



Prince George 2012 I-Track Survey Results: Findings and Discussion

by:

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Dear Reader,

On behalf of the study partners – the Northern B.C. First Nations HIV/AIDS Coalition, the Northern Health Authority, and the Public Health Agency of Canada - I would like to offer you the opportunity to read the summary findings of the Prince George 2012 I-Track survey study. This study attempts to identify patterns of risk behaviours, drugs use and health service utilization among injection drug users in Prince George. The uniqueness of the project lies not only in the local findings, but also in the collaborative nature of the research, which involved the full collaboration of local, provincial, and federal organizations. It is in this spirit of collaboration that I submit this report.

I would like to thank all of the individuals involved in this project, especially the participants who showed great courage in opening up their lives to the interviewers. I would also like to acknowledge and thank the interviewers, Fiona Prince, Annick McIntosh and Michael Cue and project coordinator Martha Shoemaker for their outstanding work on this project. In addition, I would like to thank the Public Health Agency of Canada for funding this project and providing training and direction. Also, without the support of the Northern B.C. First Nations HIV/AIDS Coalition and the Northern Health Authority, this study would not have been possible. Dr. William Osei also served as one of the co-Principal Investigators, and he offered invaluable help and insight at every stage in the process of the study. The Centre for Addiction Research British Columbia (CARBC) provided financial support for the research services of Martha Shoemaker and Lawren Taylor.

This report provides a snapshot of the key analyses of the data from the interviews with people reporting current injection drug use. The report contains 68 tables describing patterns in the data. This extensive set of tables is meant to provide relevant information to a wide body of readers who will have a wide range of specific interests. This will help the reader compare the Prince George patterns with those at other sister I-Track sites. It will probably be helpful to start with the one-page description of answers to frequently asked questions about the project and, then, read the Executive Summary and short Discussion. For those who want a comprehensive understanding of the results, the tables will provide more detailed information.

It is my hope that this report may serve not only the people who participated in the survey, but also all peoples living in northern British Columbia.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,



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Prince George 2012 I-Track Survey Results: Frequently Asked Questions

1. What is the Prince George 2012 I-Track Survey?

The Prince George 2012 I-Track Survey is part of the national I-Track surveillance system which is coordinated by the Public Health Agency of Canada (PHAC). I-Track is an ongoing surveillance system that monitors risk behaviours and HIV and hepatitis C infection among people who inject drugs (IDU) in Canada. The results of I-Track help all levels of government to assess existing interventions designed to help decrease the risk of HIV and hepatitis C infection among people who inject drugs.

The Prince George 2012 I-Track Survey was conducted in Prince George, British Columbia in May and June 2012 and questions were asked about patterns of drug use, injecting and sexual risk behaviors, and HIV and hepatitis C testing among people who inject drugs.

This is the second time an I-Track survey was conducted in Prince George. In 2008, Prince George was one of 10 sites across Canada participating in Phase 2 of the I-Track survey. A detailed description of this national surveillance system and results from Phase 1 and Phase 2 of I-Track can be found at: <http://www.phac-aspc.gc.ca/aids-sida/about/itrack-eng.php>

2. Why was the Prince George 2012 I-Track Survey conducted?

Prior research in Vancouver showed that HIV and hepatitis C infections are higher among people who inject drugs (i.e.: VIDUS and the Cedar Project). This research also showed that Aboriginal injection drug users acquired HIV twice as quickly as non-Aboriginal injection drug users. The 2008 I-Track survey in Prince George showed high levels of HIV and Hepatitis C for both Aboriginal and non-aboriginal IDUs – but with Aboriginal participants showing significantly higher prevalence of HIV in comparison to other IDUs. The 2012 I-Track Survey continues the assessment of HIV and Hepatitis C prevalence and associated risk behaviors among both Aboriginal and non-Aboriginal IDUs in Prince George.

3. Who participated in the Prince George 2012 I-Track Survey?

To be eligible for the I-Track survey, individuals over the age of 16yrs had to report injection drug use in the past 6 months. Eligible participants in the 2012 survey included 144 individuals (101 Aboriginal and 43 non-aboriginals) who completed an interview and gave a finger prick blood sample, which was tested for HIV and hepatitis C. Approximately 19% of participants in the 2012 survey reported that they had previously participated in the 2008 study.



4. How did the I-Track Survey respect information gathered from Aboriginal participants?

The 2012 I-Track study was a full collaboration between the Public Health Agency of Canada, Northern Health Authority, and Northern British Columbia First Nations HIV/AIDS Coalition. Each party agreed on how the data are handled, stored, interpreted, and how the findings are released in the public forum.

5. What were the main findings of the 2012 I-Track study?

The HIV prevalence in the entire sample for 2012 PG I-Track was: $23/144 = 16\%$; the prevalence of Hepatitis C (HCV) for the entire sample was: $93/143 = 65\%$ – a HCV pattern which was very similar across Aboriginal and non-Aboriginal participants. The HIV prevalence among individuals identifying themselves as Aboriginal was: $18/101 = 17.8\%$; the HIV prevalence among non-Aboriginal individuals was: $5/43 = 11.6\%$.

6. How do the findings from the 2012 PG I-Track study compare with the 2008 PG I-Track study?

In the 2008 study, there was a slightly higher prevalence of HIV in the entire sample: $27/151 = 17.9\%$; and a higher hepatitis C prevalence: $116/151 = 76.8\%$ in the entire sample. Among individuals identifying themselves as Aboriginal, the HIV prevalence was $21/92 = 22.8\%$, while the HIV prevalence among non-Aboriginal individuals was $6/58 = 10.3\%$. In the 2008 study, the hepatitis C prevalence for both Aboriginal and Non-aboriginal injection drug users was approximately 76.8%, and in the 2012 study, the HCV prevalence declined significantly to 65%.





Prince George 2012 I-Track Findings: Executive Summary

1. DEMOGRAPHICS: There were some demographic shifts between the 2008 and 2012 survey cohorts (See Table 1.1). There was a 9.7% increase in the 50+ age category and slight decreases in all other age categories in the 2012 survey. This not only signifies an aging population of IDUs, but also an increase in the number of IDUs in Prince George that are in the age category showing the highest incidence of new HIV cases in British Columbia (British Columbia Centre for Disease Control, 2012). There were also changes in the 2008 and 2012 ethnicity demographic. The number of non-Aboriginal participants decreased by 11.4%, and subsequently, the number of Aboriginal participants increased by 11.4%. Thus, in the 2012 survey, individuals who self-reported Aboriginal heritage comprised 71.3% of the sample.

