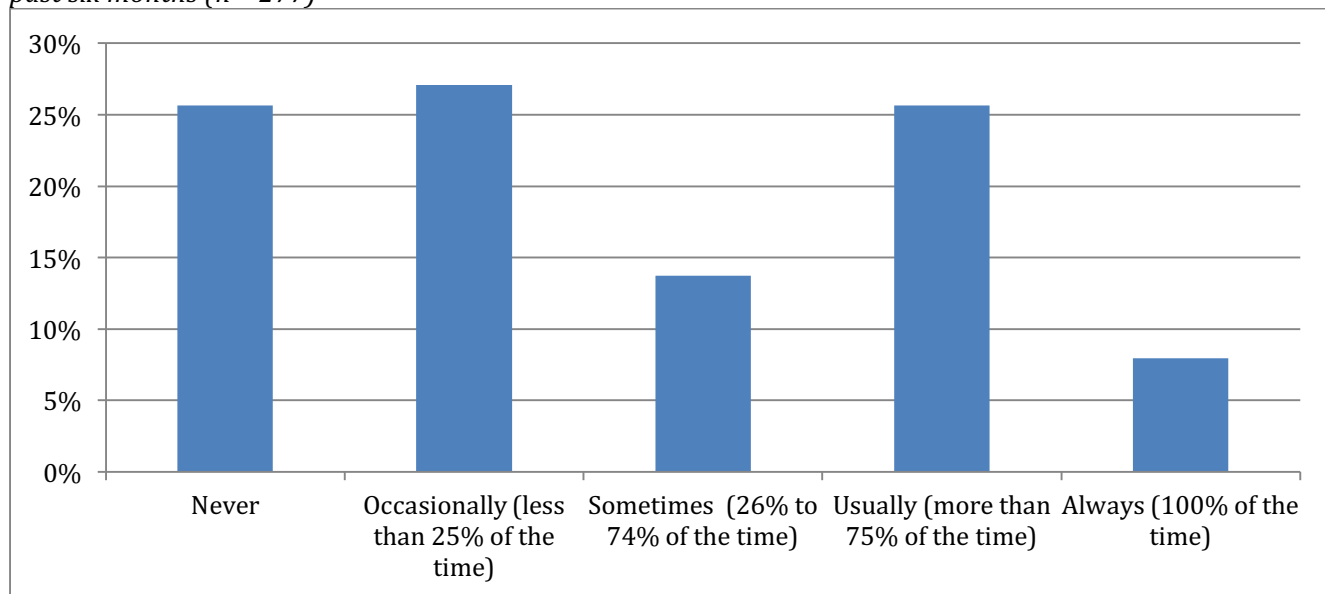
Participants were asked to report what injection drug they most often inject when bingeing. Methamphetamine was the most commonly used, reported by 39.0% (n = 57) of participants, followed by Dilaudid (22.6%, n = 33), Morphine (20.5%, n = 30), and crack cocaine (2.7%, n = 4).

Injecting alone

People who use drugs may inject alone for a number of reasons such as to avoid having to share or split drugs, to avoid peer pressure to share injection equipment, to keep drug use private, or to avoid informal or formal sanctions.⁵⁵ However, injecting alone puts people at increased risk of fatal overdose,⁵⁶ as there is no one to supervise or call for medical assistance if overdose occurs.

Just over a quarter of participants who injected drugs in the previous six months (25.6%, n = 71) reported they never inject drugs alone. 27.1% (n = 75) report injecting alone “occasionally” (less than 25% of the time), 13.7% (n = 38) reported “sometimes” (26%-74% of the time), and 25.6% (n = 71) reported “usually” injecting alone (more than 75% of the time). Only 7.9% (n = 22) of participants reported injecting alone “always” (100% of the time) (Figure 4.22).

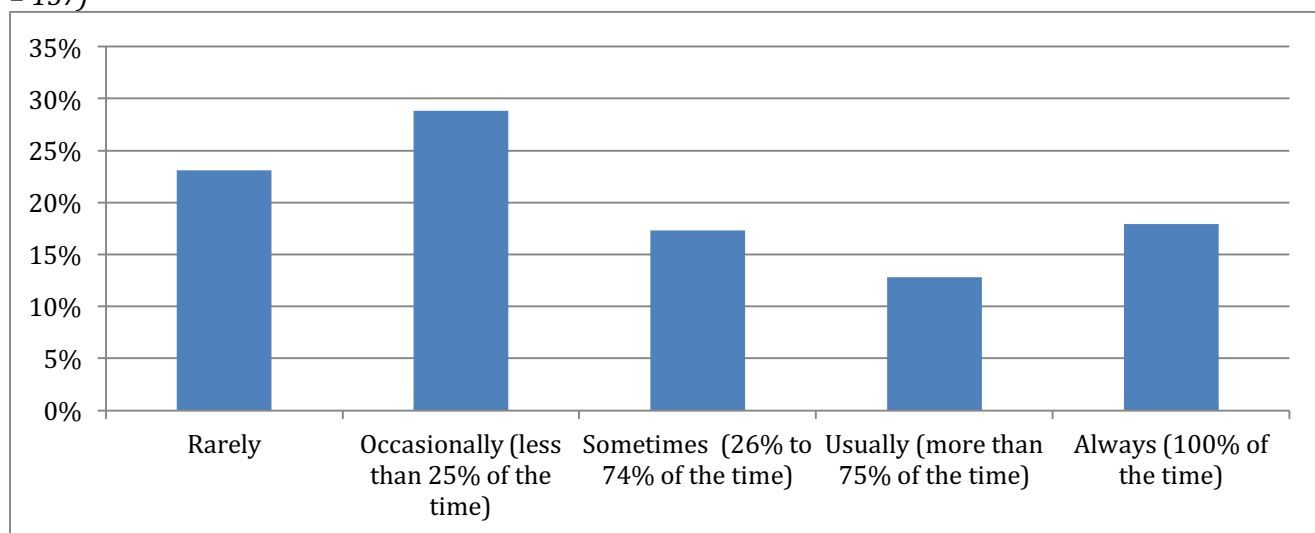
Figure 4.22. Frequency of injecting alone in the past six months amongst people who injected drugs in the past six months (n = 277)



N.B. Participants who reported injecting drugs in the past six months were asked to indicate how often they had injected alone during that period.

Requiring assistance to inject

Figure 4.23. Frequency of needing help injecting amongst people who injected drugs in the past six months (n = 157)



N.B. Participants were asked to indicate how often they had needed help injecting in the previous six month period.

Requiring assistance to inject has been shown to increase vulnerability to injection-related infection and other negative health outcomes.^{57,58} In EDUHS, 56.5% (n = 157) of participants who were current injection drug users reported requiring assistance injecting in the previous six months. Amongst this group, 23.1% (n = 36) reported rarely needing help, 28.6% (n = 45) reported occasionally requiring help (less than 25% of the time), 17.3% (n = 27) reported sometimes requiring help (26% to 74% of the time), 12.8% (n = 20) reported usually requiring help (more than 75% of the time), and 17.9% (n = 28) reported always needing help (100% of

the time) injecting (Figure 4.23). The main reasons reported for requiring help injecting included trouble finding a vein (33.3%, n = 52), jugular injection (30.1%, n = 47), and shaky hands (reported by 23.7%, n = 37).

Jugular injection

Injection in the jugular vein has the potential for a number of serious, potentially life-threatening risks, including infections, pneumothorax, nerve injury, thrombosis, aneurysm, emboli and paraplegia.⁵⁹ When asked to identify injection locations, one third (33.1%; n = 92) of people who injected drugs in previous six months of participants reported injecting into their jugular or neck vein in the six months preceding EDUHS.

4.5 Mental health and substance use problems

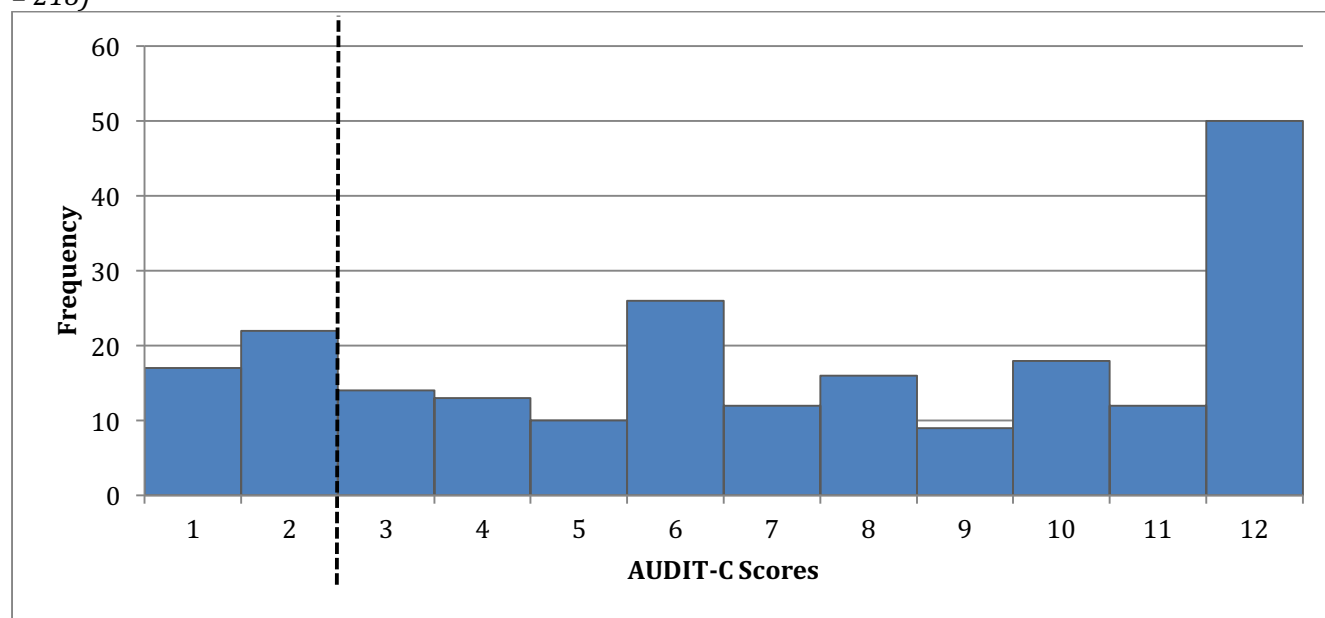
The relationship between mental illness and substance use is complex. Mental health issues may precipitate substance use and related harm, while substance use disorders can be a risk factor for other mental health problems. A series of risk factors are common to mental illness and substance use disorders, including poverty, unstable income, poor housing, and past trauma or abuse.⁶⁰ In North America, it is estimated that at least 10-20% of people experiencing homelessness also experience co-occurring mental health and substance use disorders, with 50-70% of those reporting a mental illness also using or misusing substances.⁶¹

We asked participants to self-report on their own mental health and/or substance use problems. Overall, 69.4% (n = 225) of EDUHS participants reported a past-year diagnosed or undiagnosed substance use problem (50% (n = 160) were diagnosed). In terms of other mental health problems, 55.7% (n = 167) of participants reported a past-year diagnosed or undiagnosed mental health problem (36.6% (n = 117) were diagnosed). In total, 43.8% (n = 142) indicated that they had comorbid (diagnosed and/or undiagnosed) substance use and mental health problems during the past 12 months.

Problematic alcohol use

EDUHS administered the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C), a three-item standardized clinical screen for problematic alcohol use.^{27,62} Females who score three or higher on the AUDIT-C, and males who score four or more, meet clinical criteria for problematic drinking. Figure 4.24 presents participants' AUDIT-C scores. Of the 219 participants who reported current alcohol consumption, 78% (n = 171) met criteria for problematic alcohol use. This includes 82% (n = 65) of female, and 76% (n = 106) of male EDUHS participants who reported current alcohol use. Participants who met criteria for problematic alcohol use were more likely to report consuming non-beverage alcohol. Of the 25 participants who reported non-beverage alcohol consumption in the previous six months, 24 met criteria for problematic alcohol use.

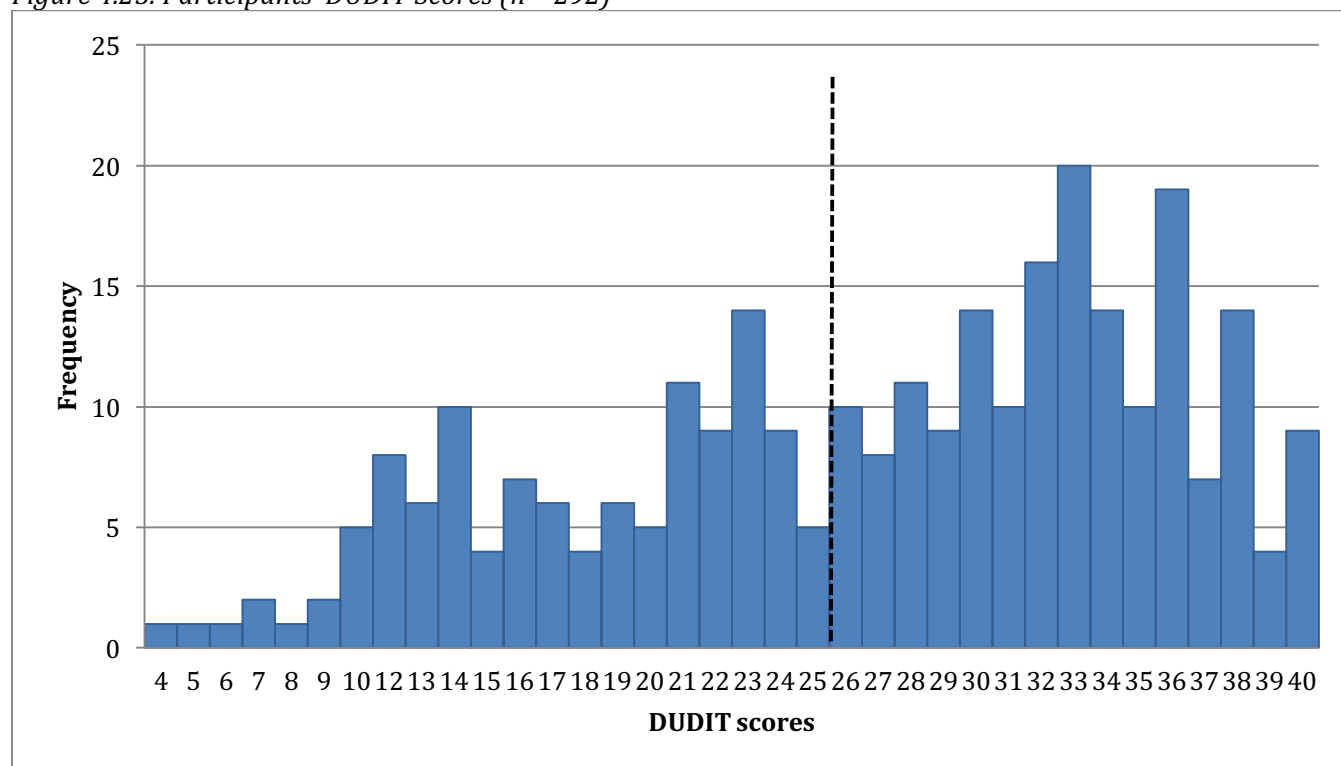
Figure 4.24. Participants' AUDIT-C Scores (amongst participants reporting current alcohol consumption) ($n = 218$)



N.B. Results of participant assessment based on the AUDIT-C clinical screen. Females who score three or higher on the AUDIT-C, and males who score four or more, meet clinical criteria for problematic drinking

Problematic drug use and drug dependence

Figure 4.25. Participants' DUDIT Scores ($n = 292$)



N.B. Results of participant assessment based on the Drug Use Disorders Identification Test. The dotted line indicates the threshold for heavy drug dependence.

Participants were also assessed on the Drug Use Disorders Identification Test (DUDIT), a standardized clinical screen designed to detect problematic drug use.²⁶ Females scoring 2 or higher and men scoring 6 or higher meet criteria for problematic substance use, and likely require some form of care or intervention. Individuals scoring 25 or higher on the DUDIT meet criteria for heavy drug dependence and increased problem severity. Amongst participants who completed all items on the DUDIT, all but one (n = 291; 99.6%) met criteria for problematic drug use. Additionally, 61.6% (n = 180) of participants met criteria for heavy drug dependence (Figure 4.25).

4.6 Overdose

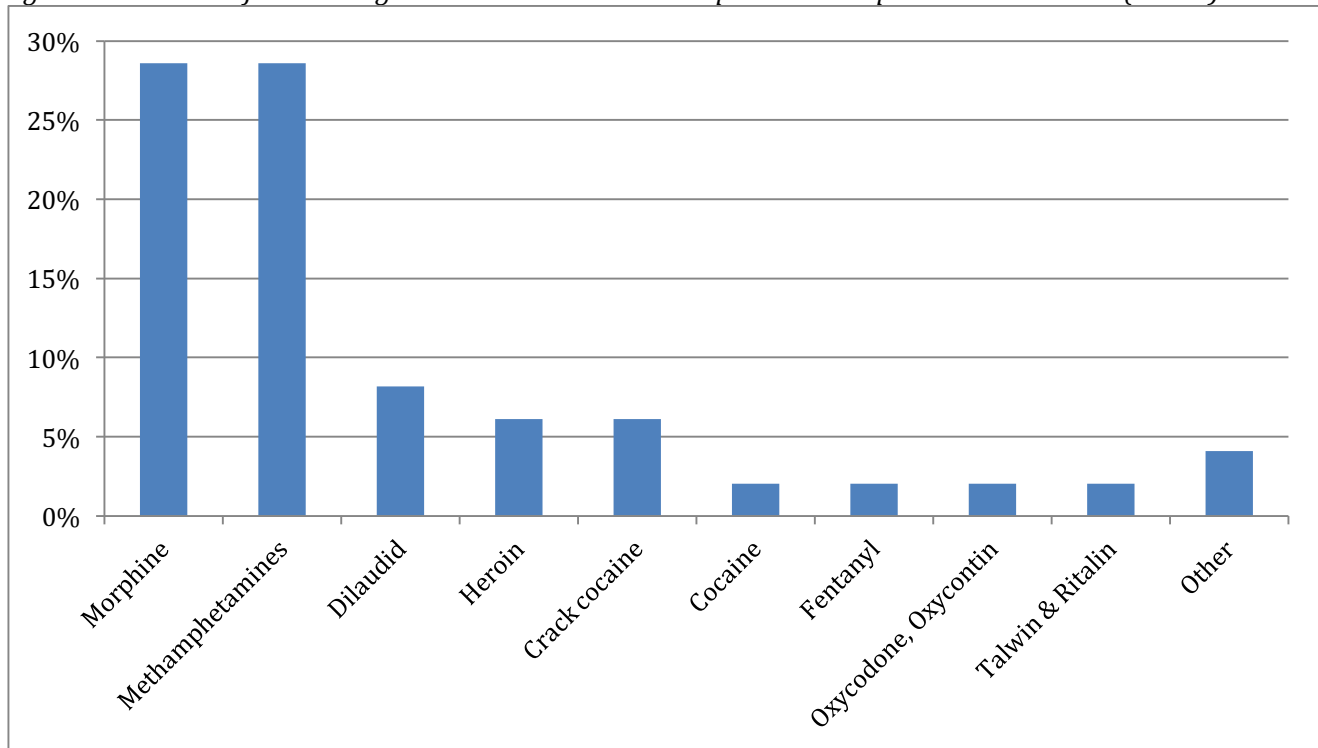
PWUD, particularly those who use opioids, are at increased risk for fatal overdose. A number of risk factors may contribute to an increased risk of overdose including rushing drug use, or using drugs alone.^{50,56} Evidence also suggests that the simultaneous use of multiple drugs contributes substantially to overdose mortality.³⁴ Overdose deaths are highly preventable and present a major opportunity for harm reduction if managed appropriately.⁶³

Overall, 22.9% (n = 69) of all EDUHS participants reported experiencing an overdose in the previous six months, while 35.7% (n = 110) reported witnessing an overdose. Rates of overdose were similar between people who used non-injection drugs only and those who reported recent injection drug use in this survey.

Participants who reported experiencing an overdose in the past six months (n = 69) were asked to indicate the main non-injection and injection drugs involved in their last overdose episode. In terms of drugs involved in their most recent overdose episode, 24 participants indicated non-injection drugs including methamphetamines (25.0%, n = 6), crack cocaine (20.8%, n = 5), benzodiazapenes/tranquilizers (8.3%, n = 2), alcohol (8.3%, n = 2), heroin (4.2%, n = 1), Dilaudid (4.2%, n = 1), and Oxycodone (4.2%, n = 1). An additional six participants listed other unspecified non-injection drugs. No participants reported that non-injection fentanyl was involved in their recent overdose.

Additionally, 49 participants indicated injection drugs were involved in their last overdose, including Morphine (28.6%, n = 14), methamphetamines (28.6%, n = 14), Dilaudid (18.4%, n = 9), heroin (6.1%, n = 3), crack cocaine (6.1%, n = 3), Fentanyl (2.0%, n = 1), Oxycodone (2.0%, n = 1), Talwin and Ritalin combined (2.0%, n = 1), and cocaine (2.0%, n = 1). Additionally, 4% (n = 2) reported other unspecified injection drugs. Figure 4.26 breaks down the main injection drugs involved in participants' last overdose, by type.

Figure 4.26. Main injection drug involved in last overdose episode in the previous six months (n = 49)



N.B. Participants were asked to indicate the main injection drug they were using during their most recent overdose in the past six months. 49 of 70 participants who experienced an overdose indicated that injection drugs were involved.

Participants were asked to describe additional circumstances of their last overdose. Only 42.6% (n = 30) of participants were aware of the potency of the drugs they were taking. 32.9% (n = 23) reported being seen by an ambulance, and 41.2% (n = 28) reported visiting an emergency department for medical assistance.

4.7 Experiences of violence

Substance use and homelessness are both factors that increase an individual's vulnerability to being a victim of violence, as well as perpetrating violence.^{19,64} Over half of participants surveyed (53.4%, n = 166) reported being a victim of violence in the previous six months, including either a physical or sexual assault. A quarter of participants (25.2%, n = 77) also reported assaulting someone else within the previous six months. After experiencing violence, only 25.9% (n = 43) of participants reporting seeking medical attention, and only 14.5% (n = 24) reported seeking counseling. Of those who did seek medical attention, 69.0% (n = 29) of participants went to the emergency room, 21.4% (n = 9) to a clinic or health center, and 9.4% (n = 4) to other services.

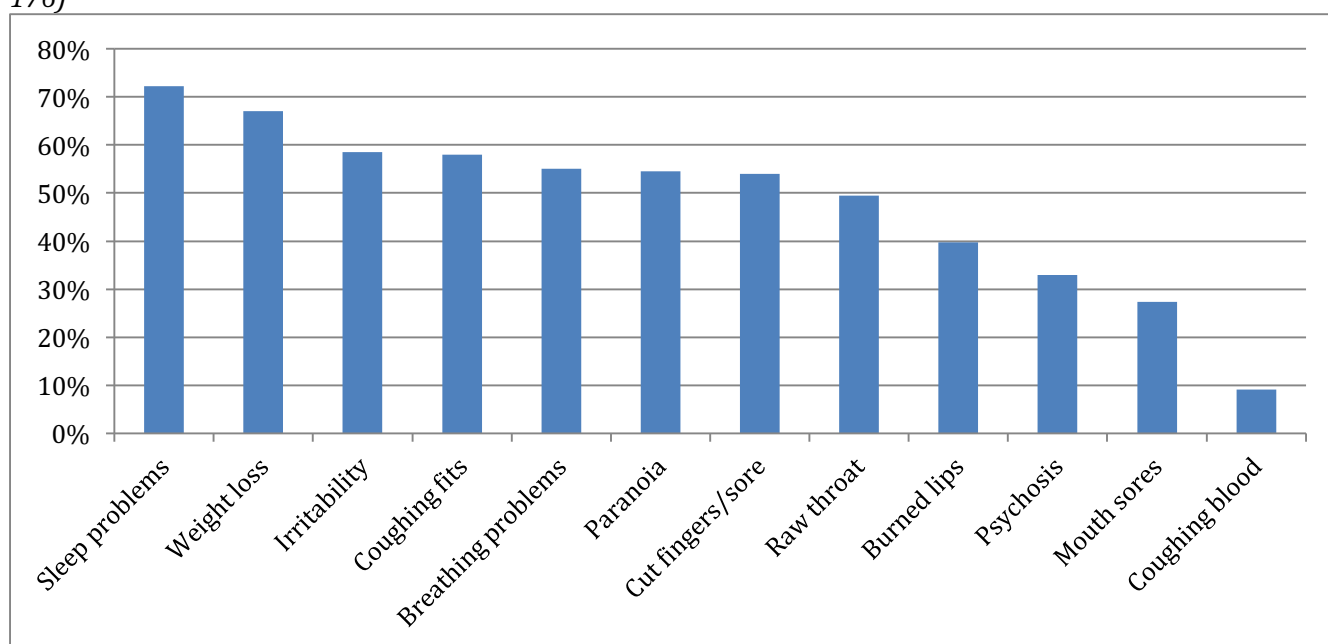
4.8 Physical health problems

Substance use and related risk behaviours may increase the risk of experiencing certain negative health impacts such as skin and respiratory problems, cutaneous and subcutaneous abscesses, etc.¹ Abscesses are a particularly common consequence of injection drug use and may lead to serious complications if left untreated.⁶⁵ Amongst EDUHS participants who injected drugs in the

previous six months, 34.3% (n = 94) of survey participants who inject drugs reported experiencing an abscess around an injection site in the previous six months.

Evidence suggests that crack smokers are at increased risk for experiencing a number of negative health problems.⁶⁶ Amongst participants who reported crack smoking in the previous six months, the vast majority of them (89.3%, n = 158) report experiencing one or more health problems related to their crack use. Health problems associated with crack smoking included sleeping problems, reported by 72.2% (n = 127) of participants, weight loss, reported by 67.0% (n = 118), irritability by 58.5% (n = 103), and coughing fits by 58.0% (n = 102). Additional issues listed were breathing problems (by 55.1%, n = 97), paranoia (54.5%, 96), cuts on fingers (54.0%, n = 95), raw throat (49.4%, n = 87), burns on lips (39.8%, n = 70), psychosis (33.0%, n = 58), mouth sores (27.3%, n = 48), and coughing up blood (9.1%, n = 16) (Figure 28).

Figure 4.27. Health problems experienced by participants while smoking crack in the past six months (n = 176)



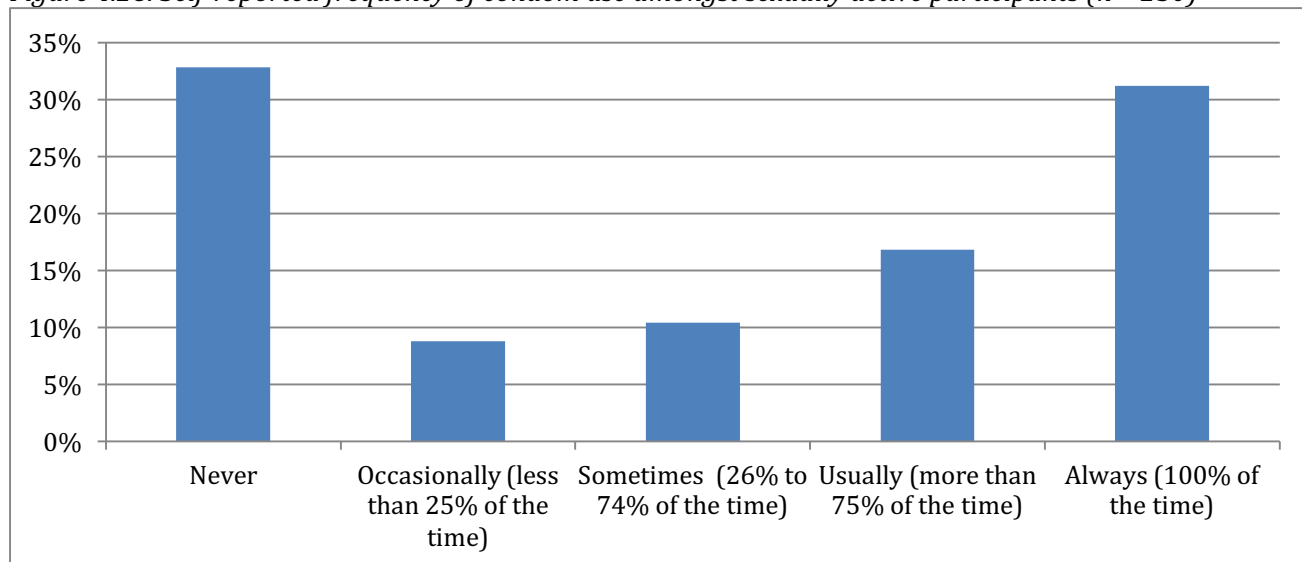
N.B. Participants who reported smoking crack and experiencing a health problem in the past six months were asked to indicate which health problems they had experienced during this time. These percentages do not equal 100% as categories are not mutually exclusive; participants could specify multiple health problems.

4.9 Sexual health

Previous research has found that people who use drugs may be more likely to engage in high risk sexual behaviours such as inconsistent condom use and sex trade work.¹⁴ Participants were asked how many people they had sex with over the previous six months, including giving or receiving vaginal, oral or anal sex. Most participants reported only one sexual partner (40.1%, n = 99), followed by two to five partners (37.2%, n = 92). A further 8.9% (n = 22) of participants reported six to 20 partners, and 4.2% (n = 12) reported over 21 sexual partners. In addition, 8.9% (n = 22) of participants reported no sexual partners in the past six months.

Of participants who reported having sex in the previous six months, 32.8% (n = 82) reported never using a condom. Almost as many participants, 31.2% (n = 78), reported always using a condom, followed by 16.8% (n = 42) that usually used a condom, 10.4 % (n = 26) who used a condom sometimes, and 8.8% (n = 22) that used a condom occasionally (Figure 4.28).

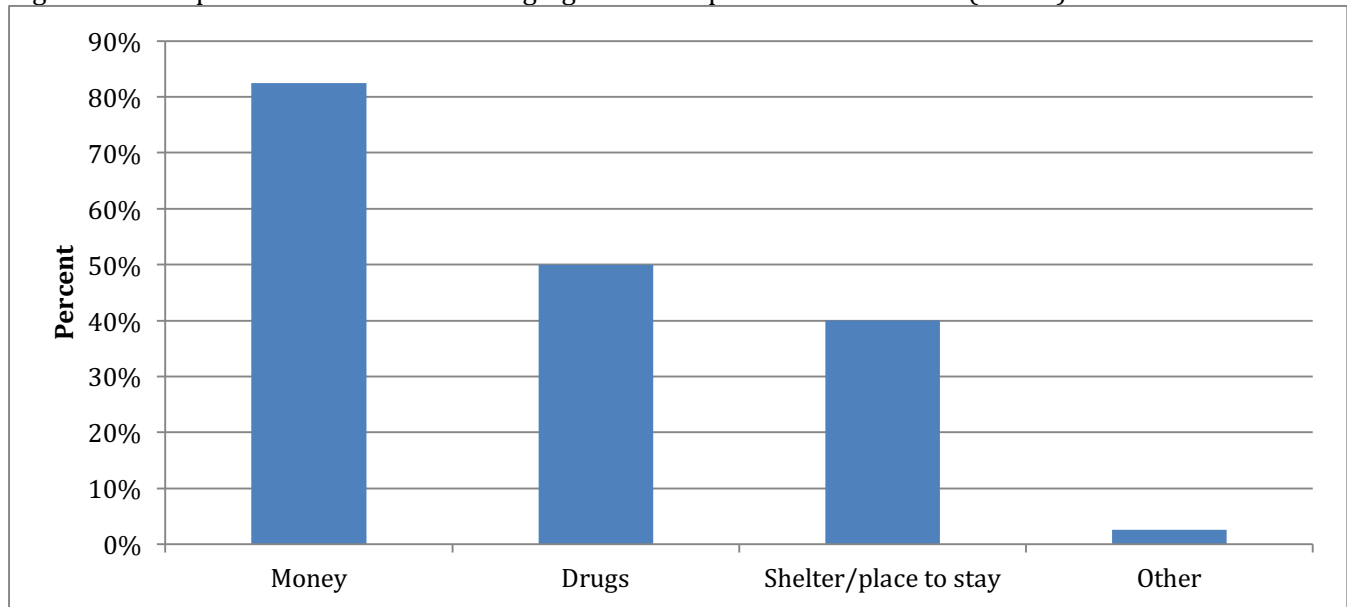
Figure 4.28. Self-reported frequency of condom use amongst sexually active participants (n = 250)



N.B. Participants were asked how often they use a condom during sex, including vaginal, oral and anal sex.

Only a small proportion of participants in this survey, 15.3% (n = 41), reported exchanging sex for money or other goods over the previous six months. Of those who reported exchanging sex, most participants (26.3%, n = 10) did so two to three days per week. This was followed by two to three times per month by 21.1% (n = 8), once a month or less by 18.4% (n = 7), and four to six days a week by 13.2% (n = 5). The remaining participants either stated about once a week or every day, with 10.5% (n = 4) in each category. Participants who reported exchanging sex in the previous six months most frequently did so for money (82.5%, n = 33), followed by drugs (50%, n = 20), shelter or a place to stay (40%, n = 16) (Figure 4.29).

Figure 4.29. Reported reasons for exchanging sex in the previous six months (n = 40)



N.B. Participants who reported exchanging sex in the previous six months were asked to indicate all of the goods they had exchanged for sex during this time. These percentages do not equal 100% as categories are not mutually exclusive; participants could specify multiple goods.

4.10 HIV and HCV status

The prevalence of HIV and HCV is disproportionately high among those who use illicit drugs. In 2010, 16.8% of the 2,358 new HIV and HCV infections reported in Canada were attributed to injection drug use.⁶ Sharing drug use equipment, including used syringes and crack pipes, is the main mode of transmission for these infections.⁶

HIV testing and treatment

Participants who reported having been tested for HIV in the past were asked to specify their most recent test result. Of these participants, 17.3% (n = 52) reported being HIV positive, and 2.7% (n = 8) reported an unknown result. The remaining 80% (n = 240) reported HIV negative status (Figure 31).

The majority of participants (48.5%, n = 147) stated they had been tested for HIV within the previous one to six months, followed by 18.8% (n = 57) in the previous seven to 12 months. An additional 11.9% (n = 36) reported that their last test was over four years ago, 9.2% (n = 28) between one and two years ago, 6.6% (n = 20) within the past month, and 5% (n = 15) more than two, but less than four years ago.

Additionally, 89.6% (n = 43) of participants who reported being HIV positive were currently under the care of a doctor for HIV. Additionally, 91.7% (n = 44) reporting having taken medication for HIV in their lifetime, while 77.3% (n = 34) reported still taking medication for HIV.

HCV testing and status

Amongst EDUHS participants, 68% (n = 202) reported previously testing positive for Hepatitis C antibodies and 32% (n = 95) reported that they had never been told they have HCV. Analysis of self-reported HIV and HCV infections, found that 14.1% (n = 41) of participants self-reported a positive status for both. Only seven participants who reported HIV positive status were negative for HCV. This is consistent with other research that has found a high rate of co-infection of HCV and HIV in people who inject drugs.⁶

Most participants (47.3%, n = 142) reported a recent HCV test, within the previous one to six months. Additionally, 15.7% (n = 47) of participants reported an HCV test in the past seven to 12 months, 7.7% (n = 23) within the last year, 9% (n = 27) between one and two years ago, and 4.7% (n = 14) between two and four years ago. 15.7% (n = 47) reported a test four years ago or more.

Amongst participants reporting a previous HCV diagnosis, 81.6% (n = 151) reported that to the best of their knowledge they still had an active hepatitis C infection. Only 45.6% of those reporting a previous hepatitis C diagnosis were under the care of a physician for HCV, and only 17.6% (n = 36) of people who reported having HCV had ever taken medication for HCV. Of those who took medication, only 6.8% (n = 5) were still taking them.

Participants who were not taking medication prescribed for HCV were asked to indicate the reasons why. The most common response by 19.1% (n = 34) was that their doctor said they didn't need them for medical reasons, followed by their doctor never talking to them about treatment by 16.3% (n = 29). Other reasons given were they were cured or completed treatment (8.4%, n = 15), doctor wanted them to stop injecting first (5.10%, n = 9), doctor said they were not ready for other reasons (3.4%, n = 6), waiting for results (2.8%, n = 5), never started because could not afford them (1.7%, n = 3), stopped due to side effects (1.1%, n = 2), stopped because medication was too complicated (1.1%, n = 2), and stopped because medication was not affordable by one person. A further 47.5% (n = 80) of participants listed other reasons not included on the survey.

4.11 Access to health and social services

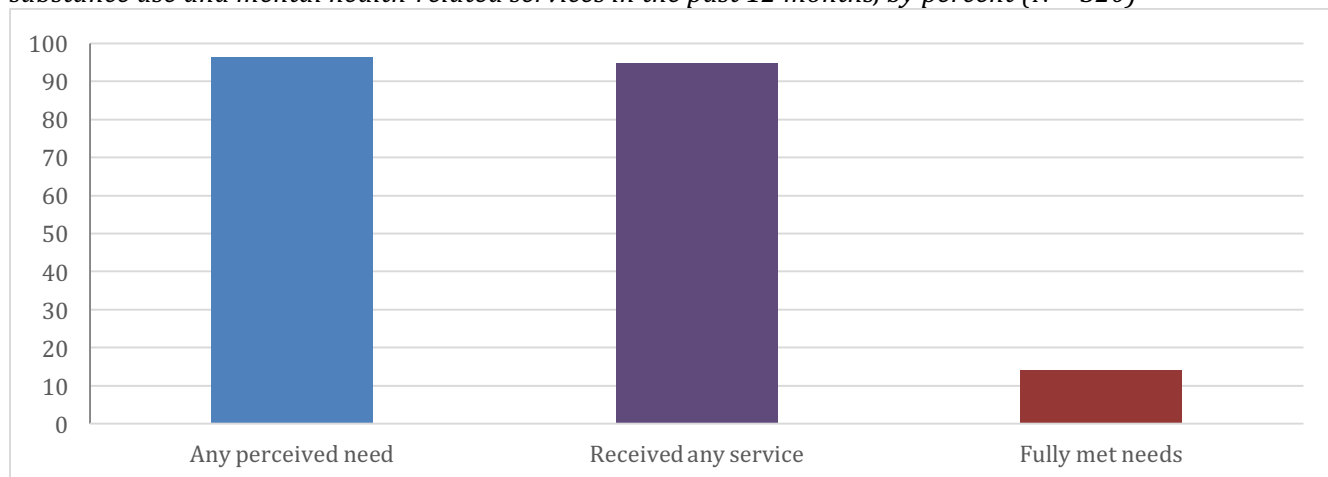
General health and social services for mental health and substance use problems

EDUHS included an adapted version of the Perceived Need for Care Questionnaire (PNCQ),²⁵ a structured instrument designed to assess participants' overall general health and social service needs for substance use and/or mental health problems. The PNCQ assesses participants' perceived need for care, self-reported service use, unmet service needs and barriers to care across seven categories of general health and social services, including: information, medication, hospital care, counseling, social interventions (help sorting out problems with money or housing), skills training (to improve ability to work or care for oneself), and harm reduction.

Figure 4.30 outlines participants' levels of perceived need, service use, and met need across all categories of services. Overall, 96.3% (n = 308) of participants perceived a need for care for one or more general health and social services during the past year, for substance use and/or mental

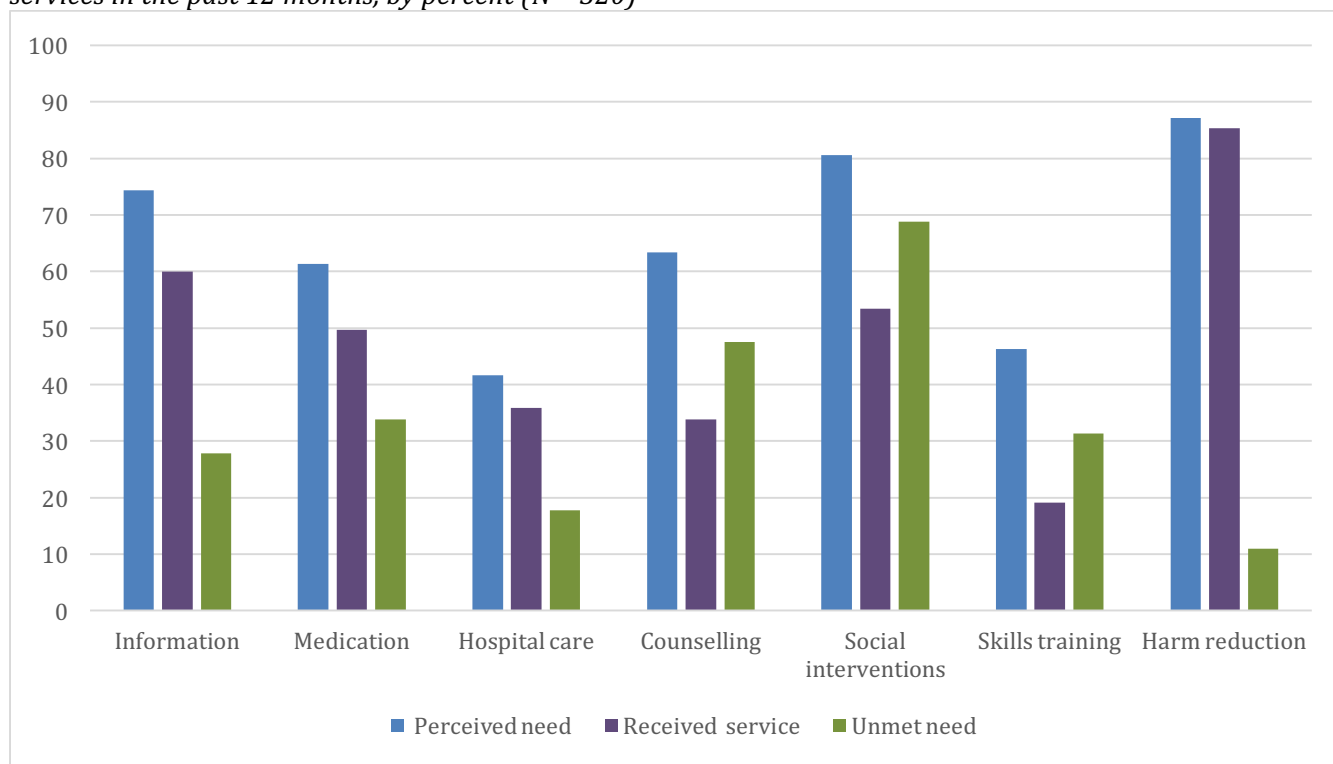
health reasons. Almost as many participants (94.7%; n= 303) reported receiving one or more services in the past year. However, despite high levels of past year service use, only 14.6% (n = 45) of participants reported having their perceived needs fully met.

Figure 4.30. Participants' overall levels of perceived need, service use, and fully met needs for care for general substance use and mental health-related services in the past 12 months, by percent (N = 320)



N.B. Received service rates are self-reported. “Any perceived need” refers to the proportion of participants who perceived a need for any service (see list below) in the past 12 months. “Received any service” refers to the proportion of participants who answered “yes” to the question “in the past 12 months have you received [service] because of problems with your emotions, mental health, or use of alcohol or drugs?” “Fully met needs” refers to the proportion of participants who reported that they had a need for one or more services, and that need was fully met in the past 12 months. Services were: information, medication, hospital care, counselling, social interventions, skills training, or harm reduction services.

Figure 4.31. Proportion of participants reporting perceived need, service use, and unmet need across seven services in the past 12 months, by percent (N = 320)



N.B. Unmet need refers to the proportion of participants who perceived a need for a given service and then reported not receiving any or enough of that service in the past 12 months. Participants were asked, “In the past 12 months have you received [service] because of problems with your emotions, mental health, or the use of alcohol or drugs?” Services were: information, medication, hospital care, counseling, social interventions, skills training, or harm reduction services.

Figure 4.31 breaks down participants’ patterns of perceived need, service use, and unmet need, by service category. Participants most frequently reported perceiving a past-year need for harm reduction (87.2%; n = 279), social interventions (80.6%; n = 258), information (74.4%; n = 238), and counseling (63.4%; n = 203). Similarly, the services most accessed by participants included harm reduction (85.3%; n = 273), information (60.0%; n = 192), social interventions (19.1%; n = 61), and medication (49.7%; n = 159). Note that high rates of perceived need and service use under the harm reduction service category, likely reflect the fact that the majority of participants were recruited from in and around two community programs with embedded needle exchange programs. As such, these figures should not be understood as representative of all street-involved PWUD in Edmonton.

The PNCQ also assessed participants’ levels of unmet need for all seven services. This refers to the proportion of participants who reported perceiving a need for a given service, and receiving either not enough of that service or none at all. Participants reported the highest levels of unmet need for social interventions (59.4%; n = 190), counseling (47.5%; n = 152), medication (33.8%; n = 108), and skills training (31.3%; n = 100) (Figure 4.31).

Table 4.1. Participants’ self-reported reasons for perceived unmet need for care across all services, for social interventions, and for counseling (N=320).

	Reasons for unmet need across all services (n = 939)		Reasons for unmet need for social interventions only (n = 254)		Reasons for unmet need for counseling only (n = 195)	
	N	%	N	%	N	%
Motivational barriers						
I do not want help at this time	173	18.4	24	9.4	53	27.2
I prefer to manage on my own	109	11.6	12	9.8	30	15.4
I did not think anything would help	31	3.3	6	2.4	7	3.6
I was afraid to ask for help or what others would think of me	30	3.2	4	1.6	10	5.1
Structural barriers						
I was only allowed a limited amount of [service]	179	19.1	68	26.8	11	5.6
I asked for help but did not receive it	116	12.4	61	24.0	11	5.6
I did not know where to get help	95	10.1	18	7.1	21	10.8
The waitlist was too long or there were no spaces available	92	9.8	52	20.5	21	10.8
I was not satisfied with care received or it was poor quality	68	7.2	2	.8	13	6.7
I could not afford it	35	3.7	2	.8	13	6.7
Other*	11	1.2	1	.4	5	2.6

N.B. Total number of barriers reported across seven service categories by participants with fully or partially unmet needs was 939. Participants could specify more than one reason for unmet need for any service. *Includes verbatim reasons that could not be classified under one of the above reasons.