2. HOUSING: In the 2012 survey, 46% of participants reported that they were currently living in a house or apartment (See Table 1.1). This reflects a 10.9% increase in participants living in more stable housing than was reported in 2008 (35.1%). There was also a 12.3% decrease between the 2008 and 2012 surveys in the number of participants that reported they were currently living in a shelter/hostel. It may seem that the housing data from the 2012 survey reflects a change towards more stable living conditions for IDU participants. However, participants in both the 2008 and 2012 surveys reported living in multiple places within Prince George during the 6 months *prior* to the survey (See Table 1.3). Furthermore, 49.3% of participants reported living in a shelter in the *previous* 6 months. This data suggests that there is still a large degree of unstable housing and homelessness amongst the IDUs in Prince George. Most notably, when the housing data is split based on Aboriginal status, 70.1% of Aboriginal participants reported living in more than one place in the previous 6 months with a range of 1-9 different places reported (See Table 1.4).

3. RESIDENTIAL MOBILITY: Place of residence in the past 6 months also showed change between the 2008 and 2012 surveys. Of the participants in the 2012 survey, 98.7% identified Prince George as being their current place of residence. This is a 6.3% increase from the 2008 participants. The most significant change in place of residence between the 2008 and 2012 surveys was that 23.4% fewer participants reported living in another city or community in the past 6 months (See Table 1.2). In 2008, 41% of participants reported they had lived in another city or community in the previous 6 months whereas the 2012 survey showed only 18% of participants had. However, when place of residence data is split based on Aboriginal status, there is a significant difference in residential mobility. Only 4.7% of non-Aboriginals reported living in more than one city or community in the past 6 months, whereas 23.4% of Aboriginal participants reported they had (See Table 1.4).

4. RISK BEHAVIOURS - INJECTION PRACTICES: Injection practice questions in the 2012 survey revealed that 30.4% of female participants and 21.1% of males reported to have first injected drugs before the age of 16yrs (See Tables 2.1 and 2.2). This information is important for



the development of education and prevention programs that target high-risk youth under the age of 16yrs.

5. RISK BEHAVIOURS - NEEDLE SHARING: According to the 2012 survey data, 30% of participants reported borrowing injection equipment and 24.7% reported lending injection equipment at some point in the previous 6 months (See Tables 3.1 and 3.3). This reflects very little change since the 2008 survey. The questions in the survey regarding borrowing and lending of needles and equipment are somewhat repetitive and might be viewed as tedious for the participant and this may hinder establishing a true estimate of sharing practices with IDUs. Furthermore, there may have been demand characteristics biasing the participants' responses, as they knew the interviewers were employees of the Needle Exchange. In other words, given that the participants likely knew the interviewers as employees of the needle exchange, the participants may have underestimated the extent of needle sharing behavior. As a result, prevention efforts must continue to focus on getting the message out that borrowing and/or lending injection equipment is a risk factor for the acquisition of infectious diseases.

6. RISK BEHAVIOURS - DRUG OF CHOICE: There was a significant shift in the types of drugs being injected between the 2008 and 2012 surveys (See Table 2.7). In 2008, the most commonly injected drug was cocaine with 70.7% of participants identifying it as their drug of choice. However, in 2012 only 33.3% of participants continued to report cocaine as their drug of choice for injecting. Instead, there was a 21.5% increase in the participants' reported use of Heroin as the most commonly injected drug. Alcohol (21.3%) and crack-cocaine (32%) were the two most common non-injection substances that participants reported using in the previous 6 months (See Table 2.8).

7. RISK BEHAVIOURS - SEXUAL PRACTICES: Similar to the 2008 survey, both male and female participants in the 2012 survey continued to most frequently report that they "never" use condoms during vaginal, oral or anal sex with their regular sex partners (See Tables 4.3, 4.4, 4.5, 4.15, 4.16 and 4.17). However, in the 2012 survey both males and females more frequently reported using condoms with their casual sex partners during vaginal, oral and anal sex than in 2008 (See Tables 4.6, 4.7, 4.8, 4.18, 4.19 and 4.20). Female condom use with client sex partners appears to have improved during vaginal sex, but appears to have declined in both oral and anal sex (See Tables 4.9, 4.10 and 4.11). In the 2012 survey, 51.9% of female participants reported having client sex partners and this represents an increase of 15.5% more female IDUs with client sex partners than in 2008 (See Table 4.2).

8. RISK BEHAVIOURS - TRAVEL TO OTHER CITIES/COMMUNITIES: It appears in the 2012 survey that Aboriginals and non-Aboriginals who travelled to the Downtown East Side (DES) and/or First Nations Reserves in the previous 6 months engaged in riskier behaviours while there (See Tables 7.3 and 7.4). In the DES, 60% of the Aboriginals who travelled there reported injecting drugs and 20% reported using sex without a condom. On First Nations reserves, 25.9% of Aboriginals who travelled there report injecting drugs while there and 29.6% report having sex without a condom while there. Only 9.3% of non-Aboriginal participants reported travelling to the DES or a First Nations reserve, but while there 50% injected drugs and 50% had sex without a condom.



9. HIV PREVALENCE: The HIV prevalence in the entire sample for 2012 PG I-Track was: $23/144 = 16\%$ (See Table 5.6). The HIV prevalence among individuals identifying themselves as Aboriginal was: $18/101 = 17.8\%$; the HIV prevalence among non-Aboriginal individuals was: $5/43 = 11.6\%$ (See Table 5.7). Of those Aboriginal participants that had HIV+ blood samples, 3 individuals were unaware they were HIV+. Of the non-Aboriginal participants that had HIV+ blood samples, 1 individual did not know that he/she was HIV+ (See Table 5.8).

10. HIV TESTING AND TREATMENT: In the 2012 survey, 94.7% of participants reported they had at some time been tested for HIV. Of those tested, 73.3% reported they had been tested within the past 12 months. Participants most frequently reported they were tested at their doctor's office (25.4%) or at the Needle Exchange (22.5%) (See Table 5.2). In the 2012 survey, 94.7% of Aboriginal participants reported they were under a doctor's care for HIV and 68.4% were taking HIV medications. 100% of non-Aboriginal participants were under a doctor's care and 75% were taking HIV medications (See Table 5.9). Participants who were aware they were HIV+ but were not taking prescribed HIV medications listed multiple reasons why they were not receiving treatment at the time of the survey (See Table 5.10).