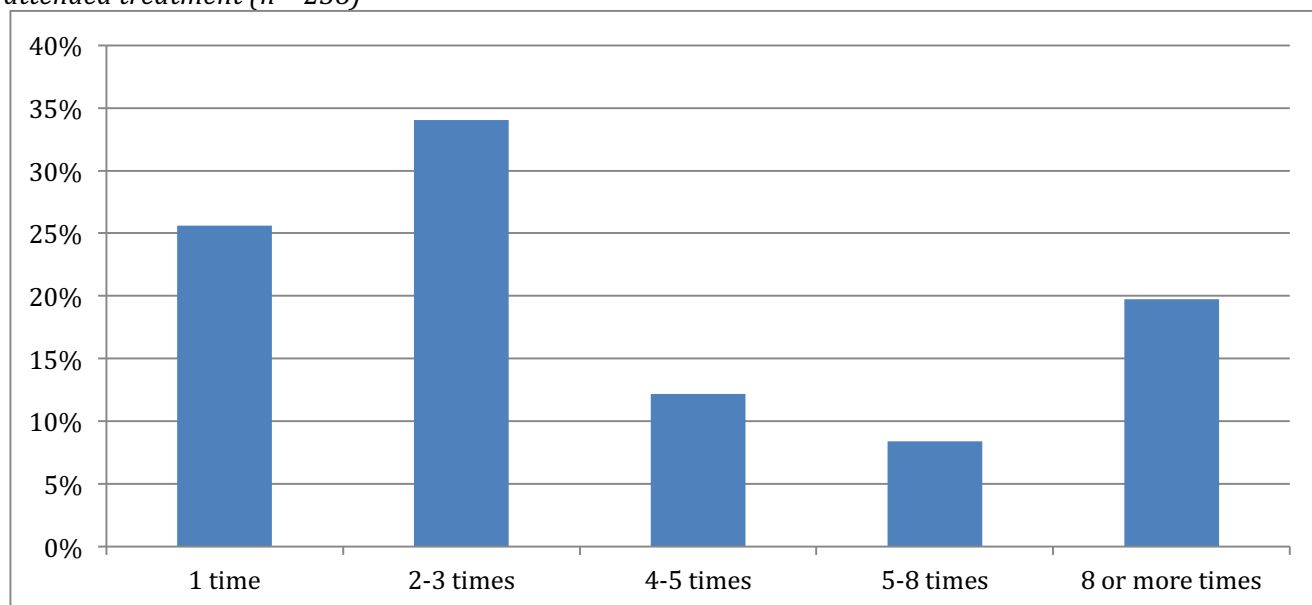
Participants who reported having one or more unmet service needs in the past 12 months were asked to specify one or more reasons for their unmet needs. Participants were given the option to choose from a close-ended list of reasons, or provide an open-ended 'other' verbatim response. Table 4.1 details participants' self-reported reasons for unmet need across all services, as well as for the service categories with the highest levels of unmet need (social interventions and for counseling).

Across service categories, the most frequently endorsed reason for unmet need was 'I was only allowed a limited amount of service,' this reason was endorsed at least once by 179 participants. The next most frequently endorsed barrier (n = 173) was 'I do not want help at this time.' The most frequently endorsed reasons for unmet need for social interventions were 'I was only allowed a limited amount of service' (n = 68) and 'I asked for help but did not receive it' (n = 61). Finally in terms of unmet need for counseling, the most frequently endorsed reasons were 'I do not want help at this time' (n = 53) and 'I prefer to manage on my own' (n = 30).

Specialty care for substance use and mental health problems

Substance use treatment in Canada has been described as a complicated system characterized by long wait times, lack of coordination, and questionable accessibility.^{13,63} People who use drugs face a number of barriers in accessing appropriate substance use treatment. Some key barriers include stigma against people who use illicit drugs, underfunding of services leading to gaps in the service continuum, and a lack of attention to gender-based and cultural differences in treatment needs.¹³ The previous section covered general health and social service use for substance use and mental health reasons, while the present section focuses on specialized substance use services, such as detox, AA or inpatient treatment services.

Figure 4.32. Number of previous substance use treatment episodes amongst participants who had ever attended treatment (n = 238)

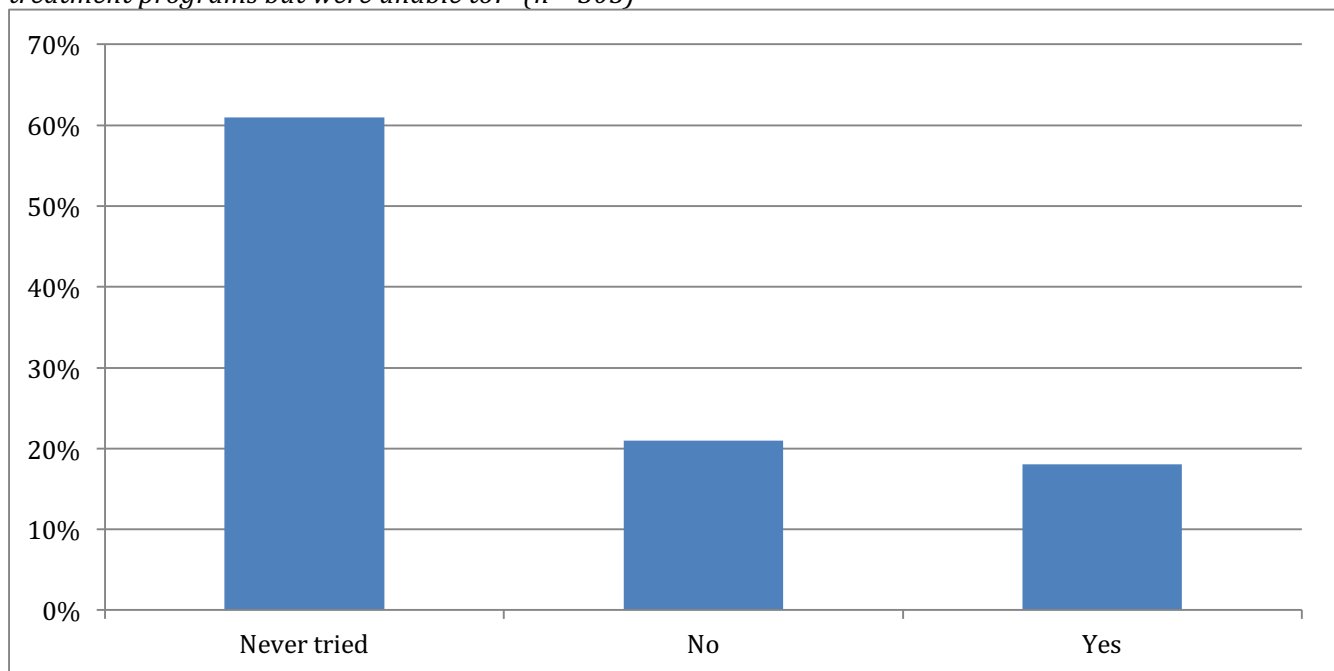


N.B. Participants who reported attending a substance use treatment program (excluding opioid dependence treatment) were asked how many times they had been in treatment previously.

Participants were asked if they had ever been in a substance use treatment program before for drug or alcohol use, such as detox, AA, NA, inpatient treatment or a recovery house. Over three quarters of participants (78.2%, $n = 272$) reported ever having attended treatment. Specifically, 25.6% ($n = 61$) had only been to treatment once, while 34.0% ($n = 81$) of participants reported receiving treatment two to three times previously. Just over ten percent of participants (12.2%, $n = 29$) had been between four and five times, 8.4% ($n = 20$) had been five to eight times, and 19.7% ($n = 47$) reported receiving treatment over eight times (Figure 4.32).

Despite a high frequency of past treatment experiences, the majority (61%, $n = 186$) of participants in this survey indicated that they had not attempted to access treatment during the past year, excluding opioid dependence treatment. Only 21% ($n = 64$) reported that they had accessed treatment, and almost as many (18%, $n = 55$) reported that they tried to access treatment but were unable to (Figure 4.33).

Figure 4.33. Participants' response to "in the last 12 months, have you tried to access any drug or alcohol treatment programs but were unable to?" ($n = 305$)



N.B. Opioid dependence treatment was excluded from the above measure.

Participants who indicated they tried but were unable to access treatment in the past 12 months were asked to specify the type of treatment they attempted to access. The most commonly

reported types were a residential substance use treatment center (54.2%, n = 32), followed by detox (27.1%, n = 16), and a specialized substance use counselor (6.8%, n = 4). A few participants indicated being unable to access AA/NA/CA/SMART (5.1%, n = 3), inpatient treatment (5.1%, n = 3), outpatient treatment (5.1%, n = 3), and 'other' (5.1%, n = 3) treatment.

Participants who indicated they tried but were unable to access a treatment in the past 12 months were also asked to indicate the barriers they faced accessing treatment. A waiting list was the most commonly reported barrier (56.9%, n = 33). However, 22.4% (n = 13) reported they were turned down, 12.1% (n = 7) could not afford the fees, one participant did not know of any programs, one reported behaviour problems, and the remaining 17.2% (n = 10) listed another unspecified reason.

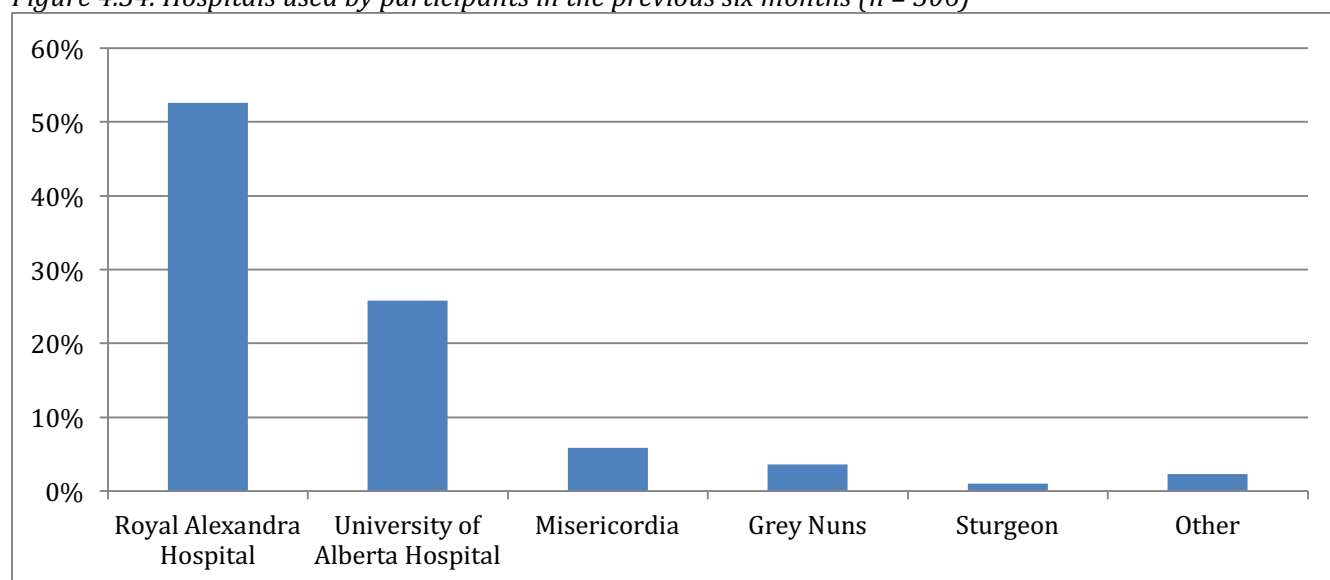
Additionally, almost half (46.4% n = 143) of survey participants indicated that they had previously been in an opioid dependence treatment program. Of these individuals, 32.2% (n = 49) were currently still taking some form of opioid dependence treatment. Of the participants who indicated regular opioid use in the past six months, only 32.9% (n = 47) reported currently being in an opioid dependence treatment program. Unstable housing might be a factor in whether participants access opioid dependence treatment. Of the opioid users who reported not currently being in an opioid dependence treatment program, 68.7%, n = 66 were unstably housed.

Only 8.5% (n = 26) of participants reported accessing specialty mental health care (e.g. psychiatry, psychology, or specialized mental health counseling) in the previous 12 months.

Hospital care

Participants were asked to name any hospitals they had visited in the previous six months for medical attention, health information, or to take part in a program. Of those who had visited a hospital, the Royal Alexandra Hospital was named by 52.6% (n = 161), the University of Alberta Hospital by 25.8% (n = 79), Misericordia by 5.9% (n = 18), Grey Nuns by 3.6% (n = 11), and Sturgeon Hospital by 1% (n = 3). An additional 2.3% of participants listed another hospital not included on the survey (Figure 4.34).

Figure 4.34. Hospitals used by participants in the previous six months (n = 306)



N.B. Participants were asked to name any hospitals they had visited in the previous six months for medical attention, health information or to take part in a program.

The majority of EDUHS participants (74.7%, n = 227) reported accessing some type of primary care facility over the previous six months. This includes medical clinics and walk-in clinics as well as community health centers. For participants who reported accessing a community health center in the past six months (n = 165), 94.6% (n = 156) indicated they had visited the Boyle McCauley Health Centre (BMHC) for services. Survey participants were recruited out of BMHC, so this figure is likely inflated and does not necessarily represent broader patterns of service use in this population. Far fewer participants had accessed other facilities, including the Northeast Health Centre (nine participants), East Edmonton Health Centre (eight participants), and other unnamed clinics (two participants).

Harm reduction services

Harm reduction refers to any program or policy designed to reduce drug-related harm without requiring the cessation of drug use. Examples of such strategies include education about safer drug use, distribution of new supplies for injection and inhalation, safer consumption facilities, programs to prevent or treat overdoses, and opioid substitution therapies.⁶³ Participants were asked what harm reduction services they had accessed in the previous six months for any medical attention, health information, or to take part in a program. 85.9% of participants (n = 275) had accessed a harm reduction program in the previous year. Note that survey participants were recruited in and around two facilities that provide harm reduction services, so this estimate is likely not representative of all PWUD in Edmonton's inner city. Streetworks at BSCS was listed by 71.2% (n = 218), Streetworks at the BMHC by 58.2% (n = 178), the Streetworks van by 42.5% (n = 130), Streetworks at the STI Clinic by 1.3% (n = 4) and HIV Edmonton by 1.3% (n = 4).

Sexual health services

Some 16.9% (n = 52) participants reported accessing a sexual health centre for medical attention, health information or programming in the past six months, 62.5% (n = 15) reported visiting the

STI clinic. 12.5% (n = 3) indicated they had visited the Birth Control Centre, and 29.17% (n = 7) listed an additional location not included in the survey.

4.12 New interventions to mitigate the negative health impacts of substance use

Safer inhalation supplies

Among the participants who reported crack use in the previous six months, 89.5% (n = 154) reported they would use sterile Pyrex crack pipes if these were distributed as part of harm reduction programming. An additional 74% (n = 128) of participants who smoke crack indicated they would use a ventilated inhalation room at a medically supervised consumption facility. In breaking down these responses by housing status, 64% (n = 29) of stably housed participants and 77% (n = 99) of unstably housed participants reported being willing to use a ventilated medically supervised consumption facility, if one was made available in Edmonton.

Take-home Naloxone

Naloxone hydrochloride is a medication used to reverse the effects of an opioid overdose. Several studies have shown that opioid users can be successfully trained to recognize the signs of an overdose and administer intranasal or intramuscular Naloxone to reverse it. Additionally, existing community programs in the United States and elsewhere have reported positive outcomes in reversing overdoses after Naloxone administration.^{67,68} The first Canadian community-based Naloxone program was implemented by Streetworks Edmonton in 2005 and has demonstrated the potential to improve health outcomes for both trainees and those they assist.⁶⁹

Alberta Health recently introduced a pilot program to distribute naloxone to people who are at high risk of overdose through seven organizations across the province. Interest in take-home Naloxone was very high amongst EDUHS participants, with 69.2% (n = 155) stating they would be interested in obtaining Naloxone and being trained on how to use the drug on someone experiencing an overdose. In addition, 16.4% (n = 45) of participants had already received naloxone training.

Medically supervised injection services

Edmonton, and many other Canadian jurisdictions are currently exploring the feasibility of implementing medically supervised injection services (SIS). To support these efforts, EDUHS participants were asked an extensive series of questions to gather their thoughts and opinions regarding the potential opening of a SIS in Edmonton. In the survey, a SIS was described to participants as “a legally operated indoor facility where people go to inject pre-obtained drugs under the supervision of medically trained workers. People inject there under safe and sterile conditions, and have access to all sterile injecting equipment.”

Among participants who had injected drugs in the previous six months, 91.3% (n = 242) of participants indicated that if a SIS opened in Edmonton, they would use it. Only 8.6% (n = 23) of participants were not interested in using the facility, and an additional four participants said they would not use it because they no longer inject. Of those who reported a willingness to use the

supervised injection facility, 57.4% (n = 101) reported unstable housing within the past six months.

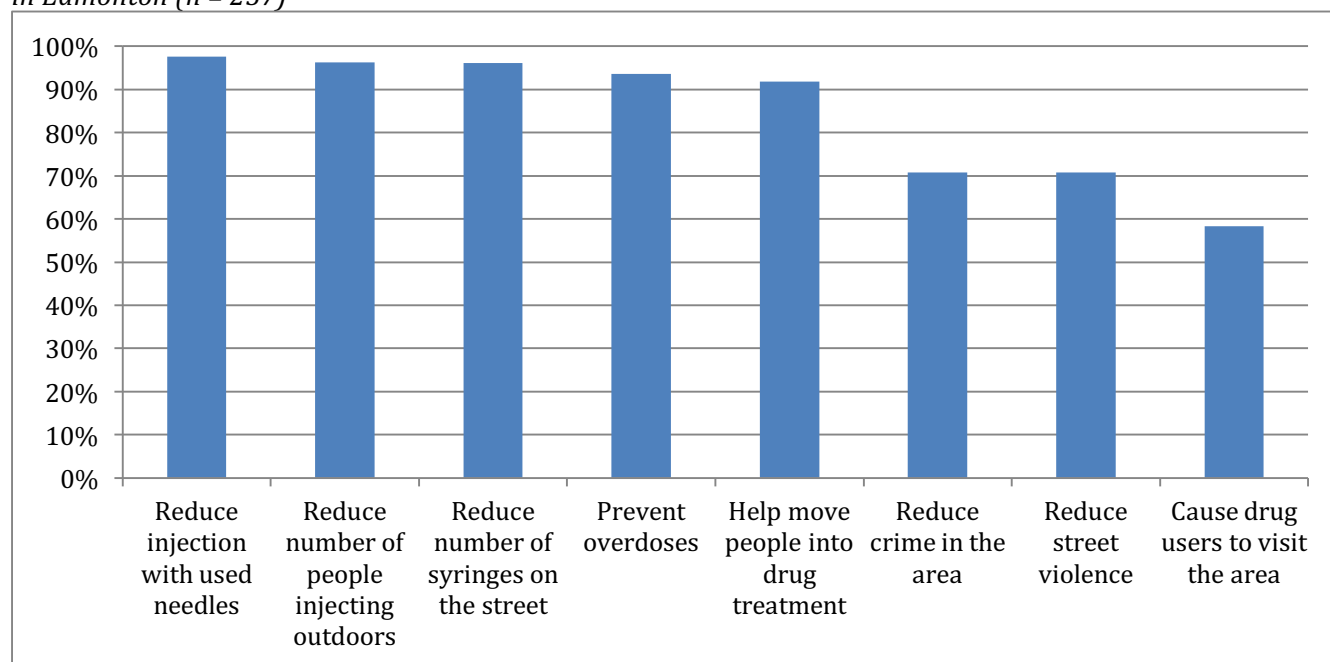
Very few participants who reported current injection drug use (21.5%, n = 60) indicated that they had ever received training on how to more safely inject from a health care professional. Receiving training on proper injection practices is an effective means to reduce the risk associated with injection drug use, and can be provided by medical professionals at a SIS.⁷⁰

Participants who reported injecting drug use in the past six months were asked additional questions relating to their SIS preferences, including what location(s) they would be most inclined to visit. Overall, 91.1% (n = 225) of participants would use the SIS if it were located at Boyle Street Community Services, 84.9% (n = 208) stated they would use a SIS at the Boyle McCauley Health Centre, 74% (n = 179) would use a mobile SIS service that travelled around the city, and 72.3% (n = 178) would use a SIS located at the George Spady Centre. Overall, 76.4% (n = 188) of participants said they would not be willing to travel more than one kilometer to access the SIF. 17.9% (n = 44) of participants said they would travel one kilometer or less, 20.7% (n = 51) of participants said 10 blocks or less, 29.7% (n = 73) five blocks or less, and 8.1% (n = 20) were only willing to travel one block or less. Only a quarter (23.6%, n = 58) of participants were willing to travel more than one kilometer to attend a SIS.

When asked what time of day they would be most likely use a SIS, the majority (58.5%, n = 121) of participants who injected drugs in the past six months, indicated between the hours of 8 AM and 4 PM. This was followed by 4 PM to midnight, endorsed by 22.7% (n = 47), and midnight to 8 AM endorsed by 18.8% (n = 39).

EDUHS also asked participants for their views on SIS. Overwhelmingly, 97.6% (n = 285) of participants thought that a SIS would reduce the prevalence of injection with used needles. The majority of participants also believed that it would reduce the number of people injecting outdoors (96.3%, n = 283), would reduce the number of syringes on the street (96.2%, n = 282), would prevent overdoses (93.9%, n = 277), and would help move people into drug treatment (91.9%, n = 260). A further 70.8% (n = 182) of participants thought a SIS would reduce crime, and 70.7% (n = 188) believed it would reduce street violence in the area it was located. 67.3% (n = 189) thought a SIS could cause more drug users to visit the area (Figure 4.35).

Figure 4.35. Participants' views on the potential benefits of opening a medically supervised injection service in Edmonton (n = 257)



N.B. The figure above represents the proportion of participants in support of the identified statement.

Participants were asked if they would still be willing to use a SIS if specific rules were enforced. The majority of participants (95.4%, n = 249) indicated they would use the service if injections were supervised by trained staff who could respond to overdoses. Additionally, 93.2% (n = 234) stated they would use the service if a “no smoking crack” rule was enforced, and 90.0% (n = 251) would use the service if they were required to stay for 10-15 minutes after injecting so their health could be monitored. Another 85.7% (n = 259) indicated they would use the service if there was a 30 minute time limit on injections, 84.0% (n = 257) if they had to register every time, 83.5% (n = 249) if they had to wait until an injection space opened up, and 81.5% (n = 254) if they were not permitted to share or split drugs in the facility. Over three quarters of participants (78.2%, n = 248) would use the service if they were not allowed to assist each other with injections, and 71.3% (n = 254) if there was video surveillance on site to protect clients. The two rules with the lowest support were a requirement to be a resident of the neighborhood in order to use the service, as only 39.5% (n = 248) of participants indicated they would use this service if this were enforced, and a requirement to show ID, as only 36.4% (n = 253) of participants indicated they would use the service if this were in place (Table 4.22). High rates of unstable housing and homelessness amongst the surveyed population may be a contributing factor in the low support for the requirement to live in the neighborhood in order to use the service.

Table 4.2. Participants' views on potential SIS rules (n = 261)

Response to “would you use the SIS if the following rule was enforced?”	Yes	No
Injections are supervised by trained staff who can respond to overdoses	95.4%	4.6%
“No smoking crack” rule enforced inside SIS	93.2%	6.8%
Required to stay 10-15 minutes after injecting so health can be monitored	90.0%	10.0%
30-minute time limit on injections	85.7%	14.3%
Required to register every time	84.0%	16%
Must wait to inject until an injection space opens up	83.5%	16.5%

Not permitted to share or split drugs inside the facility	81.5%	18.5%
Not allowed to assist each other with injections	78.2%	21.8%
Video surveillance on site to protect users	71.3%	28.7%
Must live in the neighborhood to use SIS	39.5%	60.5%
Must show ID each time to use SIS	36.4%	63.6%

N.B. Proportion of participants who reported injecting drugs in the past six months that agree or disagree with particular views on SIS.

In terms of the best setup for injecting spaces in a SIS, participants overwhelmingly indicated that private cubicles would be ideal, with 71.1% (n =180) preferring this setup. 6.3% indicated they would prefer an open plan with tables and chairs, and 22.5% (n =57) indicated they would prefer a combination of both cubicles and tables and chairs. An additional 64.2% (n =158) of participants believed that PWUD should be involved in operating the SIS.

Supervised inhalation services

A number of European jurisdictions have implemented supervised smoking facilities where PWUD are able to smoke pre-obtained drugs and access other health and social supports.⁷¹ These facilities have not been well studied to date. Although the overall effectiveness of such services has yet to be proven, epidemiological research^{16,72,73} with PWUD suggests that they have the potential to prevent crack pipe sharing, reduce the use of unsafe or improvised inhalation equipment, mitigate public disorder and connect PWUD with other health services. EDUHS participants were asked about their interest in using a safer smoking facility. In total, 63.3% (n = 186) of participants indicated that if Edmonton had a supervised inhalation services where people could smoke drugs in a ventilated room, they would use the facility.

5. Conclusion

In Canada, several cities have recently undertaken efforts to improve outcomes for socially marginalized PWUD. These efforts include introducing or expanding health and social services, and in many cases have been guided by local epidemiological evidence. Historically, little research has examined the health status and health service needs of PWUD, particularly socially marginalized PWUD residing in Edmonton's inner city. EDUHS was conducted to address this gap and represents the largest survey of socially marginalized PWUD in the city's history.

Study Limitations

All attempts have been made to ensure that the findings reported here are accurate and reliable. However, the EDUHS study had several limitations that should be noted:

1. As a cross-sectional study, EDUHS only provides a snapshot of the health and social status of PWUD in Edmonton's inner city. As such, the findings presented here cannot provide information on trends in substance use patterns, risk behaviours, and/or health and social outcomes. Additionally, we cannot draw causal inferences regarding certain trends and outcomes observed amongst participants. Repeating EDUHS in a new sample and/or conducting longitudinal research on a cohort of the target population is required in order to track health, social and substance use trends in Edmonton's inner city over the long term, and

monitor the impact of various policy and program changes on PWUD.

2. EDUHS did not use random or probability sampling, which means that EDUHS findings are not necessarily representative of the entire population of PWUD in Edmonton's inner city. Due to time and resource constraints, we used convenience sampling to recruit EDUHS participants from in and around three inner city agencies (two with embedded needle exchange services). Therefore our results likely overestimate the extent to which PWUD in Edmonton's inner city are accessing services (especially harm reduction services). Moreover, we cannot reliably describe health and social outcomes amongst PWUD who are not accessing or connected to services. Finally, our sampling strategy deliberately overrepresented PWID, as such our ability to generalize our findings to people who use only non-injection drugs is limited.
3. All of the EDUHS findings are based on self-report data, which may affect the validity of the findings. Participants were encouraged to be as candid as possible; the survey instrument was piloted prior to data collection to ensure that the wording was sensitive and to the point, and both data collectors spent time in the inner city prior to data collection. However in some cases social desirability bias may still have led to under-reporting of some risk behaviours. Additionally, participants were asked to report in detail on behaviours and events that occurred during the previous six and 12-month periods. This may have led to some recall bias, particularly amongst PWUD with substance use and mental health problems or cognitive impairments.

Recommendations

Notwithstanding the above limitations, the findings and recommendations outlined in this report provide service providers and policymakers with the necessary information and evidence-based strategies to improve health and social outcomes amongst PWUD. Results from the EDUHS support six specific policy recommendations regarding the provision of healthcare services and interventions in Edmonton:

1. Expand access to sterile syringes.

- a. In the previous six months, 91.2% ($n = 279$) of participants reported using injection drugs. Dilaudid was the most commonly injected drug (70.3%, $n = 196$), followed by methamphetamine (69.9%, $n = 195$).
- b. Current syringe exchange efforts are not fully meeting the needs of people who use drugs in Edmonton's inner city.
- c. Amongst EDUHS participants who reported injection drug use in the past 6 months, 26.1% ($n = 71$) reported either borrowing or lending previously used syringes in the same time period. These rates are higher than rates of syringe sharing reported in a number of other Canadian jurisdictions,¹⁴ and concerning because syringe sharing is an important contributor to new HIV and HCV infections.
- d. Despite the presence of a high-volume, multi-site needle exchange program, many participants reported experiencing difficulty accessing new syringes. Nearly a quarter of EDUHS participants (24.0%, $n = 67$) who injected drugs in the previous six months, said they experience regular difficulty accessing new syringes, and an additional 22.6% ($n = 63$) said they "sometimes" experience difficulty.

- e. Amongst participants who reported difficulty accessing sterile syringes ($n = 130$), 74.6% ($n = 97$) cited needle exchange operating hours as an access barrier. Additional barriers included being out of the NEP area (25.4%, $n = 33$), difficulty finding new syringes at night (19.2%, $n = 25$) and missing the mobile needle exchange van (8.5% ($n = 11$)).
- f. Opening a 24-hour fixed site syringe exchange in Edmonton's inner city could significantly improve access to sterile syringes on evenings and weekends, when Edmonton's harm reduction programs are either closed or operating with very limited capacity.
- g. Other Canadian cities currently provide PWID with reliable, 24-hour access to sterile syringes and other injection equipment.⁷⁴ For example, Toronto has two 24-hour fixed site syringe exchange programs, one located at the emergency department at St. Michael's Hospital, and one embedded in a 24 hour youth shelter.⁷⁵ In Edmonton, 24-hour fixed site access to sterile syringes could potentially be implemented at one of Streetworks Edmonton's current sites. Alternatively, the Royal Alexandra Hospital's emergency department could also be a suitable, central location for the provision of 24-hour access to sterile syringes.
- h. Beyond expanded operating hours, there are also several ways to increase geographic availability of sterile syringes both within and outside Edmonton's inner city. Edmonton's current harm reduction program could be funded to operate additional fixed sites in new locations. Alternatively, in some Canadian jurisdictions like Quebec and Vancouver, sterile syringes and other injecting supplies are available through primary health care facilities that serve the general public. In parts of British Columbia, Europe and some American states, syringe exchange programs have been embedded in community pharmacies as a means to increase geographic access to sterile syringes.^{76,77} Finally, in some European and Australian jurisdictions, sterile syringe vending machines have been installed to increase access to sterile syringes for people who would otherwise avoid harm reduction programs, or as a means to augment conventional methods of syringe distribution.^{78,79} However, although these machines increase access to sterile equipment (and can be made available 24-hours a day), they do not provide an opportunity to build trusting relationships with PWID or provide them with additional health and social services.

2. Implement medically supervised injection services (SIS) as part of a comprehensive model of care for PWUD in Edmonton.

- a. A significant proportion of PWUD in Edmonton's inner city are injecting in public. Over one quarter of participants who injected drugs in the previous six months (28.4%, $n = 79$) reported 'always' injecting drugs in public, and a further 19.1% ($n = 53$) said they usually inject drugs in public.
- b. Public injecting is associated with increased risk of syringe sharing, overdose mortality, and violent victimization. Not having a sterile environment to inject also increases the risk of abscesses and other negative health outcomes.
- c. Supervised injection services are an effective intervention for reducing public injecting. These services provide access to sterile injection supplies, medical supervision, and links to substance use treatment and other health and social services.⁸⁰
- d. Canada has two SIS, both operate in Vancouver and include - Insite, in the Downtown Eastside, and the Dr. Peter Centre on the West End. Research shows that Insite has

contributed to reductions in syringe sharing and other risky injection practices and was associated with reductions in public injecting and injection-related litter,⁸¹⁻⁸³ as well as increased uptake into detoxification and substance use treatment.⁸⁴⁻⁸⁷ The facility has also contributed to reductions in overdose mortality.⁸⁸ Additionally, several cost-benefit analyses have indicated that the facility is cost-saving, and likely contributes to reductions in HIV incidence.⁸⁹⁻⁹¹

- e. Currently several efforts are underway to expand access to SIS in Canada. Operating a SIS typically requires a federal legal exemption under section 56 of the *Controlled Drugs and Substances Act*. A number of Canadian jurisdictions (Toronto, Ottawa, Victoria, Edmonton) are currently either developing federal exemption applications, or exploring the possibility of doing so. Additionally, in May 2015, Montreal submitted an application to Health Canada to operate three fixed and one mobile SIS.⁹²
- f. 91% ($n = 248$) of EDUHS participants who recently injected drugs were willing to attend a SIS, suggesting that this service would be acceptable to a majority of PWID in Edmonton's inner city. A further 97.6% ($n = 285$) stated they thought a SIS would reduce the prevalence of injection with used needles. The majority of participants also believed that it would reduce the number of people injecting outdoors (96.3%, $n = 283$), would reduce the number of syringes on the street (96.2%, $n = 282$), would prevent overdoses (93.9%, $n = 277$), and would help move people into drug treatment (91.9%, $n = 260$).
- g. A decentralized SIS model, where SIS are integrated into existing health and social agencies that already serve PWID, has been recommended for cities like Edmonton where illicit drug use is more dispersed.¹⁷ EDUHS participants reported being willing to attend a SIS if it was integrated into an existing health or social service agency. In total, 91.1% ($n = 225$) of participants who injected drugs in the previous six months would use SIS if they were located at BSCS, 84.9% ($n = 208$) would use a SIS at the BMHC, 74% ($n = 179$) would use mobile SIS that travelled around the city, and 72.3% ($n = 178$) would use SIS located at the George Spady Centre.

3. Expand access to overdose prevention programs.

- a. PWUD in Edmonton's inner city report high rates of overdose. In total, 22.9% ($n = 69$) of all participants reported experiencing an overdose in the previous six months, while 35.7% ($n = 110$) reported witnessing an overdose.
- b. Expanding overdose prevention programs in the inner city, which inform people about the signs of various drug overdoses and encourage them to engage in safer use strategies, could reduce rates of overdose.
- c. Naloxone hydrochloride is an opioid antagonist, which can reverse the effects of an overdose from opioids. Several studies have shown that opioid users can be successfully trained to recognize the signs of an overdose and administer intranasal or intramuscular Naloxone to reverse it. Additionally, existing community programs in the United States and elsewhere have reported positive outcomes in reversing overdoses after Naloxone administration.^{67,68}
- d. The first Canadian community-based Naloxone program, operated by Streetworks Edmonton, was implemented in Edmonton in 2005 and has demonstrated the potential to improve health outcomes for both trainees and those they assist.⁶⁹
- e. Interest in naloxone was very high amongst participants, with 69.2% ($n = 155$) indicating they would be interested in obtaining a take-home naloxone kit and being trained on how to use the drug on someone experiencing an opioid overdose. A further

16.4% ($n = 49$) of EDUHS participants reported previously receiving a take-home naloxone kit and the necessary training.

- f. Alberta Health recently announced expansion of Naloxone distribution across the province, including additional funding for distributing take-home Naloxone kits in Edmonton's inner city.⁹³ This pilot project is a very positive step. However, sustainable funding for take-home naloxone is needed to reduce opioid overdose-related morbidity and mortality in Edmonton's inner city over the long term.

4. Implement a safer inhalation program.

- a. PWUD in Edmonton report high rates of non-injection drug related risk behaviours.
- b. In the previous six months, 89.2% ($n = 282$) of participants had used some type of non-injection illicit drug, by means including smoking, snorting or swallowing. Methamphetamine (smoked) was the most frequently used non-injection drug, with 23.8% ($n = 66$) of participants reporting this as the drug they used most frequently. This was followed by crack cocaine (23.1%, $n = 64$).
- c. Of participants who reported smoking crack cocaine in the previous six months, 69.7% ($n = 131$) reported borrowing, lending, or sharing a crack pipe or mouthpiece in that time. These rates are over 20% higher than a similar study conducted with people who smoke crack cocaine in Vancouver.
- d. Amongst those who smoked crack in the past six months, 39.0% ($n = 71$) of people said they found it difficult to find new crack pipes when needed.
- e. High rates of pipe sharing and constrained access to sterile smoking equipment amongst people who smoke crack cocaine can contribute to increased risk of cuts, burns, sores, and HCV transmission.^{16,72}
- f. Accordingly, several Canadian jurisdictions (e.g. British Columbia, Ontario, Halifax, Red Deer, Winnipeg) have implemented safer inhalation programs, which distribute sterile crack smoking supplies to PWUD, including borosilicate glass pipes, which are heat safe.^{63,94} These programs are designed to both reduce rates of crack pipe sharing, and use of unsterile and/or unsafe improvised smoking devices (e.g. pop cans, car antennas).
- g. Evidence⁹⁴⁻⁹⁶ suggests that safer inhalation kit programs provide an important opportunity for attracting hard-to-reach PWUD, who may otherwise not be accessing harm reduction services geared towards PWID. In Alberta, the Central Alberta AIDS Network Society in Red Deer provides access to these safer inhalation kits. Edmonton does not currently have a similar program (although sterile mouthpieces are sometimes available through Streetworks).
- h. In 2011, Alberta Health Services made the decision to close a Calgary safer inhalation program citing fears of legal action.⁹⁷ However, legal analysis of safer inhalation programs suggests, that similar to the distribution of sterile syringes, it is not actually illegal to distribute sterile crack pipes in Canada.⁹⁸ Additionally, borosilicate pipes and other safer inhalation supplies are widely distributed in many parts of Canada, including through provincial harm reduction supply distribution programs in British Columbia⁹⁹ and Ontario,¹⁰⁰ and no health service provider has ever been convicted for distributing sterile cracking smoking supplies.⁹⁸
- i. Safer inhalation programs may also benefit people who smoke methamphetamines.⁷³ At the time the EDUHS survey was developed, smoked crack cocaine was believed to be the main non-injection illicit drug used in Edmonton's inner city. However, EDUHS findings suggest that smoked methamphetamine use has become more common than

crack cocaine use.

5. Increase access to adequate general and specialized care for substance use and mental health problems.

- a. Existing access to general and specialty care for substance use and or/mental health problems is inadequate to meet the needs of EDUHS participants.
- b. Almost all EDUHS participants perceived a need for care for substance use and/or mental health problems in the past 12 months. However, only 14.6% ($n = 45$) reported having these needs fully met. Rates of unmet need were much higher than those reported amongst Alberta adults experiencing substance use disorders in the general population.¹¹
- c. Participants reported the highest levels of unmet need for social interventions and counseling. The most frequently endorsed reasons for unmet need for social interventions were 'I was only allowed a limited amount of service' ($n = 68$) and 'I asked for help but did not receive it' ($n = 61$).
- d. With regard to counseling, the most frequently endorsed reasons for unmet need were 'I do not want help at this time' ($n = 53$) and 'I prefer to manage on my own' ($n = 30$). This finding implies that a significant proportion of participants recognized that they required counseling but experienced a motivational barrier to attaining it. Additionally, some participants may have wanted counseling but preferred to manage on their own because they felt available services were not acceptable. Ensuring that counseling services are low threshold, attractive to clients, and readily available at locations where PWUD are already accessing other services (such as harm reduction programs and/or primary care clinics) could help increase uptake into these services.
- e. In terms of specialty care for substance use problems, only 20% of EDUHS participants reported accessing detoxification or treatment services (excluding opioid dependence treatment) within the past 12 months. Nearly as many participants had tried to access these services and been unable to. This is particularly troublesome considering that of the EDUHS participants who completed all items on the DUDIT, all but one ($n = 291$; 99.6%) met criteria for problematic drug use.
- f. Uptake into opioid dependence treatment programs and specialized mental health care in the last 12 months was also low, suggesting a need to expand access and/or better connect PWUD to specialty care.
- g. Policymakers and service providers should consider program changes that would make it easier for PWUD in Edmonton's inner city to access social supports. Increasing socioeconomic stability amongst unstably housed PWUD is likely to help reduce rates of risk behaviours and improve health and social outcomes.

6. Expand access to permanent supportive housing with a harm reduction model.

- a. EDUHS participants reported high rates of homelessness and unstable housing.
- b. In recent years, the City of Edmonton, Government of Alberta, and Government of Canada have funded an aggressive effort to house homeless individuals living in Edmonton's inner city.¹⁰¹ However, many people continue to be homeless or unstably housed.¹⁰² Over half (56.9%; $n = 182$) of EDUHS participants reported that their current housing situation was unstable, and almost two-thirds (61.9%; $n = 198$) indicated they were unsatisfied with their current housing situation.
- c. In terms of transitory sleeping, 72.5% ($n = 232$) of participants had slept at least one night in a shelter, on the street, in an outdoor camp, or walked all night (nowhere to

sleep) in the previous six months. Additionally, 42% ($n = 136$) of participants indicated that they had slept in six or more different places in the previous six months.

- d.** The results of this study show a clear link between unstable housing and drug-related risk behaviours. The most frequently stated reason for public injection was homelessness, reported by 45.7% ($n = 100$) of those who injected in public. The main reason for smoking crack in public was also homelessness, reported by 36.8% ($n = 57$) of those who reported smoking in public.
- e.** Unstable housing might also be a factor in whether participants access opioid dependence treatment. Of the opioid users who reported not currently being in an opioid dependence treatment program, 68.7%, ($n = 66$) were unstably housed. This is notable because of the participants who indicated regular opioid use in the past six months, only 32.9% ($n = 47$) reported currently being in an opioid dependence treatment program.
- f.** Alleviating homelessness amongst PWUD in Edmonton's inner city will likely lead to significant reductions in public drug use and associated negative health outcomes.

Our hope is that this study and its recommendations lead to appropriate policy and practice changes, and will help improve the health and social outcomes of some of Edmonton's most vulnerable citizens. High rates of risk behaviours detailed in this report, such as syringe sharing, public drug use, etc., are at least in part, shaped and determined by the physical, economic, and social environments which constrain health-protective behaviour and increase the risk of negative outcomes.^{41,47} As such, policy changes designed to improve the social and housing status of PWUD in Edmonton's inner city, and expand access to harm reduction strategies, have significant potential to improve the health and well-being of this highly vulnerable population.

Beyond implementing new programs or expanding access to services, efforts are required to address the historical lack of data on PWUD in Edmonton over the long-term. Ongoing research and monitoring can support policy change and alert policymakers to public health threats, before they reach crises level. Additionally, in cities such as Vancouver and Montreal, where longitudinal cohort research with PWUD is ongoing, service providers and policymakers have employed resulting research evidence to achieve long-term and meaningful improvements in the health of PWUD, and mitigate the economic and social costs of illicit substance use in their community.

6. References

1. Degenhardt L, Hall W. Extent of illicit drug use and dependence, and their contribution to the global burden of disease. *Lancet*. 2012;379(9810):55-70.
2. Rehm J, Baliunas, D., Brochu, S., Fischer, B., Gnam, W., Patra, J., Popova, S., Sarnocinska-Hart, A., & Taylor, B. The Costs of Substance Abuse in Canada 2002: Highlights. Canadian Centre on Substance Abuse, 2006.
3. Young MM, & Jesseman, R.J. The impact of substance use disorders on hospital use. Ottawa, ON: Canadian Centre on Substance Abuse, 2014.
4. Wood E, Kerr, T., Spittal, P. M., Tyndall, M. W., O Shaughnessy, M. V., & Schechter, M. T. . The health care and fiscal costs of the illicit drug use epidemic: The impact of conventional drug control strategies, and the potential of a comprehensive approach. *British Columbia Medical Journal*. 2003;45(3):128-34.
5. Zhang T. Costs of Crime in Canada. Department of Justice Canada, 2008.
6. Public Health Agency of Canada (PHAC). HIV/AIDS Among People Who Inject Drugs in Canada. Government of Canada, 2010.
7. Standing Committee on Social Affairs. Out of the Shadows At Last: Transforming mental health, mental illness and addiction services in Canada. The Senate of Canada, 2006.
8. Wood E, Samet JH, Volkow ND. Physician education in addiction medicine. *JAMA*. 2013;310(16):1673-4.
9. DeBeck K, Wood E, Montaner J, Kerr T. Canada's 2003 renewed drug strategy--an evidence-based review. *HIV AIDS Policy Law Rev*. 2006;11(2-3):1, 5-12.
10. Debeck K, Wood E, Montaner J, Kerr T. Canada's new federal 'National Anti-Drug Strategy': an informal audit of reported funding allocation. *Int J Drug Policy*. 2009;20(2):188-91.
11. Wild TC, Wolfe, J., Wang, J., & Ohinmaa, A. Gap Analysis of Public Mental Health and Addictions Programs (GAP-MAP) Final Report. Government of Alberta, 2014.
12. Bijl RV, de Graaf R, Hiripi E, Kessler RC, Kohn R, Offord DR, et al. The prevalence of treated and untreated mental disorders in five countries. *Health Aff (Millwood)*. 2003;22(3):122-33.
13. National Treatment Strategy Working Group. A systems approach to substance use in Canada: Recommendations for a National Treatment Strategy. Ottawa: National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada, 2008.
14. Public Health Agency of Canada. I-Track: Enhanced Surveillance of HIV, Hepatitis C and associated risk behaviours among people who inject drugs in Canada. Phase 2 Report. Centre for Communicable Diseases and Infection Control, Infectious Disease Prevention and Control Branch, Ottawa: Public Health Agency of Canada, 2013.
15. Ahern J, Stuber J, Galea S. Stigma, discrimination and the health of illicit drug users. *Drug Alcohol Depend*. 2007;88(2-3):188-96.
16. Ti L, Buxton J, Wood E, Zhang R, Montaner J, Kerr T. Difficulty accessing crack pipes and crack pipe sharing among people who use drugs in Vancouver, Canada. *Subst Abuse Treat Prev Policy*. 2011;6:34.
17. Bayoumi A, Strike, C., Brandeau, M., Degani, N., Fischer, B., Glazier, R., Hopkins, S., Leonard, L., Luce, J., Millson, P., O'Campo, P., Shepherd, S., Smith, C., & Zaric, G. . Report of the Toronto and Ottawa Supervised Consumption Assessment Study, 2012. Toronto, ON. : 2012.

18. Gibson EK, Exner H, Stone R, Lindquist J, Cowen L, Roth EA. A mixed methods approach to delineating and understanding injection practices among clientele of a Victoria, British Columbia needle exchange program. *Drug Alcohol Rev.* 2011;30(4):360-5.
19. Grant S, Tan, T., Crabtree, A., Mercer, G., Horan, R., & Buxton, J. Barriers to safer injection practices faced by people who use injection drugs, in Vancouver and Abbotsford, B.C. *UBC Medical Journal.* 2013;4(2):10-3.
20. Ivsins A, Chow C, Macdonald S, Stockwell T, Vallance K, Marsh DC, et al. An examination of injection drug use trends in Victoria and Vancouver, BC after the closure of Victoria's only fixed-site needle and syringe programme. *Int J Drug Policy.* 2012;23(4):338-40.
21. Lang K, Neil J, Wright J, Dell CA, Berenbaum S, El-Aneed A. Qualitative investigation of barriers to accessing care by people who inject drugs in Saskatoon, Canada: perspectives of service providers. *Subst Abuse Treat Prev Policy.* 2013;8:35.
22. Leece PN, Hopkins S, Marshall C, Orkin A, Gassanov MA, Shahin RM. Development and implementation of an opioid overdose prevention and response program in Toronto, Ontario. *Can J Public Health.* 2013;104(3):e200-4.
23. Roy E, Arruda N. Exploration of a crack use setting and its impact on drug users' risky drug use and sexual behaviors: The case of Piaules in a Montreal neighborhood. *Subst Use Misuse.* 2015.
24. Roy E, Leclerc P, Morissette C, Arruda N, Blanchette C, Blouin K, et al. Prevalence and temporal trends of crack injection among injection drug users in eastern central Canada. *Drug Alcohol Depend.* 2013;133(1):275-8.
25. Meadows G, Harvey C, Fossey E, Burgess P. Assessing perceived need for mental health care in a community survey: development of the Perceived Need for Care Questionnaire (PNCQ). *Soc Psychiatry Psychiatr Epidemiol.* 2000;35(9):427-35.
26. Berman AH, Bergman H, Palmstierna T, Schlyter F. Evaluation of the Drug Use Disorders Identification Test (DUDIT) in criminal justice and detoxification settings and in a Swedish population sample. *Eur Addict Res.* 2005;11(1):22-31.
27. Bush K, Kivlahan DR, McDonell MB, Fihn SD, Bradley KA. The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). Alcohol Use Disorders Identification Test. *Arch Intern Med.* 1998;158(16):1789-95.
28. Hwang SW, Wilkins R, Tjepkema M, O'Campo PJ, Dunn JR. Mortality among residents of shelters, rooming houses, and hotels in Canada: 11 year follow-up study. *BMJ.* 2009;339:b4036.
29. Palepu A, Gadermann A, Hubley AM, Farrell S, Gogosis E, Aubry T, et al. Substance use and access to health care and addiction treatment among homeless and vulnerably housed persons in three Canadian cities. *PLoS One.* 2013;8(10):e75133.
30. Patterson M, Somers JM, Moniruzzaman A. Prolonged and persistent homelessness: multivariable analyses in a cohort experiencing current homelessness and mental illness in Vancouver, British Columbia. *Mental Health and Substance Use.* 2012;5(2):85-101.
31. Brache K, Stockwell, T., Macdonald, S. Functions and harms associated with simultaneous polysubstance use involving alcohol and cocaine. *Journal of Substance Use.* 2012;17(5-6):399-416.
32. Midanik LT, Tam TW, Weisner C. Concurrent and simultaneous drug and alcohol use: results of the 2000 National Alcohol Survey. *Drug Alcohol Depend.* 2007;90(1):72-80.
33. Cherpitel CJ. Substance use, injury, and risk-taking dispositions in the general population. *Alcohol Clin Exp Res.* 1999;23(1):121-6.