11. HEPATITIS C PREVALENCE: The Hepatitis C (HCV) prevalence in the entire sample for 2012 PG I-Track was: $93/143 = 65\%$. There was negligible difference between Aboriginal and non-Aboriginal prevalence: 65.4% ($65/101$) and 66.7% ($28/42$) respectively (See Table 6.2). Of those Aboriginal participants that had HCV+ blood samples, 11 were unaware they were HCV+. Of the non-Aboriginal participants that had HCV+ blood samples, 5 were unaware they were HCV+ (See Table 6.3).

12. HCV TESTING AND TREATMENT: In the 2012 survey, 92.5% of the Aboriginal participants and 81.4% of the non-Aboriginal participants reported they had at some time been tested for HCV (See Table 6.1). Of those Aboriginal participants who were aware they were HCV+, only 17.5% had received doctor's care in the past year. Of those non-Aboriginal participants who were aware they were HCV+, only 48% had received doctor's care in the past year. No HCV+ participants were currently taking medications for HCV (See Table 6.5).



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Introduction

In addressing the HIV epidemic in Canada, the I-Track: Enhanced Surveillance of HIV/AIDS Risk Behaviours among People who Inject Drugs has been implemented as a component of the *Federal Initiative to Address HIV/AIDS in Canada*. This Public Health Agency of Canada (PHAC) initiative was designed to monitor risk behaviours and HIV and hepatitis C (HCV) infection among people who inject drugs (IDU) in Canada. The objectives of this national enhanced surveillance system is to identify trends and changing patterns in drug injection and related HIV/AIDS risk behaviours in sentinel sites across Canada. The Prince George site was one of 10 sites across Canada participating in Phase 2 of the I-Track survey (2005-2008). In 2012, Phase 3 of the I-Track survey was conducted in Prince George.

The Prince George 2008 and 2012 I-Track Surveys follow an extensive body of research on injection drug use practices in British Columbia. Prior to 2008, almost all of the research had occurred in Vancouver, and it primarily examined patterns associated with injection drug use behaviour in the Downtown Eastside of Vancouver. The Vancouver Injection Drug Use Survey (VIDUS) has produced some of the most impressive research in North America on this topic. In particular, VIDUS-based research showed high levels of HIV and hepatitis C infection among IDU in Vancouver. Also, this study showed that Aboriginal IDU acquired HIV at twice the rate as compared to non-Aboriginal IDU (Tyndall et al., 2003).

The Cedar Project was launched as a prospective cohort study of self-reported Aboriginal youth aged 14-30yrs living in Vancouver or Prince George who use illicit drugs (Spittal et al., 2007). Research conducted between 2003-2007 revealed increased incidence and prevalence of HIV and HCV among its participants. Furthermore, this cohort of youth identified multiple psycho-social factors associated with injection drug use and the transition to injection drug use (Spittal et al., 2012). Based on these findings, a need was identified to further assess HIV infection and associated risk behaviours among both Aboriginal and non-Aboriginal IDUs in the Prince George area. The 2008 and 2012 Prince George I-Track surveys compliment the Cedar Project research. The two projects focus on HIV and HCV prevalence and injection drug use, but they also focus on different age groups. Together they provide more comprehensive knowledge and understanding of the risk behaviors and transmission of infectious disease among IDUs in Prince George.



Methods

Survey design

The design was an anonymous cross-sectional survey of people who inject drugs (IDU) in Prince George.

Eligibility criteria

In order to be considered eligible to participate in the survey the person had to meet the following criteria:

- had injected drugs for non-therapeutic purposes in the previous 6 months;
- had an age of 16 years or older;
- appeared, in the interviewer's judgment, to be capable of giving informed consent;
- was able to understand either English or French; and
- had not already participated in the current survey round.

Sample size

There were 150 participants, recruited primarily from the Prince George Needle Exchange Program. Six individuals completed the interview but did not want to provide a finger prick blood sample. As a result, 144 individuals were available for analyses involving lab-confirmed HIV results. One participant did not provide a sufficient blood sample for HCV testing, so only 143 individuals were available for analyses involving lab-confirmed HCV testing.

Survey staff and training

A site coordinator and 3 interviewers were hired by the Northern BC Aboriginal HIV/AIDS Coalition and the Northern Health Authority. The site coordinator and interviewers had experience working with IDU populations. Survey staff was trained in all aspects of the survey protocol, including ethics, questionnaire administration, routine practices for infection control, dried blood specimen (DBS) collection technique, awareness of and sensitivity to IDU culture/language, and debriefing session content. Site-specific safety and security issues were discussed with interviewers.

Sampling and recruitment

Sampling and recruitment strategies were restricted by the constraints of time, budget, and access to populations. Venue-based sampling through the Prince George needle exchange program (NEP) site offered a suitable opportunity for recruitment because of high reported rates of NEP use by IDU in Prince George.

Several different strategies were used to recruit participants throughout the survey period. Distinctive posters that advertised the survey were displayed at the Prince George NEP. Staff involved in NEP services promoted the survey to their clients and directly solicited IDU clients attending the downtown needle exchange site to participate in the study. Participants also reported learning about the survey through their peers.

Data collection

Data was collected through an interview-administered questionnaire and a finger prick blood sample which was tested for HIV and HCV. At the beginning of each interview, participants provided 3 initials and date of birth (DOB) which was then changed into a computer-generated encrypted code.



Interview staff and/or NEP staff screened potential candidates as to their eligibility for participation in the survey. Candidates were given a survey information sheet outlining what the survey entailed, which emphasized the confidential and voluntary aspects of the survey. Those candidates who were interested and eligible for participation were interviewed immediately when possible or were asked to return at a later time to complete the interview. The interviewer administered the questionnaire.

The questionnaire also contained 34 of Prince George specific questions which were designed in collaboration with the Northern Health Authority and the Northern BC Aboriginal HIV/AIDS Coalition. Individuals were compensated for their time and effort in participating in the survey.