34. Coffin PO, Galea S, Ahern J, Leon AC, Vlahov D, Tardiff K. Opiates, cocaine and alcohol combinations in accidental drug overdose deaths in New York City, 1990-98. *Addiction*. 2003;98(6):739-47.
35. Barrett SP, Darredeau C, Pihl RO. Patterns of simultaneous polysubstance use in drug using university students. *Hum Psychopharmacol*. 2006;21(4):255-63.
36. Latkin CA, Knowlton AR, Sherman S. Routes of drug administration, differential affiliation, and lifestyle stability among cocaine and opiate users: implications to HIV prevention. *J Subst Abuse*. 2001;13(1-2):89-102.
37. Begin P, Weekes J, & Thomas G. The Canadian Addiction Survey: Substance use and misuse among the Canadian population. Canadian Centre on Substance Abuse, 2006.
38. Laupland KB, Embil JM. Reducing the adverse impact of injection drug use in Canada. *Can J Infect Dis Med Microbiol*. 2012;23(3):106-7.
39. Health Canada. Canadian Alcohol and Drug Use Monitoring Survey: Summary of Results for 2011. Government of Canada, 2012 June 21.
40. Kalant H. What neurobiology cannot tell us about addiction. *Addiction*. 2010;105(5):780-9.
41. Rhodes T. The 'risk environment': a framework for understanding and reducing drug-related harm. *International Journal of Drug Policy*. 2002;13(2):85-94.
42. Rhodes T. Risk environments and drug harms: a social science for harm reduction approach. *Int J Drug Policy*. 2009;20(3):193-201.
43. Vlahov D, Robertson AM, Strathdee SA. Prevention of HIV infection among injection drug users in resource-limited settings. *Clin Infect Dis*. 2010;50 Suppl 3:S114-21.
44. DeBeck K, Kerr T, Li K, Fischer B, Buxton J, Montaner J, et al. Smoking of crack cocaine as a risk factor for HIV infection among people who use injection drugs. *CMAJ*. 2009;181(9):585-9.
45. Fischer B, Powis J, Firestone Cruz M, Rudzinski K, Rehm J. Hepatitis C virus transmission among oral crack users: viral detection on crack paraphernalia. *Eur J Gastroenterol Hepatol*. 2008;20(1):29-32.
46. Macias J, Palacios RB, Claro E, Vargas J, Vergara S, Mira JA, et al. High prevalence of hepatitis C virus infection among noninjecting drug users: association with sharing the inhalation implements of crack. *Liver Int*. 2008;28(6):781-6.
47. Small W, Rhodes T, Wood E, Kerr T. Public injection settings in Vancouver: physical environment, social context and risk. *Int J Drug Policy*. 2007;18(1):27-36.
48. DeBeck K, Small W, Wood E, Li K, Montaner J, Kerr T. Public injecting among a cohort of injecting drug users in Vancouver, Canada. *J Epidemiol Community Health*. 2009;63(1):81-6.
49. Shannon K, Ishida T, Morgan R, Bear A, Oleson M, Kerr T, et al. Potential community and public health impacts of medically supervised safer smoking facilities for crack cocaine users. *Harm Reduct J*. 2006;3:1.
50. Ti L, Hayashi K, Kaplan K, Suwannawong P, Wood E, Kerr T. Contextual factors associated with rushed injecting among people who inject drugs in Thailand. *Prev Sci*. 2015;16(2):313-20.
51. Cedar Project Partnership, Pearce ME, Christian WM, Patterson K, Norris K, Moniruzzaman A, et al. The Cedar Project: historical trauma, sexual abuse and HIV risk among young Aboriginal people who use injection and non-injection drugs in two Canadian cities. *Soc Sci Med*. 2008;66(11):2185-94.

52. Kerr T, Fairbairn N, Tyndall M, Marsh D, Li K, Montaner J, et al. Predictors of non-fatal overdose among a cohort of polysubstance-using injection drug users. *Drug Alcohol Depend.* 2007;87(1):39-45.
53. Craib KJ, Spittal PM, Wood E, Laliberte N, Hogg RS, Li K, et al. Risk factors for elevated HIV incidence among Aboriginal injection drug users in Vancouver. *CMAJ.* 2003;168(1):19-24.
54. Miller CL, Kerr T, Frankish JC, Spittal PM, Li K, Schechter MT, et al. Binge drug use independently predicts HIV seroconversion among injection drug users: implications for public health strategies. *Subst Use Misuse.* 2006;41(2):199-210.
55. Hagan H, Campbell JV, Thiede H, Strathdee SA, Ouellet L, Latka M, et al. Injecting alone among young adult IDUs in five US cities: evidence of low rates of injection risk behavior. *Drug Alcohol Depend.* 2007;91 Suppl 1:S48-55.
56. Strike C, Leonard, L., Millson, M., Anstice, S., Berkeley, N., & Medd, E. . Ontario Needle Exchange Programs: Best Practice Recommendations. Toronto, ON.: Ontario Needle Exchange Network, 2006.
57. O'Connell JM, Kerr T, Li K, Tyndall MW, Hogg RS, Montaner JS, et al. Requiring help injecting independently predicts incident HIV infection among injection drug users. *J Acquir Immune Defic Syndr.* 2005;40(1):83-8.
58. Lloyd-Smith E, Wood E, Zhang R, Tyndall MW, Montaner JS, Kerr T. Risk factors for developing a cutaneous injection-related infection among injection drug users: a cohort study. *BMC Public Health.* 2008;8:405.
59. Hoda Z, Kerr T, Li K, Montaner JS, Wood E. Prevalence and correlates of jugular injections among injection drug users. *Drug Alcohol Rev.* 2008;27(4):442-6.
60. Canadian Mental Health Association. Mental Illness and Substance Use Disorders: Key Issues. 2005.
61. O'Campo P, Kirst M, Schaefer-McDaniel N, Firestone M, Scott A, McShane K. Community-based services for homeless adults experiencing concurrent mental health and substance use disorders: a realist approach to synthesizing evidence. *J Urban Health.* 2009;86(6):965-89.
62. Bradley KA, Bush KR, Epler AJ, Dobie DJ, Davis TM, Sporleder JL, et al. Two brief alcohol-screening tests From the Alcohol Use Disorders Identification Test (AUDIT): validation in a female Veterans Affairs patient population. *Arch Intern Med.* 2003;163(7):821-9.
63. Carter CM, MacPherson, D. Getting to Tomorrow: A report on Canadian drug policy. Vancouver, BC: Canadian Drug Policy Coalition, 2013.
64. Meinbresse M, Brinkley-Rubinstein L, Grassetto A, Benson J, Hamilton R, Malott M, et al. Exploring the experiences of violence among individuals who are homeless using a consumer-led approach. *Violence Vict.* 2014;29(1):122-36.
65. Lloyd-Smith E, Kerr T, Hogg RS, Li K, Montaner JS, Wood E. Prevalence and correlates of abscesses among a cohort of injection drug users. *Harm Reduct J.* 2005;2:24.
66. Fischer B, Rehm J, Patra J, Kalousek K, Haydon E, Tyndall M, et al. Crack across Canada: Comparing crack users and crack non-users in a Canadian multi-city cohort of illicit opioid users. *Addiction.* 2006;101(12):1760-70.
67. Wheeler E, Davidson PJ, Jones TS, Irwin KS. Community-Based Opioid Overdose Prevention Programs Providing Naloxone — United States, 2010. *MMWR Morb Mortal Wkly Rep.* 2012 Feb 17;61(6):101-5.
68. Doe-Simkins M, Walley AY, Epstein A, Moyer P. Saved by the Nose: Bystander-Administered Intranasal Naloxone Hydrochloride for Opioid Overdose. *Am J Public Health.* 2009 May;99(5):788-91.

69. Dong KA, Taylor, M., & Willa-Roel, C. . Community-based naloxone: a Canadian pilot program. *Can J Addiction Med*. 2012;3:4-9.
70. Wood RA, Wood E, Lai C, Tyndall MW, Montaner JSG, Kerr T. Nurse-delivered safer injection education among a cohort of injection drug users: Evidence from the evaluation of Vancouver's supervised injection facility. *International Journal of Drug Policy*. 2008 Jun 1;19(3):183-8.
71. European Monitoring Centre for Drugs and Drug Addiction. Drug consumption rooms: An overview of provision and evidence. Lisbon, Portugal: European Monitoring Centre for Drugs and Drug Addiction; 2015 Apr.
72. Kerr T, Small W, Buchner C, Zhang R, Li K, Montaner J, et al. Syringe sharing and HIV incidence among injection drug users and increased access to sterile syringes. *Am J Public Health*. 2010;100(8):1449-53.
73. Hunter C, Strike C, Barnaby L, Busch A, Marshall C, Shepherd S, et al. Reducing widespread pipe sharing and risky sex among crystal methamphetamine smokers in Toronto: do safer smoking kits have a potential role to play? *Harm Reduct J*. 2012;9:9.
74. Hyshka E, Strathdee S, Wood E, Kerr T. Needle exchange and the HIV epidemic in Vancouver: Lessons learned from 15 years of research. *International Journal of Drug Policy*. 2012 Jul;23(4):261-70.
75. Toronto Co. Harm Reduction Supplies Locations Toronto, ON.2015 [August 28, 2015]. Available from:
<http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=a4bb62ca69902410VgnVCM10000071d60f89RCRD>.
76. Chandler R. Best Practices for British Columbia's Harm Reduction Supply Distribution Program. BC Harm Reduction Strategies and Services, 2008.
77. Sheridan J, Lovell S, Turnbull P, Parsons J, Stimson G, Strang J. Pharmacy-based needle exchange (PBNX) schemes in south east England: a survey of service providers. *Addiction*. 2000;95(10):1551-60.
78. Islam M, Wodak A, Conigrave KM. The effectiveness and safety of syringe vending machines as a component of needle syringe programmes in community settings. *Int J Drug Policy*. 2008;19(6):436-41.
79. Obadia Y, Feroni I, Perrin V, Vlahov D, Moatti JP. Syringe vending machines for injection drug users: an experiment in Marseille, France. *Am J Public Health*. 1999;89(12):1852-4.
80. Edmonton Committee to End Homelessness. A Place to Call Home: Edmonton's 10 Year Plan to End Homelessness. Edmonton, AB.: 2009.
81. Wood E, Tyndall MW, Li K, Lloyd-Smith E, Small W, Montaner JS, et al. Do supervised injecting facilities attract higher-risk injection drug users? *Am J Prev Med*. 2005;29(2):126-30.
82. Wood E, Tyndall MW, Montaner JS, Kerr T. Summary of findings from the evaluation of a pilot medically supervised safer injecting facility. *CMAJ*. 2006;175(11):1399-404.
83. Kerr T, Tyndall M, Li K, Montaner J, Wood E. Safer injection facility use and syringe sharing in injection drug users. *Lancet*. 2005;366(9482):316-8.
84. Wood E, Tyndall MW, Zhang R, Montaner JS, Kerr T. Rate of detoxification service use and its impact among a cohort of supervised injecting facility users. *Addiction*. 2007;102(6):916-9.
85. Tyndall M. W. KT, Zhang R., King E., Montaner J. G., Wood E. Attendance, drug use patterns, and referrals made from North America's first supervised injection facility. *Drug Alcohol Depend* 2006;83:193-8.

86. Wood E, Tyndall MW, Qui Z, Zhang R, Montaner JS, Kerr T. Service uptake and characteristics of injection drug users utilizing North America's first medically supervised safer injecting facility. *Am J Public Health*. 2006;96(5):770-3.
87. DeBeck K. KT, Bird L., Zhang R., Marsh D., Tyndall M. et al. Injection drug use cessation and use of North America's first medically supervised safer injecting facility. *Drug Alcohol Depend*. 2011;113:172-6.
88. Marshall BD, Milloy MJ, Wood E, Montaner JS, Kerr T. Reduction in overdose mortality after the opening of North America's first medically supervised safer injecting facility: a retrospective population-based study. *Lancet*. 2011;377(9775):1429-37.
89. Andresen MA, Boyd N. A cost-benefit and cost-effectiveness analysis of Vancouver's supervised injection facility. *Int J Drug Policy*. 2010;21(1):70-6.
90. D. PS. How many HIV infections are prevented by Vancouver Canada's supervised injection facility? *Int J Drug Policy* 2011;22:179-83.
91. Bayoumi AM, Zaric GS. The cost-effectiveness of Vancouver's supervised injection facility. *CMAJ*. 2008;179(11):1143-51.
92. The Canadian Press. Denis Coderre makes another push for Montreal safe injection sites. *CBC News*. 2015 June 4 2015.
93. Tumilty R. Alberta to expand access to naloxone to deal with spike in fatal fentanyl overdoses. *Metro News*. 2015 Tues Mar 31 2015.
94. Strike C, Gohil, H., and Watson, T. M. Safer Crack Cocaine Smoking Equipment Distribution: Comprehensive Best Practice Guidelines. Canadian AIDS Treatment Information Exchange, 2014.
95. Backe H, Bailey K, Heywood D, Marshall S, Plourde P. Safer crack use kit distribution in the Winnipeg health region. Population and public health program, Winnipeg Regional Health Authority. 2012.
96. Ivsins A, Roth E, Nakamura N, Krajden M, Fischer B. Uptake, benefits of and barriers to safer crack use kit (SCUK) distribution programmes in Victoria, Canada--a qualitative exploration. *Int J Drug Policy*. 2011;22(4):292-300.
97. CBC News. Calgary addicts no longer given crack pipes [Internet]. [cited 2015 Nov 26]. August 19, 2011. Available from: <http://www.cbc.ca/news/canada/calgary/calgary-addicts-no-longer-given-crack-pipes-1.1064849>.
98. Canadian HIV/AIDS Legal Network. Distributing safer crack use kits in Canada. September 2008. Available from: http://www.aidslaw.ca/site/wp-content/uploads/2013/04/Crack-kitsQA_Sep08-ENG.pdf.
99. British Columbia Harm Reduction Program. Toward the Heart: A project of the provincial harm reduction program 2015. Available from: <http://towardtheheart.com/supplies>.
100. Ontario Harm Reduction Distribution Program. Safer Smoking Products 2015. Available from: <http://www.ohrdp.ca/product-items/stems/>.
101. Edmonton Committee to End Homelessness. A Place to Call Home: Edmonton's 10 Year Plan to End Homelessness. Edmonton, AB.: 2009.
102. Homeward Trust Edmonton. Alberta Point-in-Time Homeless Count: Edmonton Preliminary Report. Edmonton, AB.: 2014.

7. Appendix

EDMONTON DRUG USE AND HEALTH SURVEY Version 1.3

Interview date: ____/____/____
 DD MM YEAR

Interview location

- ☐ Streetworks
- ☐ Boyle McCauley Health Centre
- ☐ Bissell Centre
- ☐ Other

Interviewer initials: _____

Interview start time: _____ AM or PM (*please circle*)

Is the information collected in the interview significantly distorted by the participant's misrepresentation?

- ☐ No
- ☐ Yes
- ☐ Not sure

Is the information collected in the interview significantly distorted by the participant's inability to understand?

- ☐ No
- ☐ Yes
- ☐ Not sure

Thank you for coming in today and contributing to this study. As we go through the interview together, please keep in mind that there are no wrong answers. It's very important that you answer as honestly as you can. We rely on your information to help create positive change for people who use drugs.

We realize some of these questions are sensitive. If you do not want to answer a question, just let me know and we will move on. It is better for you to refuse to answer a question than to give a false answer. False answers affect the quality of our data and limit our ability to advocate for positive change.

***We take your privacy very seriously. All the information that you provide will only be kept between you and me. We never report any individual information.
If there are any questions you don't understand, please stop me and ask for clarification. The interview takes about an hour. If you need a break, let me know and we can stop for a short rest before we finish the interview.***

1. Have you ever participated in the Edmonton Drug Use and Health Survey before?

- ☐ No (if 'no', skip to Q.2)
- ☐ Yes

If the participant answers yes, end the interview here.

You've told me that you have already participated in this study. I am sorry but I cannot include you in this survey again. Thank you for taking the time to come in today.

In this first section, I'm going to ask you some questions about your background, your drug use, and your health. Some of these questions are very personal. Please remember that the answers you give are totally confidential. We are asking everyone who participates the same questions.

PART 1. SOCIO-DEMOGRAPHICS

2. How old are you? ____ years

If the participant is less than 15 years of age, end the interview here.

You've told me that you are under 15 years of age and this survey can include only those 15 years of age and older. I am sorry but I cannot include you in this survey today. Thank you for taking the time to come in today.

3. What is your gender?

- ☐ Male
- ☐ Female
- ☐ Transgendered
- ☐ Other (specify): _____
- ☐ Don't know
- ☐ Refused

4. What ethnic group or family background do you most closely identify with? (Do NOT read out list.)

- ☐ Caucasian/White
- ☐ South Asian (e.g. Indian, Pakistani)
- ☐ Chinese
- ☐ Other Asian
- ☐ Latin American
- ☐ Middle Eastern
- ☐ Black African
- ☐ Black Caribbean

- ☐ First Nations/Aboriginal
- ☐ Inuit
- ☐ Metis
- ☐ Other (Specify): _____
- ☐ Don't know
- ☐ Refused

a. [Do Not Read] The participant self-identifies as being of First Nations, Aboriginal, Inuit or Metis ancestry:

- ☐ Yes
- ☐ No (Go to **Q.5**)

Next I am going to ask you about residential school. We know that talking about residential school may be sensitive and potentially upsetting for some people. I just want to remind you that anything you say to us is confidential and you have the right to refuse to answer any questions.

b. Did anyone in your family ever attend a residential school?

- ☐ Yes
- ☐ No (go to **Q.5**)
- ☐ Don't know
- ☐ Refused

i. [IF YES] Who? [Do not read list. Check ALL that apply]

- ☐ Mother
- ☐ Father
- ☐ Sibling(s)
- ☐ Children
- ☐ Grandmother(s)
- ☐ Grandfather(s)
- ☐ Aunt(s)
- ☐ Uncle(s)
- ☐ Cousin(s)
- ☐ Other: _____

c. Did you ever attend a residential school?

- ☐ Yes
- ☐ No (go to **Q.5**)
- ☐ Don't know
- ☐ Refused

i. [IF YES] For how many years approximately? _____

5. Do you live in Edmonton right now?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

6. How long have you lived in Edmonton? _____ (If 'current age', skip to **Q.7**)

- ☐ Don't know
- ☐ Refused

a. Where did you live just before you came to Edmonton? _____

- ☐ Don't know
- ☐ Refused

7. What area of the city do you spend most of your day in? (Read out list. Check ONE only.)

- ☐ Downtown or Central (generally around the Boyle Street Community Services, the Herb/Hope, Bissell Centre, Mustard Seed)
- ☐ 118 Ave area
- ☐ South Central (Whyte Ave area, etc.)
- ☐ North-East (Abbotsfield, etc.)
- ☐ North-West (Stony Plain Road, Jasper Place, etc.)
- ☐ West (Callingwood, etc.)
- ☐ South-East (Mill Woods, etc.)
- ☐ South (Calgary Trail or Gateway Boulevard south of Whyte Ave, etc.)
- ☐ South-West (Terwillegar, Riverbend, etc.)
- ☐ Don't Know
- ☐ Refused

8. In the past 6 months, what types of places have you slept in? (Read out the list and check ALL that apply).

- ☐ Own apartment/house
- ☐ Hotel/furnished room/boarding house
- ☐ Transition housing
- ☐ Shelter/hostel
- ☐ Friend's place
- ☐ Family member's place
- ☐ Camps (squatting)
- ☐ Working out of town (rigs/work camp)
- ☐ Reserve or settlement
- ☐ Couch surfing
- ☐ Detox
- ☐ Jail/prison
- ☐ Hospital
- ☐ Street (sleeping rough)
- ☐ Don't sleep (walk all night)
- ☐ Don't know

- ☐ Refused

9. How would you describe your current housing situation?

- ☐ Very unstable
- ☐ A little unstable
- ☐ Neither unstable nor stable
- ☐ A little stable
- ☐ Very stable

- ☐ Don't know
- ☐ Refused

10. How satisfied are you with your current housing situation?

- ☐ Very unsatisfied
- ☐ A little unsatisfied
- ☐ Neutral
- ☐ A little satisfied
- ☐ Very satisfied

- ☐ Don't know
- ☐ Refused

PART 2. DRUG USE, RISK BEHAVIOURS, AND EXPERIENCE OF HARM

11. How often do you have a drink containing alcohol? One drink means 12 oz beer, 5 ounces of wine, or 1.5 oz of hard liquor.

- ☐ Never (**Go to Q.15**)
- ☐ Monthly or less
- ☐ 2-4 times a month
- ☐ 2-3 times a week
- ☐ 4 or more times a week

- ☐ Don't know
- ☐ Refused

12. How many standard drinks containing alcohol do you have on a typical day?

- ☐ 1 or 2
- ☐ 3 or 4
- ☐ 5 or 6
- ☐ 7 to 9
- ☐ 10 or more

- ☐ Don't know
- ☐ Refused

13. How often do you have six or more drinks on one occasion?

- ☐ Never
- ☐ Less than monthly
- ☐ Monthly
- ☐ Weekly
- ☐ Daily or almost daily

- ☐ Don't know
- ☐ Refused

14. In the *last 6 months*, what was the most you drank in one day?

_____ (# of drinks)

- ☐ Don't know
- ☐ Refused

15. In the *last 6 months*, did you drink cooking wine/rubbing alcohol/mouthwash/or cologne?

- ☐ Yes
- ☐ No (Go to **Q.16**)

- ☐ Don't know
- ☐ Refused

a. How often?

- ☐ 4 or more times a week
- ☐ 2-3 times a week
- ☐ 2 to 4 times a month
- ☐ Once a month or less

- ☐ Don't know
- ☐ Refused

b. In the *last 6 months*, on a typical day when you drank [cooking wine/rubbing alcohol/mouthwash], how much did you drink?

_____ (# of drinks per day)

- ☐ Don't know
- ☐ Refused

c. In the *last 6 months*, what was the most [cooking wine/rubbing alcohol/mouthwash] you drank in one day?

_____ (# of drinks)

- ☐ Don't know
- ☐ Refused

d. In the *last week*, how many days did you drink [cooking wine/rubbing alcohol/mouthwash]?

_____ (# of days)

- ☐ Don't know
- ☐ Refused

e. On average, on the days you drank [cooking wine/rubbing alcohol/mouthwash], how many drinks per day did you have during the *last week*?