HIV testing: biological sample collection

After completion of the interview and debriefing, consenting participants provided a finger-prick blood sample that was collected on a cotton-fibre based paper product designed for the collection of body fluids. The quality of the sample was improved by selecting a fingertip on the non-dominant hand, which was not callused. The area was cleaned with an alcohol swab, and a micro lancet was then used to puncture the swabbed area. The sample card was filled by blood-flow, and the puncture site was covered with a bandage. Filter papers were labeled by the interviewer with a unique study code that corresponded to the code on the completed questionnaire. After standard procedures for diagnostic specimens had been conducted, dried blood spot (DBS) cards were shipped to the National HIV and Retrovirology Laboratories in Ottawa for testing. DBS cards were tested for HIV using enzyme immuno-assay (EIA), and the results of reactive samples were confirmed with Western Blot.



Results: I-Track 2008 and 2012 – Tables

Section 1: Demographic characteristics of participants

Table 1.1: Demographic characteristics of participants – All phases

Demographic	Prince George 2008 %	Prince George 2012 %
Age Group		
17-29 yrs	19.1	17.3
30-39 yrs	32.5	28.7
40-49 yrs	35.7	32.7
50+ yrs	11.5	21.3
Total	100	100
Average yrs (range)	38.8	40.2 (16-65)
Gender		
Male	50.3	46.7
Female	49	52
Transgender/Other*	0.7	1.3
Total	100	100
Ethnicity		
Non-Aboriginal	40.1	28.7
Aboriginal	59.9	71.3
Total	100	100
Education		
Less than high school	85.2	78.7
High school or greater	14.8	22.3
Total	100	100
Current place of residence		
House or Apartment	35.1	46.0
Shelter/Hostel	34.4	22.7
Parents/Relatives/Friends	12.7	18.0
Other**	17.8	13.3
Total		100

* For the purpose of 2012 gender-divided analyses, the Trans individual was included with the group of identification (female), while an individual reporting 'other' was included in their sex at birth (male). This was done to protect their anonymity.

**Other includes Hotel/Motel, Rooming/Boarding house, Transition/Halfway house, Drug treatment facility, Public place, Vehicle, Street/Squats, and 'Don't know' reports (2 each Phase).



Table 1.2: City of residence – All phases

	Prince George 2008 %	Prince George 2012 %
Current Resident of Prince George	92.4	98.7
Lived in another city or community within 6 months	41.4	18

Table 1.3: All places lived in the previous 6 months – All phases

This table was generated from the question: In the past 6 months, what types of places have you lived in? A specific list of places was then read to the participants and positive responses were recorded.

	Prince George 2008 %	Prince George 2012 %
Friend's place	26.1	28
Hotel/motel room	26.1	17.3
Jail/prison/corrections	12.1	11.3
Other relative's house	12.7	17.3
Own house/apartment	52.9	64.7
Parent's house	10.2	12.7
Recovery house/psychiatric institutions	11.5	0.7
Rooming/boarding house	10.2	6.7
Shelter/hostel	50.3	49.3
Streets/Squats	33.1	9.3
Transition house	5.7	12.0
Others	7.0	6.0



Table 1.4: Number of places in past 6 months – by Aboriginal status

The responses to the previous question were then divided based on Aboriginal status and presented in this table.

	Aboriginal	Non-Aboriginal
Lived in more than one city in past 6 months	23.4% Yes	4.7% Yes
Lived in more than one type of place in past 6 months (see above for list)	70.1%	55.8%
Average number of types of place lived in past 6 months (range)	2.60 (1-9)	1.89 (1-4)

Table 1.5: Monthly income

This table was generated from the question: How much money do you usually make in one month? This includes both legal and illegal ways you got your money.

	Prince George 2008 %	Prince George 2012 %
Overall Income over \$2000	-	22%

Table 1.6: Method of income

This table was generated from the question: Over the last year, what was the main way you got your money to live? This includes both legal and illegal ways you got your money.

Main Source of Income	Prince George 2008	Prince George 2012
Year round regular work	-	6%
Seasonal work	-	4.7%
Social Assistance	-	22.7%
Disability	-	29.3%
Sex Work	-	14.0%
Crime/Theft	-	8%
Selling Drugs	-	4.7%
Other*	-	10.6%

* Other includes Pension, EI, Family/Friends, Panhandling, and misc.



Section 2: Injection Practices:

Table 2.1: Age at first injection – Male – All phases

This table was generated from the question: How old were you the first time you injected drugs (shot up, fixed) for non-medicinal purposes? This includes self-injection or injection by someone else.

	Prince George 2008 %	Prince George 2012 %
First Injection at 16 or younger	24.1	21.1
First Injection older than 16	75.9	78.9
Total	100	100

Table 2.2: Age at first injection – Female – All phases

This table was generated from the question: How old were you the first time you injected drugs (shot up, fixed) for non-medicinal purposes? This includes self-injection or injection by someone else.

	Prince George 2008 %	Prince George 2012 %
First Injection at 16 or younger	27.3	30.4
First Injection older than 16	72.7	64.6
Missing	0	5.1
Total	100	100



Table 2.3: People with whom the participants reported injecting in the past 6 months – All phases

This table was generated from the question: In the past 6 months, of the following categories, with who did you inject drugs (shoot up, fix)?

	Prince George 2008 %	Prince George 2012 %
Close friend(s)	36.3	54.7
Family	3.8	13.3
People I don't know at all	5.1	6.0
People I don't know well	13.4	12.0
Regular sex partner(s)	28.7	32.7
Casual sex partner(s)	-	14.0
Client sex partner(s)	-	8.7
No one: you injected by yourself	51.0	72.7

Table 2.4: People with whom the participants reported injecting most often in the past 6 months – All phases

This table was generated from the question: In the past 6 months, of the following categories, with who did you inject most often?

	Prince George 2008 %	Prince George 2012 %
Close friend(s)	22.9	24.7
Family	3.8	5.3
People I don't know at all	0.6	0
People I don't know well	5.7	1.3
Regular sex partner	21.7	20.7
Casual sex partner	-	2.7
Client sex partner	-	2.7
No one	43.3	42.0



Table 2.5: Frequency of injection in the previous month – All phases

This table was generated from the question: In the past month, how often did you inject drugs?

	Prince George 2008 %	Prince George 2012 %
Did not inject	8.9	17.3
Every day	26.1	28.7
Once in a while, not every week	25.5	34.7
Regularly, once or twice a week	20.4	14.7
Regularly, three or more times per week	17.2	4.7
Missing/Refused	1.9	-
Total	100	100

Table 2.6: Most common place where injecting took place in the previous 6 months – All phases

This table was generated from the question: In the past 6 months, where were you when you injected drugs?