_____ (# of drinks per day)

- ☐ Don't know
- ☐ Refused

f. In the *last week*, what was the most [cooking wine/rubbing alcohol/mouthwash] you drank in one day?

_____ (# of drinks per day)

- ☐ Don't know
- ☐ Refused

16. Have you ever become physically violent when you were under the influence of alcohol?

- ☐ No
- ☐ Yes, but not in the last year
- ☐ Yes, during the last year

- ☐ Don't know
- ☐ Refused

17. Have you ever suffered a health problem because of your drinking?

- ☐ No (Go to **Q.18**)
- ☐ Yes, but not in the last year
- ☐ Yes, during the last year

- ☐ Don't know
- ☐ Refused

a. If yes, what was the health problem? _____

- ☐ Don't know
- ☐ Refused

18. Have you ever had legal difficulties—for example, been prosecuted, been arrested by the police or gotten a big fine—as a result of drinking?

- ☐ No
- ☐ Yes, but not in the last year
- ☐ Yes, during the last year

- ☐ Don't know
- ☐ Refused

The next few questions are about any drugs you might use. This includes illicit drugs and prescription drugs that you take without a prescription from a doctor or for nonmedical reasons.

19. How often do you use drugs other than alcohol?

- ☐ Never (**end interview here, if participant reports never using drugs**)
- ☐ Once a month or less often
- ☐ 2 to 4 times a month
- ☐ 2 to 3 times a week

- ☐ 4 times a week or more often
- ☐ Don't know
- ☐ Refused

20. Do you use more than one type of drug on the same occasion?

- ☐ Never
- ☐ Once a month or less often
- ☐ 2 to 4 times a month
- ☐ 2 to 3 times a week
- ☐ 4 times a week or more often
- ☐ Don't know
- ☐ Refused

21. How many times do you take drugs on a typical day when you use drugs?

- ☐ 0
- ☐ 1-2 times
- ☐ 3-4 times
- ☐ 5-6 times
- ☐ 7 or more
- ☐ Don't know
- ☐ Refused

22. How often are you influenced heavily by drugs? (e.g. how often do you get high on drugs other than alcohol)

- ☐ Never
- ☐ Less often than once a month
- ☐ Every month
- ☐ Every week
- ☐ Daily or almost every day
- ☐ Don't know
- ☐ Refused

23. Over the past year, have you felt that your longing for drugs was so strong that you could not resist it?

- ☐ Never
- ☐ Less often than once a month
- ☐ Every month
- ☐ Every week
- ☐ Daily or almost every day
- ☐ Don't know
- ☐ Refused

24. Has it happened, over the past year, that you have not been able to stop taking drugs once you started?

- ☐ Never
- ☐ Less often than once a month
- ☐ Every month

- ☐ Every week
- ☐ Daily or almost every day

- ☐ Don't know
- ☐ Refused

25. How often over the past year have you taken drugs and then neglected to do something you should have done?

- ☐ Never
- ☐ Less often than once a month
- ☐ Every month
- ☐ Every week
- ☐ Daily or almost every day

- ☐ Don't know
- ☐ Refused

26. How often over the past year have you needed to take a drug the morning after heavy drug use the day before?

- ☐ Never
- ☐ Less often than once a month
- ☐ Every month
- ☐ Every week
- ☐ Daily or almost every day

- ☐ Don't know
- ☐ Refused

27. How often over the past year have you had guilt feelings or a bad conscience because you used drugs?

- ☐ Never
- ☐ Less often than once a month
- ☐ Every month
- ☐ Every week
- ☐ Daily or almost every day

- ☐ Don't know
- ☐ Refused

28. Have you or anyone else been hurt (mentally or physically) because you used drugs?

- ☐ No
- ☐ Yes, but not over the past year
- ☐ Yes, over the past year

- ☐ Don't know
- ☐ Refused

29. Has a relative or a friend, a doctor or a nurse, or anyone else, been worried about your drug use or said to you that you should stop using drugs?

- ☐ No
- ☐ Yes, but not over the past year
- ☐ Yes, over the past year

- ☐ Don't know
- ☐ Refused

Now I am going to ask you about any drugs that you smoke, snort or ingest (swallow) ONLY. In other words, I am going to ask about any drugs you use without a needle.

30. Have you used any non-injection drugs in the *last 6 months*?

- ☐ Yes
- ☐ No (Go to **Q. 36**)
- ☐ Don't know
- ☐ Refused

a. In the last 6 months (that is, since _____), when you were using, which of the following non-injecting drugs did you use? For pharmaceutical drugs, I mean prescription drugs that you take without a prescription from a doctor or for non-medical reasons.

Used in the past 6 months	Non-injection drug
<input type="checkbox"/>	Cigarettes
<input type="checkbox"/>	Heroin (sniffed or snorted)
<input type="checkbox"/>	Heroin (smoked)
<input type="checkbox"/>	Crack cocaine
<input type="checkbox"/>	Cocaine (sniffed or snorted)
<input type="checkbox"/>	Crystal meth (smoked) (pint, speed,)
<input type="checkbox"/>	Crystal meth (snorted) (pint, speed,)
<input type="checkbox"/>	Tranquilizers (Sedatives, Xanax, Ambien, sleeping pills, benzos, etc.)
<input type="checkbox"/>	Valium
<input type="checkbox"/>	Talwin
<input type="checkbox"/>	Ritalin
<input type="checkbox"/>	Wellbutrin
<input type="checkbox"/>	Barbiturates (barbital)
<input type="checkbox"/>	Dilaudid (dilly's)
<input type="checkbox"/>	Morphine (kadians, greys, pinks)
<input type="checkbox"/>	Hydromorphone (hydros)
<input type="checkbox"/>	Codeine
<input type="checkbox"/>	Street methadone
<input type="checkbox"/>	Percocet (Oxycodone + Acetaminophen)
<input type="checkbox"/>	Demerol

<input type="checkbox"/>	Fentanyl
<input type="checkbox"/>	Hydrocodone (Vicodin)
<input type="checkbox"/>	Marijuana, hash
<input type="checkbox"/>	Glue (sniffed)
<input type="checkbox"/>	Poppers
<input type="checkbox"/>	Nitrous oxide
<input type="checkbox"/>	LSD
<input type="checkbox"/>	Ecstasy
<input type="checkbox"/>	Mushrooms
<input type="checkbox"/>	Mescaline
<input type="checkbox"/>	PCP/angel dust
<input type="checkbox"/>	Oxycontin
<input type="checkbox"/>	OxyNEO
<input type="checkbox"/>	Oxycodone (sometimes also referred to as Percs)
<input type="checkbox"/>	Ketamine (Special K)
<input type="checkbox"/>	GHB
<input type="checkbox"/>	Other:
<input type="checkbox"/>	Other:
<input type="checkbox"/>	Other:

- ☐ Don't know
- ☐ Refused

b. In the last six months, which non-injection drug did you use most frequently?

- _____.
- ☐ Don't know
 - ☐ Refused

c. How often did you use that drug?

- ☐ Daily
- ☐ A few times a week
- ☐ Once a week
- ☐ A few times a month
- ☐ Once a month
- ☐ Don't know
- ☐ Refused

31. In the last 6 months, did you go on runs or binges (that is, you used non-injection drugs more than usual)?

- ☐ Yes
- ☐ No (go to **Q.32**)

- ☐ Don't know
- ☐ Refused

a. If yes, how many times did you binge?

_____/month or _____/6months

- ☐ Don't know
- ☐ Refused

b. On average, how long do these binges last?

- ☐ <1 day
- ☐ 1 to 2 days
- ☐ 3 to 5 days
- ☐ 5+ days

- ☐ Don't know
- ☐ Refused

c. What non-injection drugs are you usually using when you binge?

- _____.
- ☐ Don't know
 - ☐ Refused

d. Are you able to keep track of your own pipe(s)/straw during the binges (if using this equipment)?

- ☐ Yes
- ☐ No (go to Q.32)
- ☐ Sometimes

- ☐ Don't know
- ☐ Refused

e. If yes, how? (check all that apply)

- ☐ I was alone
- ☐ I kept it in a safe place
- ☐ I marked it
- ☐ I used it only once
- ☐ I broke it
- ☐ I put it in a sharps container
- ☐ I kept it on myself
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

If no crack cocaine use in last six months, skip to Q.36

32. In the *last 6 months*, have you borrowed, lent, or shared a crack pipe/mouthpiece?

- ☐ Yes
- ☐ No

- ☐ Don't know

- ☐ Refused

a. Where do you get your crack pipes? (Read list. Check all that apply)

- ☐ Street (new)
- ☐ Street (used)
- ☐ Corner store
- ☐ Friend
- ☐ Homemade
- ☐ Other: _____
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

b. Where do you get your other crack-smoking supplies (screens, push stick, mouthpieces, lip balm, etc.)? (Read list. Check all that apply)

- ☐ Street (new)
- ☐ Street (used)
- ☐ Streetworks
- ☐ Corner store
- ☐ Friend
- ☐ Homemade
- ☐ I don't need anything else
- ☐ Other: _____
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

c. Do you ever find it hard to get new pipes when you need them?

- ☐ Yes
- ☐ No (Go to E)
- ☐ Sometimes

- ☐ Don't know
- ☐ Refused

d. If yes or sometimes, why do you find it hard to get new (unused) pipes? (Do not read. Check all that apply).

- ☐ Store sold out
- ☐ Store no longer selling
- ☐ Store closed
- ☐ Can not afford to purchase/no money
- ☐ Do not know where to find
- ☐ Not available at Streetworks
- ☐ Other: _____
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

e. Do you ever find it hard to get other new crack-smoking supplies (screens, push stick, mouthpieces, lip balm, etc.)?

- ☐ Yes
- ☐ No (Go to **Q.33**)
- ☐ Sometimes

- ☐ Don't know
- ☐ Refused

f. If yes or sometimes, why do you find it hard to get new (unused) crack-smoking supplies? (Do not read. Check all that apply).

- ☐ Store sold out
- ☐ Store no longer selling
- ☐ Store closed
- ☐ Can not afford to purchase/no money
- ☐ Do not know where to find
- ☐ Not available at Streetworks
- ☐ Other: _____
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

33. Would you use a program that gave out crack pipes and other safer smoking supplies for free?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

34. In the last 6 months, when you smoked crack cocaine, how often did you smoke it in public places (e.g. on the street, in the river valley, in a parking lot, NOT at your place or someone else's place)?

- ☐ Always (100% of the time)
- ☐ Usually (more than 75% of the time)
- ☐ Sometimes (26% to 74% of the time)
- ☐ Occasionally (less than 25% of the time)
- ☐ Never (skip to **Q.35**)

- ☐ Don't know
- ☐ Refused

a. Where were you when you smoked crack cocaine in public in the last 6 months? (top 2 locations)

1. _____

2. _____

- ☐ Don't know
- ☐ Refused

b. Why do you smoke crack cocaine in public? (Do not read out. Check all that apply)

- ☐ Away from where I live
- ☐ Nowhere to smoke where I buy drugs
- ☐ Homeless
- ☐ Sex trade
- ☐ Don't want person I am staying with to know I use/am still using
- ☐ Borrowing someone's pipe
- ☐ In a hurry
- ☐ Guest fees at a friend's place
- ☐ Dealing/middling/steering
- ☐ Other: _____
- ☐ Don't know
- ☐ Refused

c. In the *last 6 months*, have you had to rush when smoking crack cocaine in public?

- ☐ Yes
- ☐ No (If no, go to **Q.35**)
- ☐ Sometimes
- ☐ Don't know
- ☐ Refused

d. If yes or sometimes, how often has this happened?

- ☐ Always (100% of the time)
- ☐ Usually (more than 75% of the time)
- ☐ Sometimes (26% to 74% of the time)
- ☐ Occasionally (less than 25% of the time)
- ☐ Don't know
- ☐ Refused

35. In the *last 6 months*, have you experienced any of the following health problems from smoking crack cocaine? (*Read out list.*)

Experienced at all (check all that apply)		Experienced the most (check one only)
<input type="checkbox"/>	Burns (lips)	<input type="checkbox"/>
<input type="checkbox"/>	Mouth sores	<input type="checkbox"/>
<input type="checkbox"/>	Cut fingers/sores	<input type="checkbox"/>
<input type="checkbox"/>	Raw throat	<input type="checkbox"/>
<input type="checkbox"/>	Coughing blood	<input type="checkbox"/>
<input type="checkbox"/>	Coughing fits	<input type="checkbox"/>
<input type="checkbox"/>	Breathing problems	<input type="checkbox"/>
<input type="checkbox"/>	Irritability	<input type="checkbox"/>
<input type="checkbox"/>	Paranoia	<input type="checkbox"/>
<input type="checkbox"/>	Psychosis	<input type="checkbox"/>

<input type="checkbox"/>	Weight loss	<input type="checkbox"/>
<input type="checkbox"/>	Sleep problems	<input type="checkbox"/>
<input type="checkbox"/>	Other:	<input type="checkbox"/>
<input type="checkbox"/>	No problems	<input type="checkbox"/>

- ☐ Don't know
- ☐ Refused

Now I am going to ask you about any drugs that you inject with a needle. Injection drug use can have a big impact on health. Knowing more about your injection drug use can help us learn more about the ways in which injection drugs impact health in Edmonton.

36. Have you ever used a needle to fix, chip, or muscle even once?

- ☐ Yes (go to Q.37)
- ☐ No

- ☐ Don't know
- ☐ Refused

a. If no, how likely do you think you are to try injection drugs?

- ☐ Very unlikely
- ☐ Unlikely
- ☐ No less or more likely than others
- ☐ Likely
- ☐ Very likely
- ☐ Don't know
- ☐ Refused

If never injected drugs, skip to Q.62

37. Have you used any injection drugs in the last 6 months?

- ☐ Yes
- ☐ No (Got to Q.62)

- ☐ Don't know
- ☐ Refused

a. In the last 6 months (that is, since _____), when you were using, which of the following drugs did you inject and how often? For pharmaceutical drugs, I mean prescription drugs that you inject without a prescription from a doctor or for non-medical reasons (Read out list. Check all that apply.)

Used in the past 6 months	Injection drug
<input type="checkbox"/>	Heroin
<input type="checkbox"/>	Crack cocaine
<input type="checkbox"/>	Cocaine
<input type="checkbox"/>	Crystal meth (pint, speed,)

<input type="checkbox"/>	Speedball (heroin & cocaine)
<input type="checkbox"/>	Goofball (heroin & crystal meth)
<input type="checkbox"/>	Dilaudid (dilly's)
<input type="checkbox"/>	Morphine (kadians, greys, pinks)
<input type="checkbox"/>	Hydromorphone (hydros)
<input type="checkbox"/>	Codeine
<input type="checkbox"/>	Valium
<input type="checkbox"/>	Talwin
<input type="checkbox"/>	Ritalin
<input type="checkbox"/>	Wellbutrin
<input type="checkbox"/>	OxyNeo
<input type="checkbox"/>	OxyContin
<input type="checkbox"/>	Oxycodone
<input type="checkbox"/>	Percocet
<input type="checkbox"/>	Demerol
<input type="checkbox"/>	Methadone
<input type="checkbox"/>	Fentanyl (
<input type="checkbox"/>	Hydrocodone (Vicodin)
<input type="checkbox"/>	Steroids
<input type="checkbox"/>	Other:
<input type="checkbox"/>	Other:

- ☐ Don't know
- ☐ Refused

b. In the last 6 months, which injection drug did you use most frequently?

_____.

- ☐ Don't know
- ☐ Refused

c. How often did you use that drug?

- ☐ Daily
- ☐ A few times a week
- ☐ Once a week
- ☐ A few times a month
- ☐ Once a month
- ☐ Don't know
- ☐ Refused

38. In the last 6 months, did you go on runs or binges (that is, when you used injection drugs more than usual)?

- ☐ Yes
- ☐ No (go to **Q.39**)

- ☐ Don't know
- ☐ Refused

a. If yes, how many times did you binge?

_____/month or _____/6months

- ☐ Don't know
- ☐ Refused

b. On average, how long do these binges last?

- ☐ <1 day
- ☐ 1 to 2 days
- ☐ 3 to 5 days
- ☐ 5+ days

- ☐ Don't know
- ☐ Refused

c. What injection drug are you usually using when you binge? _____.

- ☐ Don't know
- ☐ Refused

d. Are you able to keep track of your own rig(s) during the binges?

- ☐ Yes
- ☐ No (go to **Q.39**)
- ☐ Sometimes

- ☐ Don't know
- ☐ Refused

e. (If yes or sometimes) How? (check all that apply)

- ☐ Alone
- ☐ Keep it in a safe place
- ☐ Mark it
- ☐ Use only once
- ☐ Break point
- ☐ Put in sharps container
- ☐ Keep on self
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

39. In the last 6 months, where did you get your new rigs from (check all that apply)?

- ☐ Borrowed from the street (not bought)
- ☐ Bought on the street
- ☐ Friends/partner
- ☐ Pharmacy
- ☐ [Streetworks at] Boyle Street Community Services
- ☐ [Streetworks] Van
- ☐ [Streetworks at] Boyle McCauley Health Centre

- ☐ [Streetworks at] HIV Edmonton
- ☐ [Streetworks] at George Spady
- ☐ [Streetworks] at STI Clinic
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

a. Where do you get *most* of your new rigs from?

- ☐ Borrowed from the street (not bought)
- ☐ Bought on the street
- ☐ Friends/partner
- ☐ Pharmacy
- ☐ Streetworks (at Boyle Street Community Services)
- ☐ Streetworks Van
- ☐ [Streetworks at] Boyle McCauley Health Centre
- ☐ [Streetworks at] HIV Edmonton
- ☐ [Streetworks at] George Spady
- ☐ [Streetworks at] STI Clinic
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

b. Why do you get most of your new rigs there? (check all that apply)

- ☐ It's cheap
- ☐ It's free
- ☐ It's closer to where I live
- ☐ It's closer to where I inject
- ☐ Home delivery
- ☐ There is a low chance of getting caught carrying needles
- ☐ Fewer people see me get my needles from the place or person
- ☐ It's the only place I know of that I can get new needles
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

40. In the last 6 months, what percentage of your new rigs came from a needle exchange program?

- ☐ All (100%) (**Skip to Q.41**)
- ☐ Most (more than 75%)
- ☐ Some (26% to 74%)
- ☐ Occasionally (less than 25%)
- ☐ None

a. If you didn't or don't use [Streetworks] the needle exchange, why not? [*Do NOT read out list. Check all that apply.*]

- ☐ Too far, inconvenient
- ☐ Friends give needles to me
- ☐ Get needles from somewhere else
- ☐ Don't want people seeing me at the NEP

- ☐ Don't like to participate in the NEP
- ☐ Service too complicated, too many rules
- ☐ Afraid of getting caught carrying needles
- ☐ Someone else goes there for me
- ☐ Don't know of one
- ☐ Limited or restricted hours of operation
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

41. Do you ever find it hard to get new rigs when you need them?

- ☐ Yes
- ☐ No (go to **Q.42**)
- ☐ Sometimes

- ☐ Don't know
- ☐ Refused

a. (If yes or sometimes) Why? (Do NOT read out list. Check all that apply.)

- ☐ Was out of NEP area
- ☐ No rigs to exchange
- ☐ Hard to find new needles at night
- ☐ Missed the NE van/van route
- ☐ Too high/drug sick
- ☐ Refused by drug stores or pharmacy
- ☐ NEP hours of operation
- ☐ Incarcerated
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

42. Do you ever find it hard to get new equipment (e.g. not needles and syringes but other works like ties, cookers, water, vitamin C, etc.)?

- ☐ Yes
- ☐ No (go to **Q.43**)
- ☐ Sometimes

- ☐ Don't know
- ☐ Refused

a. (If yes or sometimes) Why? (Do NOT read out list. Check all that apply.)

- ☐ Was out of NEP area
- ☐ Hard to find new works at night
- ☐ Missed the NE van/van route
- ☐ Too high/drug sick
- ☐ NEP hours of operation
- ☐ Incarcerated
- ☐ Don't know where to get it
- ☐ NEP didn't have water
- ☐ NEP didn't have filters
- ☐ NEP didn't have cookers

- ☐ NEP didn't have ties
- ☐ Other: _____
- ☐ Don't know
- ☐ Refused

43. Where do you dispose of your used needles and/or syringes most often? (Do NOT read out list. Check all that apply.)

- ☐ Put in a secure container and throw in the garbage
- ☐ Return to needle exchange program
- ☐ Return to health care facility or pharmacy
- ☐ Give them to others to discard
- ☐ Put in a drop box
- ☐ Put in the garbage
- ☐ Dispose of them on streets/parks/alleys or in sewer
- ☐ Personal sharps container
- ☐ Other (specify): _____
- ☐ Don't know
- ☐ Refused

44. Over the *last 6 months*, has anyone ever taken [confiscated] a rig from you?

- ☐ Yes
- ☐ No (go to **Q.45**)
- ☐ Don't know
- ☐ Refused

a. (If yes) Who? (Do NOT read out list. Check all that apply.)

- ☐ Agency worker
- ☐ Another user
- ☐ Court
- ☐ Partner/friend
- ☐ Pimp
- ☐ Police- arrest situation
- ☐ Police- "jack up" non-arrest
- ☐ Parent/family member
- ☐ Shelter worker
- ☐ Other: _____
- ☐ Don't know
- ☐ Refused

45. In the *last 6 months*, if you wanted to fix and you didn't have a new rig, what did you do? (Do NOT read out list. Check all that apply.)

- ☐ Reuse the one I have
- ☐ Use a rig that is not my own
- ☐ Clean it
- ☐ Don't clean it
- ☐ Go to NEP to get new rig
- ☐ Use drugs another way (e.g. smoke)
- ☐ Borrow rig from someone I know

- ☐ Steal one
- ☐ Buy one (where?: _____)
- ☐ Other: _____
- ☐ N/A (never happened/I don't fix if I don't have a new rig)
- ☐ Don't know
- ☐ Refused

46. In the *last 6 months* have you seen someone fix with a rig that had already been used by somebody else?

- ☐ Yes
- ☐ No (Go to **Q.47**)
- ☐ Don't know
- ☐ Refused

a. (If yes) How many times?

- ☐ Once
- ☐ 2 to 5 times
- ☐ 6 to 10 times
- ☐ 11 to 100 times
- ☐ More than 100 times
- ☐ Don't know
- ☐ Refused

47. In the *last 6 months* did you fix with a rig that had already been used by someone else?

- ☐ Yes
- ☐ No (Go to **Q.49**)
- ☐ Don't know
- ☐ Refused

a. (If yes) How many times?

- ☐ Once
- ☐ 2 to 5 times
- ☐ 6 to 10 times
- ☐ 11 to 100 times
- ☐ More than 100 times
- ☐ Don't know
- ☐ Refused

b. Over the *last 6 months*, when you used a needle that someone else had already used, what were some of the reasons why? (Do NOT read out list. Check all that apply.)

- ☐ Did not have one on me
- ☐ Didn't know where to get new rigs
- ☐ I could not get one/no access (e.g. closed)
- ☐ I sold all my needles
- ☐ My needle was too dull or plugged
- ☐ The needle had been cleaned

- ☐ Other person HIV-negative
- ☐ Needed help injecting
- ☐ I knew/trusted the people I was with
- ☐ I was with my partner
- ☐ I wanted to show trust/bonding
- ☐ My rig got mixed up with someone else's
- ☐ Too high at the time to care
- ☐ Someone else's drugs/"free drugs"
- ☐ Did not care/"why not?"
- ☐ Suicidal
- ☐ "I won't get HIV/AIDS"
- ☐ I'm already HIV positive
- ☐ "Jonesing" (i.e. drug sick)
- ☐ I was in prison or jail
- ☐ I was doing the wash
- ☐ Other: _____
- ☐ Don't know
- ☐ Refused

48. In the *last 6 months*, have you picked up a used rig on the street and used it, even if you cleaned it?

- ☐ Yes
- ☐ No (Go to **Q.49**)
- ☐ Don't know
- ☐ Refused

a. (If yes) How many times?