	Prince George 2008 %	Prince George 2012 %
Friend's place	5.7	19.3
Hotel/motel room	7.0	4.7
Own house/apartment	47.8	46.7
Parent's/relatives house	1.3	5.3
Rooming/boarding house	3.8	0.7
Streets/Public place	30.6	9.3
Vehicle	-	3.3
Shooting gallery/dealer's place	-	3.3
Others	1.3	3.3
Missing	2.5	4



Table 2.7: Drugs most commonly injected in the previous 6 months – All phases

This table was generated from the question: In the past 6 months, which one of these did you inject (shoot up, fix) most often? This question is also about substances that were NOT prescribed to you for injection.

	Prince George 2008 %	Prince George 2012 %
Amphetamine/Methamphetamine	2.0	6.7
Cocaine	70.7	33.3
Crack	2.5	6.7
Dilaudid	3.8	6.7
Heroin	2.5	24
Morphine (non-prescribed)	13.4	14
Morphine (prescribed)	3.2	4.0
Other*	0.6	4.0
Missing/Refused	1.3	0.6
Total	100	100

* Other includes Heroin + Cocaine, Benzodiazepines, Oxycontin, Methadone (Non-prescribed)



Table 2.8: Drugs most often taken by a non-injecting route in the previous 6 months – All phases

This table was generated from the question: In the past 6 months, which of the following substances did you snort, smoke, eat, drink, or use as a patch (or any other means WITHOUT INJECTING)? Again, this question is about substances that were NOT prescribed to you.

	Prince George 2008 %	Prince George 2012 %
Alcohol	12.1	21.3
Cocaine	19.7	6.0
Crack	45.9	32
Marijuana	5.7	7.3
Morphine (non-prescribed)	3.8	6.7
Methamphetamine	1.3	4.7
Codeine	1.9	6.0
No non-injection drug use	-	4.0
Other*	8.3	11.3
Missing/Refused/Don't know	1.3	0.7

*Other includes Dilaudid, Ecstasy, Heroin, Methadone, Benzodiazepines, Oxycodone, Morphine (prescribed), and Other



Section 3: Patterns of borrowing and lending

Table 3.1: Patterns of borrowing needles/syringes and equipment – All phases

This table was generated from the questions: In the past 6 months, when you injected drugs (shot up, fixed), did you use NEEDLES and/or SYRINGES that had already been used by someone else including your sex partner? AND In the past 6 months, when you injected drugs (shot up, fixed), did you use (read out 'a' through 'f' below) that had already been used by someone else?

	Prince George 2008 %	Prince George 2012 %
Borrowed a needle at all in previous 6 months (2008) or 1 month (2012)	7.6 (Yes)	9.3 (Yes)
Of needle borrowers, borrowed Occasionally/Once	83.3	50.5*
a. Borrowed Water in previous 6 months	17.2	10.7
b. Borrow Filter in previous 6 months	11.5	8.7
c. Borrow Cooker in previous 6 months	21.7	21.3
d. Borrow Tourniquet in previous 6 months	8.3	14.0
e. Borrow Swabs in previous 6 months	7.0	2.0
f. Borrow Acidifier in previous 6 months	5.7	5.3
Borrow Any Equipment in previous 6 months	26.1	30

*In 2012 this question was changed to ask for a specific number of borrowed needles in the past month. This figure represents individuals reporting 1 or 2 needles borrowed.

Table 3.2 – Use of sterile equipment in most recent injection

This table was generated from the question: Did you use a sterile needle and/or syringe the last time you injected drugs (shot up, fixed)? By sterile this means a brand new needle and/or syringe that had not previously been used by anyone, including yourself.

	Prince George 2012 %
No	7.3
Yes, sterile needle only	0.7
Yes, sterile syringe only	0
Yes, both sterile syringe and needle	90.0
Missing/refused	1.3



Table 3.3: Patterns of lending needles/syringes and equipment – All phases

This table was generated from the questions: In the past 6 months, did anyone else use needles and/or syringes that you had already used? This includes your sex partner(s). AND In the past 6 months, did anyone use (read out 'a' through 'f' below) that you had already used?

	Prince George 2008 %	Prince George 2012 %
Lent a needle at all in previous 6 months	12.7 (Yes)	15.3 (Yes)
a. Lent Water in previous 6 months	-	14.7
b. Lent Filter in previous 6 months	-	11.3
c. Lent Cooker in previous 6 months	-	18.7
d. Lent Tourniquet in previous 6 months	-	11.3
e. Lent Swabs in previous 6 months	-	3.3
f. Lent Acidifier in previous 6 months	-	7.3
Lent Any Equipment in previous 6 months	25.5	24.7

Table 3.4: People to whom needles were lent in the past 6 months

This table was generated from the question: In the past 6 months, of the following categories, who used needles and/or syringes that you had already used?

The results below are the responses from the 23 individuals who reported lending needles/syringes.

	Prince George 2012
Regular Sex partner(s)	43.5%
Casual Sex partner(s)	8.7%
Client sex partner(s)	8.7%
Family	8.7%
Friend(s) or people you know well	47.8%
People you don't know well	8.7%
People you don't know at all	8.7%



Section 4: Sex Risk Behaviours: Females and Males

Table 4.1: Females: number of male sex partners in the previous 6 months – All phases

This table was generated from the question: In the past 6 months, how many men have you had sex with? This includes getting and giving vaginal, oral or anal sex.

	Prince George 2008 %	Prince George 2012 %
None	18.2	13.9
1	31.2	27.8
2-5	22.1	22.8
6-20	13.0	13.9
21+	11.7	10.1
Don't know/Refused	3.9	11.4
Total	100	100

Table 4.2: Females: types of male sex partners in the previous 6 months – All phases

This table was generated from the question: In the past 6 months, did you have vaginal, oral or anal sex with a (read 'a' thru 'd') male sex partner?