- ☐ Once
- ☐ 2 to 5 times
- ☐ 6 to 10 times
- ☐ 11 to 100 times
- ☐ More than 100 times
- ☐ Don't know
- ☐ Refused

49. In the *last 6 months* have you used injecting equipment that had already been used by someone else? This includes "clean" equipment that had already been used by someone else.

- ☐ Yes
- ☐ No (Go to **Q.50**)
- ☐ Don't know
- ☐ Refused

a. (If yes) How many times?

- ☐ Once
- ☐ 2 to 5 times
- ☐ 6 to 10 times
- ☐ 11 to 100 times
- ☐ More than 100 times

- ☐ Don't know
- ☐ Refused

b. (If yes) What was it? (Read out list. Check all that apply).

- ☐ Cookers/spoons
- ☐ Water
- ☐ Filter
- ☐ Bleach kit
- ☐ Plunger
- ☐ Barrel
- ☐ Other:

- ☐ Don't know
- ☐ Refused

50. In the *last 6 months* have you lent your used equipment to someone else? This includes lending "clean" equipment that you have already used.

- ☐ Yes
- ☐ No (Go to **Q.51**)

- ☐ Don't know
- ☐ Refused

a. (If yes) How many times?

- ☐ Once
- ☐ 2 to 5 times
- ☐ 6 to 10 times
- ☐ 11 to 100 times
- ☐ More than 100 times

- ☐ Don't know
- ☐ Refused

b. (If yes) What was it? (Read out list. Check all that apply).

- ☐ Cookers/spoons
- ☐ Water
- ☐ Filter
- ☐ Bleach kit
- ☐ Plunger
- ☐ Barrel
- ☐ Other:_____

- ☐ Don't know
- ☐ Refused

51. In the *last 6 months* did you lend a used rig to someone else?

- ☐ Yes
- ☐ No (Go to **Q.52**)

- ☐ Don't know
- ☐ Refused

a. (If yes) How many times?

- ☐ Once
- ☐ 2 to 5 times
- ☐ 6 to 10 times
- ☐ 11 to 100 times
- ☐ More than 100 times

- ☐ Don't know
- ☐ Refused

52. In the *last 6 months*, have you used water from a bottle or an H2O blister that has been previously used (by someone else)?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

53. Please list all of the sites on your body that you have injected into in the *last 6 months* (Read out list. Check all that apply.)

- ☐ Arm: mainline (pit of elbow)
- ☐ Arm: other
- ☐ Hands
- ☐ Feet
- ☐ Leg
- ☐ Groin
- ☐ Neck/jugular
- ☐ Muscle (muscling)
- ☐ Breast
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

54. In the *last 6 months* did someone help you inject?

- ☐ Yes
- ☐ No (Go to Q.55)

- ☐ Don't know
- ☐ Refused

a. (If yes) How often?

- ☐ Always (100% of the time)
- ☐ Usually (more than 75% of the time)
- ☐ Sometimes (26% to 74% of the time)
- ☐ Occasionally (less than 25% of the time)
- ☐ Rarely

- ☐ Don't know
- ☐ Refused

b. Why have you needed help injecting? Check all that apply.

- ☐ New user

- ☐ Don't know how
- ☐ Bad veins/no veins
- ☐ Hate needles/afraid
- ☐ Too high/drug sick
- ☐ Shaky hands
- ☐ Jugging (neck/jugular injection)
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

55. Has a healthcare provider, such as a harm reduction nurse, ever shown you how to inject safely?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

56. In the *last 6 months*, how often did you inject drugs in public places (at a shelter/agency, outside, parking lot, river valley, etc. NOT at a private residence)?

- ☐ Always (100% of the time)
- ☐ Usually (more than 75% of the time)
- ☐ Sometimes (26% to 74% of the time)
- ☐ Occasionally (less than 25% of the time)
- ☐ Never (Go to **Q.57**)

- ☐ Don't know
- ☐ Refused

a. Where were you the most often (top 2 locations) when you used injection drugs in public? Do Not Read list, check two only.

- ☐ Alley
- ☐ Street
- ☐ Park
- ☐ Parkade
- ☐ Stairwell
- ☐ Abandoned building
- ☐ Washroom
- ☐ River Valley
- ☐ Shelter: _____
- ☐ Agency or Drop-in: _____
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

b. What area of Edmonton are you most likely to inject in public in (please be as specific as possible) Top 2 locations?

1. _____

2. _____

- ☐ Don't know
- ☐ Refused

c. Why do you inject in public? [Do not read list. Check all that apply]

- ☐ Away from where I live
- ☐ Nowhere to inject safely where I buy
- ☐ Homeless
- ☐ Sex trade
- ☐ Don't want the person I am staying with to know I use/am still using
- ☐ Too far from home
- ☐ Need assistance to fix/need to be juggled
- ☐ Dope sick
- ☐ Guest fees at a friend's place, no money
- ☐ Prefer to be outside
- ☐ Dealing/middling/steering
- ☐ Staying in a shelter
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

d. In the *last 6 months*, have you had to rush your injection when using in public?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

57. In the *last 6 months*, how often have you fixed with others?

- ☐ Always (100% of the time)
- ☐ Usually (more than 75% of the time)
- ☐ Sometimes (26% to 74% of the time)
- ☐ Occasionally (less than 25% of the time)
- ☐ Never

- ☐ Don't know
- ☐ Refused

58. In the *last 6 months*, how often have you fixed alone/by yourself?

- ☐ Always (100% of the time)
- ☐ Usually (more than 75% of the time)
- ☐ Sometimes (26% to 74% of the time)
- ☐ Occasionally (less than 25% of the time)
- ☐ Never

- ☐ Don't know
- ☐ Refused

59. In the *last 6 months*, how often have you gone to a place where other people usually go to shoot up in groups, like a crack house or shooting gallery?

- ☐ Never
- ☐ Occasionally, but not every week
- ☐ Regularly, 1 or 2 times a week
- ☐ Regularly, 3 times or more a week
- ☐ Every day

- ☐ Don't know
- ☐ Refused

60. Have you ever spent time in jail, prison or a corrections facility? This includes youth corrections facilities?

- ☐ Yes
- ☐ No (go to **Q.61**)

- ☐ Don't know
- ☐ Refused

a. If yes, did you ever inject drugs while in jail, prison, or corrections?

- ☐ Yes
- ☐ No (go to **Q.61**)

- ☐ Don't know
- ☐ Refused

b. If yes, did you ever share needles and/or syringes while in jail, prison or corrections?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

61. In the *last 6 months* have you had an abscess (swollen area collecting pus at an injection site)?

- ☐ Yes
- ☐ No (go to **Q.62**)

- ☐ Don't know
- ☐ Refused

a. How many times in the past 6 months? _____

This next section includes some questions about overdosing from drugs, including both injection and non-injection drugs.

62. In the *last 6 months*, have you overdosed by accident (i.e. where you had a negative or unintended reaction from using too much drugs)?

- ☐ Yes
- ☐ No (Go to **Q.64**)

- ☐ Don't know
- ☐ Refused

a. (If yes) The *last time* you overdosed, what was the main drug?

Non-injection	Injection drug	Injection
<input type="checkbox"/>	Heroin	<input type="checkbox"/>
<input type="checkbox"/>	Crack cocaine	<input type="checkbox"/>
<input type="checkbox"/>	Cocaine	<input type="checkbox"/>
<input type="checkbox"/>	Crystal meth (speed, pint)	<input type="checkbox"/>
<input type="checkbox"/>	Speedball (heroin & cocaine)	<input type="checkbox"/>
<input type="checkbox"/>	Methadone	<input type="checkbox"/>
<input type="checkbox"/>	Morphine (kadians, greys, pinks)	<input type="checkbox"/>
<input type="checkbox"/>	Hydromorphone	<input type="checkbox"/>
<input type="checkbox"/>	Fentanyl	<input type="checkbox"/>
<input type="checkbox"/>	Oxycondone, Oxycontin	<input type="checkbox"/>
<input type="checkbox"/>	OxyNeo	<input type="checkbox"/>
<input type="checkbox"/>	Ts & Rs [Talwin or Ritalin]	<input type="checkbox"/>
<input type="checkbox"/>	Benzos	<input type="checkbox"/>
<input type="checkbox"/>	Dilaudid	<input type="checkbox"/>
<input type="checkbox"/>	Heroin & Crystal (goofball)	<input type="checkbox"/>
<input type="checkbox"/>	Sleeping pills	<input type="checkbox"/>
<input type="checkbox"/>	Alcohol	<input type="checkbox"/>
<input type="checkbox"/>	Ketamine	<input type="checkbox"/>
<input type="checkbox"/>	Other:	<input type="checkbox"/>
<input type="checkbox"/>	Other:	<input type="checkbox"/>

- ☐ Don't know
- ☐ Refused

b. The *last time* you overdosed, were you aware of what drug you were taking?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

c. Were you aware of how potent it was?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

d. Were you taking any other drugs?

- ☐ Yes

- ☐ No (go to **F**)
- ☐ Don't know
- ☐ Refused

e. (If yes) What other drugs were you taking?

Non-injection	Injection drug	Injection
<input type="checkbox"/>	Heroin	<input type="checkbox"/>
<input type="checkbox"/>	Crack cocaine	<input type="checkbox"/>
<input type="checkbox"/>	Cocaine	<input type="checkbox"/>
<input type="checkbox"/>	Crystal meth (speed, pint)	<input type="checkbox"/>
<input type="checkbox"/>	Speedball (heroin & cocaine)	<input type="checkbox"/>
<input type="checkbox"/>	Methadone	<input type="checkbox"/>
<input type="checkbox"/>	Morphine (kadians, greys, pinks)	<input type="checkbox"/>
<input type="checkbox"/>	Hydromorphone	<input type="checkbox"/>
<input type="checkbox"/>	Fentanyl	<input type="checkbox"/>
<input type="checkbox"/>	Oxycondone, Oxycontin	<input type="checkbox"/>
<input type="checkbox"/>	OxyNeo	
<input type="checkbox"/>	Ts & Rs [Talwin or Ritalin]	<input type="checkbox"/>
<input type="checkbox"/>	Benzos	<input type="checkbox"/>
<input type="checkbox"/>	Dilaudid	<input type="checkbox"/>
<input type="checkbox"/>	Heroin & Crystal (goofball)	<input type="checkbox"/>
<input type="checkbox"/>	Sleeping pills	<input type="checkbox"/>
<input type="checkbox"/>	Alcohol	<input type="checkbox"/>
<input type="checkbox"/>	Ketamine	<input type="checkbox"/>
<input type="checkbox"/>	Other:	<input type="checkbox"/>
<input type="checkbox"/>	Other:	<input type="checkbox"/>

- ☐ Don't know
- ☐ Refused

f. Were other people with you?

- ☐ Yes
- ☐ No (Go to **G**)
- ☐ Don't know
- ☐ Refused

g. Where were you the last time you overdosed?

- ☐ Own place (e.g. room, apartment)
- ☐ Partner's/lover's place
- ☐ Friend's place
- ☐ Relative's place
- ☐ Dealer's place

- ☐ Street (alley, doorway, etc.)
- ☐ Bathroom (any public washroom)
- ☐ Park
- ☐ Drop-in centre
- ☐ Parking lot
- ☐ Car
- ☐ Inside bar or club
- ☐ House party
- ☐ School
- ☐ Abandoned building
- ☐ Jail
- ☐ Crack house/shooting gallery
- ☐ Other: _____
- ☐ Don't know
- ☐ Refused

h. What happened to you? What reaction did you have to the drugs? (Read out list. Check all that apply).

- ☐ Lost consciousness/blacked out
- ☐ Seizure
- ☐ Had a hard time breathing
- ☐ Stopped breathing
- ☐ Vomiting
- ☐ Turned blue
- ☐ Can't remember
- ☐ Other: _____
- ☐ Don't know
- ☐ Refused

i. Were you seen by an ambulance?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

j. Did the police come?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

k. Were you taken to the ER/hospital?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

l. Were you given Narcan?

- ☐ Yes
- ☐ No (Go to **Q.66**)

- ☐ Don't know
- ☐ Refused

m. If yes, who gave you Narcan?

- ☐ Paramedic
- ☐ Nurse
- ☐ Doctor
- ☐ A friend or someone else (not a doctor or nurse) who was trained to give Narcan and had it with them
- ☐ Don't know
- ☐ Refused

63. In the *last 6 months*, about how many times have you overdosed? _____

64. Have you witnessed someone else OD in the *last 6 months*?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

65. Have you ever been given take-home Narcan/Naloxone and trained on how to use it on someone if they overdose?

- ☐ Yes (Go to **Q.66**)
- ☐ No

- ☐ Don't know
- ☐ Refused

a. If no, why not? [Do not read list. Check one]

- ☐ Didn't know it was available/allowed
- ☐ Never been offered
- ☐ Not interested
- ☐ Do not feel comfortable doing it
- ☐ Don't use opiates/down
- ☐ Don't know anyone who uses opiates/down
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

b. [If no] Would you like to be given take-home Narcan/Naloxone and trained how to use it to help someone who is overdosing?

- ☐ Yes

- ☐ No
- ☐ Don't know
- ☐ Refused

Now I'm going to ask you a couple of questions about violence you may have experienced. We are asking these questions because many people who use drugs have experiences with violence. This information may be helpful for finding ways to reduce violence and keep people safer.

66. In the *last 6 months*, have you been attacked or assaulted (including sexual assault), or suffered any kind of violence?

- ☐ Yes
- ☐ No (go to **Q.67**)
- ☐ Don't know
- ☐ Refused

a. If yes, how many times? _____

b. Who was the last person that attacked you?

- ☐ Stranger
- ☐ Dealer
- ☐ Police
- ☐ Husband/wife
- ☐ Boyfriend/girlfriend
- ☐ Partner
- ☐ Sex work client
- ☐ Sex worker
- ☐ Friend
- ☐ Regular sex partner
- ☐ Casual sex partner
- ☐ Security guard
- ☐ Acquaintance
- ☐ Don't know
- ☐ Other: _____
- ☐ Other: _____
- ☐ Don't know
- ☐ Refused

c. What type of attack was it?

- ☐ Beating
- ☐ Sexual assault/rape
- ☐ Attacked with weapons (club, knife, belt)
- ☐ Strangled
- ☐ Attacked or threatened with a gun
- ☐ Robbery (rolling for drugs or money)
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

d. Did you seek medical attention after?

- ☐ Yes (go to F)
- ☐ No (go to E)

- ☐ Don't know
- ☐ Refused

e. If not, why not? _____

- ☐ Don't know
- ☐ Refused

f. Where did you go?

- ☐ Clinic/health centre
- ☐ ER
- ☐ Service agency or drop-in
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

g. Did you seek counselling or other support?

- ☐ Yes (go to Q.71)
- ☐ No (go to H)

- ☐ Don't know
- ☐ Refused

h. If not, why not? _____

- ☐ Don't know
- ☐ Refused

67. In the last 6 months, have you physically attacked or assaulted someone?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

The next set of question is about your sexual health. We ask these questions because we want to gain a better understanding of how sex affects health. We realize these questions are very personal. We encourage you to answer as honestly as you can, so we can get accurate answers. All your answers are totally private. If you would rather not answer a question, just let me know and we'll move on.

When I say sex, this includes getting and giving oral, vaginal, and anal sex with either men or women.

68. Have you had sex during the *last 6 months*?

- ☐ Yes
- ☐ No (go to **Q.72**)

- ☐ Don't know
- ☐ Refused

69. Did you or your partner use a condom when you last had sex?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

70. Over the *last 6 months*, how many people have you had sex with? This includes getting and giving vaginal, oral, and anal sex? (Read out the list. Check ONE only.)

- ☐ None
- ☐ 1 partner
- ☐ 2-5 partners
- ☐ 6-20 partners
- ☐ 21 or more partners

- ☐ Don't know
- ☐ Refused

71. How often do you use a condom during sex?

- ☐ Always (100% of the time)
- ☐ Usually (more than 75% of the time)
- ☐ Sometimes (26% to 74% of the time)
- ☐ Occasionally (less than 25% of the time)
- ☐ Never (0% of the time)

- ☐ Don't know
- ☐ Refused

72. Over the *last 6 months*, have you exchanged sex for.... (Read out list. Check ALL that apply.)

- ☐ Drugs or alcohol
- ☐ Shelter or a place to stay for the night
- ☐ Money
- ☐ Anything else you needed at the time (specify): _____
- ☐ You did not exchange sex (Go to **Q.73**)

- ☐ Don't know
- ☐ Refused

a. If yes, how often did you exchange sex during the *last 6 months*?

- ☐ Once a month or less
- ☐ 2 to 3 times a month
- ☐ About once a week
- ☐ 2 to 3 days a week
- ☐ 4 to 6 days a week

- ☐ Every day
- ☐ Don't know
- ☐ Refused

PART 3. HEALTH STATUS, HEALTH SERVICE USE, AND UNMET HEALTHCARE NEEDS

Now I'm going to ask you a few questions about HIV testing and your HIV

73.
ave you

ever been tested for HIV?

- ☐ Yes
- ☐ No (go to **Q.76**)
- ☐ Don't know
- ☐ Refused

74. When was your most recent HIV test? (*Read out the list. Check ONE only*).

- ☐ Within the past month
- ☐ 1 to 6 months ago
- ☐ 7 to 12 months ago
- ☐ More than 1 year but up to 2 years ago
- ☐ More than 2 years but less than four years ago
- ☐ 4 years ago or more

75. What was the result of your most recent HIV test? *Read out the list. Check ONE only*).

- ☐ Positive for HIV—you have the virus
- ☐ Negative for HIV—you do not have the virus (go to **Q.76**)
- ☐ Indeterminate result (go to **Q.76**)
- ☐ You didn't understand the result (go to **Q.76**)
- ☐ You are still waiting for your result (go to **Q.76**)
- ☐ Your result is ready but you did not receive it yet (go to **Q.76**)
- ☐ Don't know
- ☐ Refused

a. If positive, are you currently under the care of a doctor for you HIV? This means a single visit or more to a doctor in the past six months for HIV treatment, counselling, testing, etc.

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

b. Have you ever taken drugs for HIV that were prescribed for you?

- ☐ Yes
- ☐ No (go to **Q.76**)

- ☐ Don't know
- ☐ Refused

c. Are you taking them at this time?

- ☐ Yes (go to **Q.76**)
- ☐ No
- ☐ Don't know
- ☐ Refused

d. Why are you not taking prescribed drugs for your HIV? (Read out the list. Check ALL that apply).

- ☐ You've never started because you couldn't afford them
- ☐ You tried taking them and stopped because you could not afford them
- ☐ You tried taking them and stopped because you experienced side effects
- ☐ You tried taking them and stopped because it was too complicated or the medications were too difficult to take
- ☐ Your doctor never talked to you about treatment
- ☐ Your doctor said you couldn't take them properly or that you were not ready to take them for medical reasons
- ☐ They were never offered to you
- ☐ Your doctor recommended that you interrupt your treatment (*because of side effects, other illness, travel restrictions, or surgery*)
- ☐ Other: _____
- ☐ Don't know
- ☐ Refused

Now I'm going to ask you a few questions about Hepatitis C testing and your Hep C status. Before someone can be diagnosed with hepatitis C, they must have two types of blood tests. The first test is call an antibody test. Because the antibody test tells you if you have ever, in your life been infected with hepatitis C, a positive test does not necessarily mean that you are currently infected with hepatitis C. This is why a second blood test is done. The second blood test is called an RNA test. If the RNA test is positive, you have the hepatitis C virus in your body and are infected with hepatitis C. If the RNA test is negative you do not have the hepatitis C virus in your body and are not infected with hepatitis C. It is possible for a person to get hepatitis C more than once.

76. Have you ever been tested for hepatitis C?

- ☐ Yes
- ☐ No (go to **Q.79**)
- ☐ Don't know
- ☐ Refused

77. When was your most recent hepatitis C test? (Read out the list. Check ONE only).

- ☐ Within the past month
- ☐ 1 to 6 months ago
- ☐ 7 to 12 months ago
- ☐ More than 1 year but up to 2 years ago
- ☐ More than 2 years but less than four years ago
- ☐ 4 years ago or more
- ☐ Don't know

- ☐ Refused

78. Have you ever been told by a health professional (e.g. doctor or nurse) that you have or had a hepatitis C infection?

- ☐ Yes
- ☐ No (go to **Q.79**)
- ☐ Don't know
- ☐ Refused

a. When were you first told by a health professional that you had a hepatitis C infection?

- ☐ Within the past month
- ☐ 1 to 6 months ago
- ☐ 7 to 12 months ago
- ☐ More than 1 year but up to 2 years ago
- ☐ More than 2 years but less than 4 years ago
- ☐ 4 years ago or more
- ☐ Don't know
- ☐ Refused

b. Do you know if you are currently infected with hepatitis C? This means that you last RNA blood test for hepatitis C was positive, and that you still have active virus in your body. (If necessary, reassure participant that it is okay to say "I don't know").

- ☐ Yes, I am currently infected
- ☐ No, I am not currently infected
- ☐ Don't know
- ☐ Refused

c. Are you under the care of a doctor for hepatitis C? This means a single visit or more to a doctor in the past one year for hepatitis C (treatment, counselling, follow-up testing, etc.). (Read out the list. Check ONE only.)

- ☐ Yes, you've had a visit in the past 6 months
- ☐ Yes, you've had a visit in the past 1 year, but not in the past 6 months
- ☐ No
- ☐ *Don't know*
- ☐ *Refused*

d. Have you ever taken drugs for hepatitis C that were prescribed for you? (Drugs: Interferon, Intron, Peg-Intron, Virazole, Rebetron, Ribavirin)

- ☐ Yes
- ☐ No (go to **Q.80**)
- ☐ *Don't know*
- ☐ *Refused*

e. Are you taking them at this time?

- ☐ Yes
- ☐ No (go to **Q.80**)

- ☐ *Don't know*
- ☐ *Refused*

f. When did you stop taking them?

- ☐ Within the past month
- ☐ 1 to 6 months ago
- ☐ 7 to 12 months ago
- ☐ More than 1 year but up to 2 years ago
- ☐ More than 2 years but less than 4 years ago
- ☐ 4 years ago or more
- ☐ *Don't know*
- ☐ *Refused*

g. Why are you not taking prescribed drugs for hepatitis C? (Read out the list. Check ALL that apply.)

- ☐ You are cured or you have completed your treatment regime
- ☐ Your doctor has discussed hepatitis C treatment with you and you are waiting for more test results
- ☐ Your doctor has never talked to you about treatment
- ☐ Your doctor said you didn't need them for a medical reason (waiting for liver enzymes / your counts aren't high enough)
- ☐ Your doctor wants you to stop injecting drugs before you begin treatment
- ☐ Your doctor said you were not ready to take them for other reasons
- ☐ You tried taking them and stopped because you experienced side effects
- ☐ You tried taking them and stopped because you could not afford them
- ☐ You tried taking them and stopped because it was too complicated or the medications were too difficult to take
- ☐ You never started because you could not afford them
- ☐ Other: _____
- ☐ *Don't know*
- ☐ *Refused*

If participant reports being hepatitis C negative or has not been tested

79. Would you be willing to enrol in a research project evaluating the effectiveness of a hepatitis C vaccine? By vaccine, I mean a medication that could prevent you from being infected with hepatitis C?

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

Now I am going to ask you some questions about your addiction and mental health status. Some questions focus on whether you have accessed addiction and mental health services over the past year.