	Prince George 2008 %	Prince George 2012 %
a. Regular male sex partner	53.2	60.8
b. Casual male sex partner	40.3	31.6
c. Client male sex partner	36.4	51.9
d. Male sex partner of whom you were a client		2.5



Table 4.3: Females: condom use with REGULAR male sex partners during vaginal sex in the previous 6 months – All phases

This table is comprised only of those who had a regular male sex partner and was generated from the question: In the past 6 months, how often did you use condoms during vaginal sex with a regular male sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	39	39.6
Frequently/Usually	4.9	6.3
Sometimes/Occasionally	9.8	6.3
Never	46.3*	45.8
Regular partner but no vaginal sex		-
Missing/Don't know/Refused	-	2.0

* In 2008, 'Never' included those who did not use condoms and those who did not have vaginal sex.

Table 4.4: Females: condom use with REGULAR male sex partners during oral sex in the previous 6 months – All phases

This table is comprised only of those who had a regular male sex partner and was generated from the question: In the past 6 months, how often did you use condoms during oral sex with a regular male sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	36.6	22.9
Frequently/Usually	0	4.2
Sometimes/Occasionally	2.4	16.7
Never	58.3	43.8
Regular partner but no oral sex		12.5
Missing/Don't know/Refused	2.4	0

* In 2008, 'Never' included those who did not use condoms and those who did not have oral sex.

Table 4.5: Females: condom use with REGULAR male sex partners during anal sex in the previous 6 months – All phases

This table is comprised only of those who had a regular male sex partner and was generated from the question: In the past 6 months, how often did you use condoms during anal sex with a regular male sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	26.8	10.4
Frequently/Usually	0	6.2
Sometimes/Occasionally	4.9	4.2
Never	68.3	25.0
Regular partner but no anal sex		54.2
Missing/Don't know/Refused	0	0

* In 2008, 'Never' included those who did not use condoms and those who did not have anal sex.



Table 4.6: Females: condom use with CASUAL male partners during vaginal sex in the previous 6 months – All phases

This table is comprised only of those who had a casual male sex partner and was generated from the question: In the past 6 months, how often did you use condoms during vaginal sex with a casual male sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	67.7	60.0
Usually/Frequently	6.5	16.0
Sometimes/Occasionally	13.0	16.0
Never*	12.9	4.0
Casual partner but no vaginal sex		0
Missing/Don't know/Refused	0	4.0

* In 2008, 'Never' included those who did not use condoms and those who did not have vaginal sex.

Table 4.7: Females: condom use with CASUAL male partners during oral sex in the previous 6 months – All phases

This table is comprised only of those who had a casual male sex partner and was generated from the question: In the past 6 months, how often did you use condoms during oral sex with a casual male sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	58.1	44
Usually/Frequently	3.2	8.0
Sometimes/Occasionally	13	24
Never*	25.9	8.0
Casual partner but no oral sex		8.0
Missing/Don't know/Refused	-	8.0

* In 2008, 'Never' included those who did not use condoms and those who did not have oral sex.

Table 4.8: Females: condom use with CASUAL male partners during anal sex in the previous 6 months – All phases

This table is comprised only of those who had a casual male sex partner and was generated from the question: In the past 6 months, how often did you use condoms during anal sex with a casual male sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	35.5	16
Usually/Frequently	3.2	-
Sometimes/Occasionally	13	20
Never*	48.4	-
Casual partner but no anal sex		60
Missing/Don't know	-	4

* In 2008, 'Never' included those who did not use condoms and those who did not have anal sex.



Table 4.9: Females: condom use with CLIENT male sex partners during vaginal sex in the previous 6 months – All phases

This table is comprised only of those who had a client male sex partner and was generated from the question: In the past 6 months, how often did you use condoms during vaginal sex with a client male sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	71.4	73.2
Frequently/Usually	10.7	9.8
Sometimes/Occasionally	10.7	12.2
Never	7.1	0
Client partner but no vaginal sex		2.4
Missing/Don't know/Refused	0	2.4

* In 2008, 'Never' included those who did not use condoms and those who did not have vaginal sex.

Table 4.10: Females: condom use with CLIENT male sex partners during oral sex in the previous 6 months – All phases

This table is comprised only of those who had a client male sex partner and was generated from the question: In the past 6 months, how often did you use condoms during oral sex with a client male sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	67.9	61.0
Frequently/Usually	10.7	12.2
Sometimes/Occasionally	7.1	14.6
Never	14.3	2.4
Client partner but no oral sex		7.3
Missing/Don't know/Refused	0	2.4

* In 2008, 'Never' included those who did not use condoms and those who did not have oral sex.

Table 4.11: Females: condom use with CLIENT male sex partners during anal sex in the previous 6 months – All phases

This table is comprised only of those who had a client male sex partner and was generated from the question: In the past 6 months, how often did you use condoms during anal sex with a client male sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	32.1	19.5
Frequently/Usually	10.7	4.9
Sometimes/Occasionally	3.6	4.9
Never	53.6	2.4
Client partner but no anal sex		68.3
Missing/Don't know/Refused	0	0

* In 2008, 'Never' included those who did not use condoms and those who did not have anal sex.



Sex Risk Behaviours: Males

Table 4.12: Males: number of male sex partners in the previous 6 months

In 2008 only one individual reported having a male sex partner, and in 2012, only two males reported having a male sex partner.

Table 4.13: Males: number of female sex partners in the previous 6 months – All phases

This table was generated from the question: In the past 6 months, how many women have you had sex with? This includes getting and giving vaginal, oral or anal sex.

	Prince George 2008 %	Prince George 2012 %
None	21.5	16.9
1	48.1	45.1
2-5	21.5	32.4
6-20	6.3	2.8
21+	1.3	1.4
Don't know/Refused	1.3	1.4
Total	100	100

Table 4.14: Males: types of female sex partners in the previous 6 months – All phases

This table was generated from the question: In the past 6 months, did you have vaginal, oral or anal sex with a (read 'A' thru 'D') female sex partner?

	Prince George 2008 %	Prince George 2012 %
Regular female sex partner	54.4	66.2
Casual female sex partner	36.7	39.4
Client female sex partner	2.5	2.8
Buyer female sex partner	-	5.6



Table 4.15: Males: condom use with REGULAR female partners during vaginal sex in the previous 6 months – All phases

This table is comprised only of those who had a regular female sex partner and was generated from the question: In the past 6 months, how often did you use condoms during vaginal sex with a regular female sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	25.6	29.8
Frequently/Usually	2.3	4.3
Sometimes/Occasionally	11.6	8.5
Never	60.5	55.3
Regular partner but no vaginal sex		-
Missing/Don't know/Refused	-	2.1

* In 2008, 'Never' included those who did not use condoms and those who did not have vaginal sex.