80. Has a health professional ever told you that you have an addiction?

- ☐ Yes, in the past 12 months
- ☐ Yes, but not in the past 12 months
- ☐ Yes (*only if unable to specify time period*)
- ☐ No

- ☐ Don't know
- ☐ Refused

81. Has a health professional ever told you that you have a mental disorder?

- ☐ Yes, in the past 12 months
- ☐ Yes, but not in the past 12 months
- ☐ Yes (*only if unable to specify time period*)
- ☐ No

- ☐ Don't know
- ☐ Refused

82. Do you think you have ever had an addiction problem that has not been diagnosed by a professional? (*By addiction problem I mean misuse of things like alcohol, street drugs, or prescription medications to get high, or engaging in behaviours like gambling, sex, or work in a way that creates problems in life*)?

- ☐ Yes, in the past 12 months
- ☐ Yes, but not in the past 12 months
- ☐ Yes (*only if unable to specify time period*)
- ☐ No

- ☐ Don't know
- ☐ Refused

83. Do you think you have ever had a mental health problem that has not been diagnosed by a professional?

- ☐ Yes, in the past 12 months
- ☐ Yes, but not in the past 12 months
- ☐ Yes (*only if unable to specify time period*)
- ☐ No

- ☐ Don't know
- ☐ Refused

84. In the past 12 months, have you received information (about treatments or available services) because of problems with your emotions, mental health, or use of alcohol or drugs? (Read out list. Check ONE).

- ☐ Yes, in the past 12 months (go to 'A')
- ☐ No, but I think I needed this kind of help in the past 12 months (go to 'B')
- ☐ No, I did not need this kind of help in the past 12 months (go to **Q.85**)

- ☐ Don't know
- ☐ Refused

a. Do you think you got as much information as you needed?

- ☐ Yes (go to **Q.85**)
- ☐ No (go to 'B')

- ☐ Don't know
- ☐ Refused

b. Please indicate if each of the following reasons stopped you from getting any or enough help in the past 12 months (Check all that apply)

- ☐ I preferred to manage myself
- ☐ I didn't know where to get help
- ☐ I was afraid to ask for help or what others would think of me
- ☐ I couldn't afford the money
- ☐ I asked but didn't get help
- ☐ I didn't think anything would help/nothing will help me
- ☐ I don't want to get help at this time
- ☐ Wait list too long/no spaces available
- ☐ I was not only allowed a limited amount of [information]
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

85. In the past 12 months, have you received medication (or tablets to help you with these problems) because of problems with your emotions, mental health, or use of alcohol or drugs? (e.g. methadone, antidepressants, etc.) (Read out list. Check ONE).

- ☐ Yes, in the past 12 months (go to 'A')
- ☐ No, but I think I needed this kind of help in the past 12 months (go to 'B')
- ☐ No, I did not need this kind of help in the past 12 months (go to **Q.86**)

- ☐ Don't know
- ☐ Refused

a. Do you think you got as much medication as you needed?

- ☐ Yes (go to **Q.86**)
- ☐ No

- ☐ Don't know
- ☐ Refused

b. Please indicate if each of the following reasons stopped you from getting any or enough help in the past 12 months (Check all that apply)

- ☐ I preferred to manage myself
- ☐ I didn't think anything would help
- ☐ I didn't know where to get help
- ☐ I was afraid to ask for help or what others would think of me
- ☐ I couldn't afford the money
- ☐ I asked but didn't get help
- ☐ I don't want to get help at this time
- ☐ Wait list too long/no spaces available
- ☐ I was only allowed a limited amount of [medication]
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

86. In the past 12 months, have you received hospital care (overnight or longer) because of problems with your emotions, mental health, or use of alcohol or drugs? (e.g. treating an infection or abscess, overdose, psychosis, etc.) (Read out list. Check ONE).

- ☐ Yes, in the past 12 months (go to 'A')
- ☐ No, but I think I needed this kind of help in the past 12 months (go to 'B')
- ☐ No, I did not need this kind of help in the past 12 months (go to **Q.87**)

- ☐ Don't know
- ☐ Refused

a. Do you think you got as much hospital care as you needed?

- ☐ Yes (go to **Q.87**)
- ☐ No (go to 'B')

- ☐ Don't know
- ☐ Refused

b. Please indicate if each of the following reasons stopped you from getting any or enough help in the past 12 months (Check all that apply)

- ☐ I preferred to manage myself
- ☐ I didn't think anything would help
- ☐ I didn't know where to get help
- ☐ I was afraid to ask for help or what others would think of me
- ☐ I couldn't afford the money
- ☐ I asked but didn't get help
- ☐ I don't want to get help at this time
- ☐ Wait list too long/no spaces available
- ☐ I was only allowed a limited [amount of time in hospital]
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

87. In the past 12 months, have you received counselling (outside of a hospital including any kind of help to talk through your problems) because of problems with your emotions, mental health, or use of alcohol or drugs? (Read out list. Check ONE).

- ☐ Yes, in the past 12 months (go to 'A')
- ☐ No, but I think I needed this kind of help in the past 12 months (go to 'B')
- ☐ No, I did not need this kind of help in the past 12 months (go to **Q.88**)

- ☐ Don't know
- ☐ Refused

a. Do you think you got as much counselling as you needed?

- ☐ Yes (go to **Q.88**)
- ☐ No (go to 'B')

- ☐ Don't know
- ☐ Refused

b. Please indicate if each of the following reasons stopped you from getting any or enough help in the past 12 months (Check all that apply)

- ☐ I preferred to manage myself
- ☐ I didn't think anything would help
- ☐ I didn't know where to get help
- ☐ I was afraid to ask for help or what others would think of me
- ☐ I couldn't afford the money
- ☐ I asked but didn't get help
- ☐ I don't want to get help at this time
- ☐ Wait list too long/no spaces available
- ☐ I was only allowed a limited amount of [sessions/appointments]
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

88. In the past 12 months, have you received social interventions (to help sort out practical issues such as housing or money problems) because of problems with your emotions, mental health, or use of alcohol or drugs? (e.g. income support, shelters, housing, etc.) (Read out list. Check ONE).

- ☐ Yes, in the past 12 months (go to 'A')
- ☐ No, but I think I needed this kind of help in the past 12 months (go to 'B')
- ☐ No, I did not need this kind of help in the past 12 months (go to **Q.89**)
- ☐ Don't know
- ☐ Refused

a. Do you think you got as much social interventions (for housing or money problems) as you needed?

- ☐ Yes (go to **Q.89**)
- ☐ No (go to 'B')
- ☐ Don't know
- ☐ Refused

b. Please indicate if each of the following reasons stopped you from getting any or enough help in the past 12 months (Check all that apply)

- ☐ I preferred to manage myself
- ☐ I didn't think anything would help
- ☐ I didn't know where to get help
- ☐ I was afraid to ask for help or what others would think of me
- ☐ I couldn't afford the money
- ☐ I asked but didn't get help
- ☐ I don't want to get help at this time
- ☐ Wait list too long/no spaces available
- ☐ I was only allowed a limited amount of [social interventions/help]
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

89. In the past 12 months, have you received skills training (help to improve your ability to work, to care for yourself, to use your time or to meet people) because of problems with your emotions, mental health, or use of alcohol or drugs? (Read out list. Check ONE).

- ☐ Yes, in the past 12 months (go to 'A')
- ☐ No, but I think I needed this kind of help in the past 12 months (go to 'B')
- ☐ No, I did not need this kind of help in the past 12 months (go to **Q.90**)

- ☐ Don't know
- ☐ Refused

a. Do you think you got as much skills training as you needed?

- ☐ Yes (go to **Q.90**)
- ☐ No (go to 'B')

- ☐ Don't know
- ☐ Refused

b. Please indicate if each of the following reasons stopped you from getting any or enough help in the past 12 months (Check all that apply)

- ☐ I preferred to manage myself
- ☐ I didn't think anything would help
- ☐ I didn't know where to get help
- ☐ I was afraid to ask for help or what others would think of me
- ☐ I couldn't afford the money
- ☐ I asked but didn't get help
- ☐ I don't want to get help at this time
- ☐ Wait list too long/no spaces available
- ☐ I was only allowed a limited amount [skills training]
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

90. In the past 12 months, have you received access to harm reduction (services [like needle exchange] to reduce the risk of harm related to using drugs) because of problems with your use of alcohol or drugs? (Read out list. Check ONE).

- ☐ Yes, in the past 12 months (go to 'A')
- ☐ No, but I think I needed this kind of help in the past 12 months (go to 'B')
- ☐ No, I did not need this kind of help in the past 12 months (go to **Q.91**)

- ☐ Don't know
- ☐ Refused

a. Do you think you got as much harm reduction as you needed?

- ☐ Yes (go to **Q.91**)
- ☐ No (go to 'B')

- ☐ Don't know
- ☐ Refused

b. Please indicate if each of the following reasons stopped you from getting any or enough help in the past 12 months (Check all that apply)

- ☐ I preferred to manage myself
- ☐ I didn't think anything would help
- ☐ I didn't know where to get help
- ☐ I was afraid to ask for help or what others would think of me
- ☐ I couldn't afford the money
- ☐ I asked but didn't get help
- ☐ I don't want to get help at this time
- ☐ Wait list too long/no spaces available
- ☐ I was only allowed a limited amount of [harm reduction services/supplies]
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

91. In the past 12 months, did you require medical care for a short term or long term physical health problem or condition? (Read out list. Check ONE).

- ☐ Yes, in the past 12 months (go to 'A')
- ☐ No, but I think I needed this kind of help in the past 12 months (go to 'B')
- ☐ No, I did not need this kind of help in the past 12 months (go to **Q.92**)

- ☐ Don't know
- ☐ Refused

a. Do you think you got as much medical care as you needed?

- ☐ Yes (go to **Q.92**)
- ☐ No (go to 'B')

- ☐ Don't know
- ☐ Refused

b. Please indicate if each of the following reasons stopped you from getting any or enough help in the past 12 months? (Check all that apply)

- ☐ I preferred to manage myself
- ☐ I didn't think anything would help
- ☐ I didn't know where to get help
- ☐ I was afraid to ask for help or what others would think of me
- ☐ I couldn't afford the money
- ☐ I asked but didn't get help
- ☐ I don't want to get help at this time
- ☐ Wait list too long/no spaces available
- ☐ I was only allowed a limited amount of [medical care]
- ☐ Other: _____

- ☐ Don't know
- ☐ Refused

92. Have you ever been in a substance use treatment program such as detox, AA, NA, inpatient treatment, recovery house, etc.? (not methadone)

- ☐ Yes
- ☐ No (go to **Q.93**)
- ☐ Don't know
- ☐ Refused

a. If yes, how many times have you been in treatment before?

- ☐ 1 time
- ☐ 2-3 times
- ☐ 4-5 times
- ☐ 5-8 times
- ☐ 8 or more times
- ☐ Don't know
- ☐ Refused

b. What kinds of treatment programs did you attend?

- ☐ Detox/youth detox
- ☐ Daytox
- ☐ Recovery house
- ☐ Treatment centre
- ☐ Counsellor
- ☐ NA, CA, AA, SMART
- ☐ Inpatient treatment
- ☐ Outpatient treatment
- ☐ Drug treatment court
- ☐ Other: _____
- ☐ Don't know
- ☐ Refused

93. In the last 12 months, have you tried to access any drug or alcohol treatment program but were unable?

- ☐ Yes
- ☐ No (go to **Q.94**)
- ☐ Never tried
- ☐ Don't know
- ☐ Refused

a. If yes, what kind?

- ☐ Detox/youth detox
- ☐ Daytox
- ☐ Recovery house
- ☐ Treatment centre
- ☐ Counsellor
- ☐ NA, CA, AA, SMART
- ☐ Methadone program
- ☐ Inpatient treatment
- ☐ Outpatient treatment
- ☐ Drug treatment court

☐ Other: _____

☐ Don't know

☐ Refused

b. If you could not access a drug/alcohol program, what was the problem?

☐ Waiting list

☐ Don't know of any programs

☐ Turned down by program

☐ No treatment program nearby

☐ No program I want/need

☐ Can't afford the fees

☐ Behaviour problems

☐ Failed too many times

☐ Couldn't stop using

☐ Other: _____

94. Have you ever been in a methadone treatment program?

☐ Yes

☐ No (go to C)

☐ Don't know

☐ Refused

a. Are you in a methadone treatment program right now?

☐ Yes (go to **Q.95**)

☐ No (go to B)

☐ Don't know

☐ Refused

b. Why did you stop?

☐ Didn't want to take it anymore

☐ Side effects

☐ Could not get to the pharmacy

☐ Didn't comply with the program and taken off by my doctor

☐ Went to jail

☐ Other: _____

c. If you've never been on methadone, why not? [Do not read list. Check all that apply]

☐ Waiting list

☐ Don't know of any programs

☐ Turned down by program

☐ No program nearby

☐ No program I want/need

☐ Too inconvenient

☐ Didn't want to stop taking drugs

☐ Don't trust methadone

☐ Not a solution

☐ Other: _____

The next few questions are about using health services such as a needle exchange programs, clinics, or health centres.

- 95. Have you used any of the following clinics or community health centres in the past 6 months for any medical attention, health information or to take part in a program? (Read out the header. If Yes to the header, read out the site-specific sub-list. Check ALL that apply. Do not read aloud, DO NOT KNOW, REFUSE and DID NOT USE options. If No, check DID NOT USE...)**

Hospitals?

- ☐ Royal Alexandra Hospital
- ☐ University of Alberta Hospital
- ☐ Misericordia Hospital
- ☐ Grey Nun's Hospital
- ☐ Sturgeon Hospital
- ☐ Leduc Hospital
- ☐ Other hospital(s): _____

- ☐ Used a hospital, but DO NOT KNOW the name
- ☐ Used a hospital, but REFUSE to provide name

- ☐ DID NOT USE a hospital

- ☐ Don't know
- ☐ Refuse

Medical clinics or Walk-in clinics, including in the community and prison-based?

- ☐ DID USE a Medical clinic or Walk-in clinic, specify: _____

- ☐ Used a Medical clinic or Walk-in clinic, but DO NOT KNOW the name
- ☐ Used a Medical clinic or Walk-in clinic, but REFUSE the name

- ☐ DID NOT USE a Medical Clinic or Walk-in clinic

- ☐ Don't know
- ☐ Refused

Community Health Centres (CHCs)?

- ☐ Boyle McCauley Health Centre
- ☐ East Edmonton Health Centre
- ☐ Northeast Health Centre
- ☐ Other Community Health Centre(s): _____

- ☐ Used a Community Health Centre, but DO NOT KNOW the name
- ☐ Used a Community Health Centre, but REFUSE the name

- ☐ DID NOT USE a Community Health Centre

- ☐ Don't know
- ☐ Refused

Community drop-in centres and/or shelters?

- ☐ Boyle Street Community Services
 - ☐ Bissell Centre
 - ☐ Kindred House
 - ☐ Jasper Place Health and Wellness
 - ☐ Mustard Seed Church
 - ☐ Neighbour Centre
 - ☐ YESS emergency
 - ☐ Herb Jamieson
 - ☐ WEAC
 - ☐ George Spady Centre
 - ☐ Hope Mission
 - ☐ Other community drop-in centres: _____
-
- ☐ Used a community drop-in centre, but DO NOT KNOW the name
 - ☐ Used a community drop-in centre, but REFUSE to provide the name
 - ☐ DID NOT USE a community drop-in centre
 - ☐ Don't know
 - ☐ Refused

Detox or Drug treatment facility?

- ☐ AADAC Detox
 - ☐ George Spady Centre's Detox
 - ☐ Poundmaker's
 - ☐ Henwood
 - ☐ Panorama Clinic
 - ☐ Edmonton Adult Addiction Centre
 - ☐ Our House
 - ☐ Recovery Acres
 - ☐ Other detox or drug treatment facility: _____
-
- ☐ Used a detox or drug treatment facility, but DO NOT KNOW the name
 - ☐ Used a detox or drug treatment facility, but REFUSE to provide the name
 - ☐ DID NOT USE a detox or drug treatment facility
 - ☐ Don't know
 - ☐ Refused

Needle exchange or harm reduction service?

- ☐ Streetworks at Boyle Street
 - ☐ Streetworks on the van
 - ☐ Streetworks at Boyle McCauley Health Centre
 - ☐ Streetworks The STI Clinic
 - ☐ Streetworks HIV Edmonton
 - ☐ Streetworks Other needle exchange or harm reduction service(s): _____
-
- ☐ Used a needle exchange or harm reduction service, but DO NOT KNOW the name

- ☐ Used a needle exchange or harm reduction service, but REFUSE to provide the name
- ☐ DID NOT USE a needle exchange or harm reduction service
- ☐ Don't know
- ☐ Refused

Mental Health Centre?

- ☐ Alberta Hospital Edmonton
- ☐ Alberta Hospital Ponoka
- ☐ Other mental health centre: _____
- ☐ Used a mental health centre, but DO NOT KNOW the name
- ☐ Used a mental health centre, but REFUSE to provide the name
- ☐ DID NOT USE a mental health centre
- ☐ Don't know
- ☐ Refused

Sexual Health Centre or Facility

- ☐ Birth control centre
- ☐ STI clinic
- ☐ Options
- ☐ Other sexual health centre(s) or facility(ies): _____
- ☐ Used a sexual health centre or facility, but DO NOT KNOW the name
- ☐ Used a sexual health centre or facility, but REFUSE to provide the name
- ☐ DID NOT USE a sexual health centre or facility
- ☐ Don't know
- ☐ Refused

Any services not already listed?

- ☐ Other: _____
- ☐ Used an option not already listed, but DO NOT KNOW the name
- ☐ Used an option not already listed, but REFUSE to provide the name
- ☐ DID NOT USE any option not already listed
- ☐ Don't know
- ☐ Refused

PART 4. ACCEPTABILITY OF POTENTIAL NEW HEALTH SERVICES FOR PEOPLE WHO USE DRUGS

96. Have you ever heard of a safe injection facility (SIFs)? They're also called supervised injection sites, or drug consumption rooms.

- ☐ Yes
- ☐ No (go to **Q.98**)

- ☐ Don't know
- ☐ Refused

a. Have you ever been to a SIF?

- ☐ Yes
- ☐ No (go to **Q.97**)
- ☐ Don't know
- ☐ Refused

b. Where was it? _____

c. How often did you go there to inject? (Read out list. Check only one).

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Once a week
- ☐ Once a day
- ☐ More than once a day
- ☐ Don't know
- ☐ Refused

97. Please explain to me what you know about SIFs. (Check only those mentioned).

- ☐ Absence of police presence
- ☐ Supervision of injecting processes by trained staff
- ☐ Assistance from staff if overdose occurs in the SIF
- ☐ Safety and security
- ☐ Clean and sterile environment for injecting
- ☐ Provision of clean injecting equipment and syringes
- ☐ Safe disposal of used injecting equipment
- ☐ Other: _____

-
- ☐ Don't know
 - ☐ Refused

For this questionnaire, we want to use the same definition of a SIF, to make sure that we're talking about the same type of place. A supervised injection facility is a *legally* operated indoor facility where people come to inject their drugs under the supervision of medically trained workers. People can inject there under safe and sterile conditions and have access to all sterile injecting equipment (cotton, cooker, etc.). Any agency can be a SIF, if there are nurses or trained professionals on side to supervise injections. People would not be criminally charged for using the SIF.

98.

If a safe injection facility were opened in Edmonton, would you use such a place?

- ☐ Yes
- ☐ No

- ☐ Don't inject (Go to **Q.112**)
- ☐ Don't know
- ☐ Refused

a. Why?: _____

99. There are a number of rules being considered for SIFs. Would you use a SIF in Edmonton if.....

a. Injections are supervised by a trained staff member who can respond to overdoses

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

b. There is a 30 minute time limit for injections

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

c. You have to register each time you use it

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

d. You are required to show ID

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

e. You have to live in the neighbourhood

- ☐ Yes
- ☐ No
- ☐ Don't know
- ☐ Refused

f. There are video surveillance cameras on site to protect users

- ☐ Yes

- ☐ No
- ☐ Don't know
- ☐ Refused
- g. No smoking crack**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- h. Not allowed to assist each other with injections**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- i. Not allowed to share or split drugs**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- j. May have to sit and wait until space is available for you to inject**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- k. Have to hang around for 10 to 15 minutes after injecting so that your health can be monitored**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused

100. There are various services being considered for SIFs. How important are these to you?

- a. All injections are supervised by a trained staff member who can respond to overdoses**
 - ☐ Very important
 - ☐ Somewhat important
 - ☐ Not that important
 - ☐ Don't know
 - ☐ Refused
- b. Social workers available**

- ☐ Very important
- ☐ Somewhat important
- ☐ Not that important

- ☐ Don't know
- ☐ Refused

c. Referrals to treatment or detox

- ☐ Very important
- ☐ Somewhat important
- ☐ Not that important

- ☐ Don't know
- ☐ Refused

d. Peer workers/support

- ☐ Very important
- ☐ Somewhat important
- ☐ Not that important

- ☐ Don't know
- ☐ Refused

e. Needle exchange

- ☐ Very important
- ☐ Somewhat important
- ☐ Not that important

- ☐ Don't know
- ☐ Refused

f. Injection equipment distribution

- ☐ Very important
- ☐ Somewhat important
- ☐ Not that important

- ☐ Don't know
- ☐ Refused

g. HIV and HEP C testing

- ☐ Very important
- ☐ Somewhat important
- ☐ Not that important

- ☐ Don't know
- ☐ Refused

h. Special times for women or a women's only SIF

- ☐ Very important
- ☐ Somewhat important
- ☐ Not that important

- ☐ Don't know

- ☐ Refused

101. Would you use a SIF if it was embedded in another service like a community health centre, hospital, doctor's office, walk-in clinic, or social service agency that you use?

- ☐ Yes (go to Q.102)
- ☐ No

- ☐ Don't know
- ☐ Refused

a. Why not?

102. Would you use a SIF if it was located at Boyle Street Community Services?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

103. Would you use a SIF if it was located at the Boyle McCauley Health Centre?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

104. Would you use a SIF if it was located at the George Spady Centre?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

105. Would you use a SIF if it was mobile and operated out of a van or bus that traveled around the inner city? (like the Streetworks van)

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

106. Where would you put a SIF in Edmonton, if it was up to you?

107. What would be the farthest distance that you would travel to a SIF? (Read out list. Check only one.)

- ☐ A block or less
- ☐ 5 blocks or less

- ☐ 10 blocks or less
- ☐ A kilometre or less
- ☐ More than a kilometre

- ☐ Don't know
- ☐ Refused

108. When would you be most likely to use a SIF? (Read out list. Check only one.)

- ☐ 8am – 4pm
- ☐ 4 pm – midnight
- ☐ Midnight – 8 am

- ☐ Don't know
- ☐ Refused

109. Should SIFs be limited to users of a certain age?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused

a. If yes, what should be the minimum age? _____

110. What would be the best setup for injecting spaces in SIFs? (

- ☐ Private cubicles
- ☐ An open plan with tables and chairs
- ☐ A combination of the above

- ☐ Don't know
- ☐ Refused

111. Do you think users should be involved in operating a SIF?

- ☐ Yes
- ☐ No (go to **Q.112**)

- ☐ Don't know
- ☐ Refused

a. If yes, how do you think users could be involved?

112. In your opinion, if an SIF was opened, would it...

a. Cause more users to visit the area?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refused
- b. Reduce crime in the area?**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- c. Reduce the number of people injecting outdoors?**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- d. Reduce the number of used syringes on the street?**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- e. Reduce street violence?**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- f. Prevent overdoses?**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- g. Reduce injection with used needles?**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused
- h. Help move people into drug treatment?**
 - ☐ Yes
 - ☐ No
 - ☐ Don't know
 - ☐ Refused

113. If Edmonton had a safe place like a SIF, where people could legally go to smoke drugs in a supervised, ventilated inhalation room and have access to other services, would you use it?

- ☐ Yes
- ☐ No

- ☐ Don't know
- ☐ Refuse

That concludes our survey. Thank you for coming in today! Do you have any comments or questions?