Table 4.16: Males: condom use with REGULAR female partners during oral sex in the previous 6 months – All phases

This table is comprised only of those who had a regular female sex partner and was generated from the question: In the past 6 months, how often did you use condoms during oral sex with a regular female sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	18.6	8.5
Frequently/Usually	2.3	2.1
Sometimes/Occasionally	11.7	4.3
Never	67.5	61.7
Regular partner but no oral sex		21.3
Missing/Don't know/Refused	0	2.1

* In 2008, 'Never' included those who did not use condoms and those who did not have oral sex.

Table 4.17: Males: condom use with REGULAR female partners during anal sex in the previous 6 months – All phases

This table is comprised only of those who had a regular female sex partner and was generated from the question: In the past 6 months, how often did you use condoms during anal sex with a regular female sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	9.3	4.3
Frequently/Usually	2.3	-
Sometimes/Occasionally	4.7	-
Never	83.8	25.5
Regular partner but no anal sex		68.1
Missing/Don't know/Refused	0	2.1

* In 2008, 'Never' included those who did not use condoms and those who did not have anal sex.



Table 4.18: Males: condom use with CASUAL female partners during vaginal sex in the previous 6 months – All phases

This table is comprised only of those who had a casual female sex partner and was generated from the question: In the past 6 months, how often did you use condoms during vaginal sex with a casual female sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	55.2	75.0
Frequently/Usually	3.4	7.1
Sometimes/Occasionally	20.7	3.6
Never	13.8	10.7
Casual partner but no vaginal sex		0
Missing/Don't know/Refused	0	3.6

Table 4.19: Males: condom use with CASUAL female partners during oral sex in the previous 6 months – All phases

This table is comprised only of those who had a casual female sex partner and was generated from the question: In the past 6 months, how often did you use condoms during oral sex with a casual female sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	34.5	32.1
Usually/Frequently	3.4	-
Sometimes/Occasionally	20.7	3.6
Never*	41.3	28.6
Casual partner but no oral sex		32.1
Missing/Don't know	-	3.6
Total	100	100

Table 4.20: Males: condom use with CASUAL female partners during anal sex in the previous 6 months – All phases

This table is comprised only of those who had a casual female sex partner and was generated from the question: In the past 6 months, how often did you use condoms during anal sex with a casual female sex partner?

	Prince George 2008 %	Prince George 2012 %
Always	34.5	17.9
Usually/Frequently	-	3.5
Sometimes/Occasionally	10.3	-
Never*	55.2	10.7
Casual partner but no anal sex		67.9
Total	100	100



Section 5: HIV Testing & Care

Table 5.1: Proportion reporting ever been tested for HIV – All phases

This table was generated by the question: Have you ever been tested for HIV?

	Prince George 2008 %	Prince George 2012 %
Yes	90.4	94.7

Table 5.2: Where did your most recent HIV test take place?

This table is comprised only of those who had ever been tested for HIV and was generated by the question: Where was your most recent testing done? This question refers to the location where the test was ordered but not necessarily where the blood was drawn.

	Prince George 2012 %
Doctor's office (GP, specialist, walk-in clinic, etc)	25.4
Hospital / Emergency	10.6
As a research participant (where you received the result)	14.1
Canadian Blood Services	0
Jail or corrections facility	11.3
Needle Exchange Program	22.5
Community health facility (e.g. Native Health Centre)	7.0
Anonymous testing site	0
STI / STD clinic	2.1
Drug treatment facility / organization (e.g. Methadone clinic, detox facility)	1.4
Outreach program	0
Other (specify)	4.9
Missing/Don't know/Refused	0.7



Table 5.3: Type of most recent HIV test

This table is comprised only of those who had ever been tested for HIV and was generated by the question: Was this most recent test a: (read out the list below)?

	Prince George 2012 %
Rapid test only	1.4
Blood test only	82.4
Rapid test and blood test	12.0
Missing/Don't know/Refused	4.2

Table 5.4: When was your most recent HIV test?

This table is comprised only of those who had ever been tested for HIV.

	Prince George 2012 %
Within the past month	13.4
1 to 6 months ago	49.3
7 to 12 months ago	10.6
More than 1 year but up to 2 years ago	8.4
More than 2 years but less than 4 years ago	7.7
4 years ago or more	10.6
Missing/Don't know/Refused	0

Table 5.5: How many times have you been tested in the past 2 years?

This table is comprised only of those who had ever been tested for HIV.

	Prince George 2012
Average number of tests (range)	3.28 (0-24)
Median number of tests	3



Table 5.6: Results of HIV Lab Test (DBS) – All phases

	Prince George 2008	Prince George 2012
Positive	17.9% (27/151)	16.0% (23/144)
Negative	82.1% (124/151)	84.0% (121/144)

* (2008) 4 Prince George respondents did not have enough blood on their sample to complete a HIV test; and 2 people completed the interview but did not want to give a blood sample. (2012) 6 respondents did not provide a DBS.

Table 5.7: HIV Infection by Aboriginal status – All phases

HIV Lab Result*	Prince George 2008		Prince George 2012	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
HIV Positive	22.8% (21/92)	10.3% (6/58)	17.8% (18/101)	11.6% (5/43)
HIV Negative	77.2% (71/92)	89.7% (52/58)	82.2% (83/101)	88.4% (38/43)

*In 2008, one individual, who was HIV negative, did not provide ethnicity information and, as a result, was excluded from this table.

Table 5.8: Proportion aware of HIV status – by Aboriginal status

This table is comprised only of individuals whose DBS tested HIV positive. In terms of absolute numbers, this means 1 non-Aboriginal person and 3 Aboriginal persons were unaware of their HIV+ status.

	Aboriginal	Non-Aboriginal
Aware HIV+	83.3% (15/18)	80% (4/5)
Unaware HIV+	16.7% (3/18)	20% (1/5)



HIV Medical Care

Table 5.9: Proportion under the care of a doctor for HIV

This table is comprised only of individuals who reported HIV+ status and was generated by the question: Are you under the care of a doctor for your HIV? This means a single visit or more to a doctor in the past 6 months for HIV treatment, counseling, testing, etc.

	Prince George 2008 %	Prince George 2012	
		Aboriginal %	Non-Aboriginal %
Doctor's care for HIV	84.2	94.7	100
Taking medication for HIV	10.5	68.4	75

Table 5.10: Why are you not taking prescribed drugs for your HIV?

This table is based on the 7 individuals not taking medication for HIV.

	Prince George 2012 %
You never started because you couldn't afford them	0
You tried taking them and stopped because you could not afford them	0
You tried taking them and stopped because you experienced side effects	14.3
You tried taking them and stopped because it was too complicated or the medications were too difficult to take	14.3
Your doctor has never talked to you about treatment	0
Your doctor said you didn't need them or you were not ready to take them (<i>for other reasons</i>)	42.9
Your doctor said you couldn't take them properly or you were not ready to take them	0
They weren't offered to you	0
You don't qualify to take them based on your insurance policy	0
Your doctor recommended that you interrupt your treatment (<i>because of side effects, other illness, travel restrictions or surgery</i>)	0
You don't think you need them	0
Other (specify)	28.7

The two 'other' responses were: "I don't care", and "Stopped for a period of time due to Alcohol consumption".



Section 6: HCV Testing & Care

Table 6.1: Proportion reporting ever been tested for HCV – by Aboriginal status

This table was generated by the questions: Have you ever been tested for hepatitis C? AND Have you ever been told by a health professional (e.g., doctor or nurse) that you have or had a hepatitis C infection?

	Prince George 2012	
	Aboriginal	Non-Aboriginal
Tested for HCV	92.5%	81.4%
Ever told HCV+ by doctor	53.3%	58.1%

Table 6.2: HCV Infection Lab Test (DBS) by Aboriginal status

HCV Lab Result*	Prince George 2012	
	Aboriginal	Non-Aboriginal
HCV Positive	65.4% (65/101)	66.7% (28/42)
HCV Negative	34.6% (36/101)	33.3% (14/42)

* Six respondents did not provide a DBS and one sample had insufficient quantity for HCV testing.

Table 6.3: Proportion aware of HCV status – by Aboriginal status

This table is comprised only of individuals whose DBS tested HCV positive. In terms of absolute numbers, this table indicates that 11 Aboriginal persons and 5 non-Aboriginal persons were unaware of their HCV+ status.

	Aboriginal	Non-Aboriginal
Aware HCV+ *	83.1% (54/65)	82.1% (23/28)
Unaware HCV+*	16.9% (11/65)	17.9% (5/28)

*Those who answered reported they had been told they were HCV+ by medical personnel were classified as Aware. Those who did not, or who had never been tested, were classified as Unaware.

Table 6.4: Number of times tested for HCV in the past 2 years

	Prince George 2012
This table is comprised only of those who had ever been tested for HCV and was generated by the question: How many times were you tested for hepatitis C in the past 2 years? This refers to diagnostic tests only. This does not include follow-up tests such as those used to monitor liver function.	
Average number of tests (range)	3.35 (0-24)



HCV Medical Care

Table 6.5: Doctor’s care and medication for HCV – by Aboriginal status

This table is comprised only of individuals who reported HCV+ status.

	Prince George 2012	
	Aboriginal %	Non-Aboriginal %
Doctor’s care for HCV in past year	17.5	48
Currently HCV Infected	76.6	68.7
Ever prescribed medication for HCV	17.5	2.3
Currently taking HCV medication	0	0

The most common reasons for not currently taking HCV medication were: “You are cured or you have completed your treatment regime” and “Your doctor has never talked to you about treatment.”

Other STI/STD

Table 6.6: Have you ever been told by a health professional that you had other STI/STDs – by Aboriginal status

	Prince George 2012	
	Aboriginal %	Non-Aboriginal %
Any STI (excluding HIV/HCV)	40.2	23.3
Chlamydia	26.2	16.3
Gonorrhea	15.9	2.3
Syphilis	4.7	4.7
Human papillomavirus (HPV)	4.7	4.7
Genital Herpes (Herpes Simplex Virus)	4.7	0
Oral Herpes (Herpes Simplex Virus)	2.8	2.3
Other STI (specify)	5.6	0



Section 7: Prince George Specific Questions

Aboriginal status and residential school history

Out of the 107 Aboriginal respondents, 25 (23%) identified as Metis, 77 (72%) as First Nations, and 5 (5%) as Other Aboriginal. Nine individuals (8%) reported they live on a Reserve. Seventy (91%) of the First Nations individuals reported official Status.

Seventy-one individuals (66%) were raised by at least one person who attended a residential school.

Foster care

Sixty-six (44%) individuals reported having been in foster care, with an average of 6.9 years in care (range 1-19). Seven refused to answer how long they were in care.

Table 7.1: Use of Prince George shelters

	Prince George 2008	Prince George 2012
Used a Shelter in past 6 months	-	81 (54%) Yes
Days spent in a shelter in past 6 months, mean (range)	-	45 (1-200)
Denied access to a Shelter in the past 6 months*	42 (26.8%) Yes	22 (14.7%) Yes
Average number of days denied (range)	24.3 (1-180)	24.7 (1-180)

* The most common reasons for being denied shelter access were behavioral; in 2012 three individuals reported their not being enough rooms, and 3 were denied access due to drug/alcohol use.

Table 7.2: Impact of crack pipes on injection frequency – All phases

This table is comprised only of respondents who reported crack/cocaine/meth use in the past 6 months and was generated by the question: If you have as many crack pipes as you need for your cocaine use, does the frequency of your daily drug injections...?

	Prince George 2008 %	Prince George 2012 %
Go up	5.6	4.8
Stay about the same	56.3	70.2
Go down	30.3	21.8
Don't know/refused	7.8	3.2



Mobility and IDU

Table 7.3: Travel to Downtown East Side (DES) and risk behaviors

	Prince George 2008	Prince George 2012	
		Aboriginal	Non-Aboriginal
Travelled to DES in last 6 months	12.7% Yes	14% Yes	9.3% Yes
Injected drugs while there	-	60% Yes	50% Yes
If injected, shared equipment while there	-	22% Yes	0% Yes
Sex without a condom while there	-	20% Yes	25% Yes

Table 7.4: Travel to First Nations reserves and risk behaviors

	Prince George 2012	
	Aboriginal	Non-Aboriginal
Travelled to or lived on reserve in last 6 months	25.2% Yes	9.3% Yes
Injected drugs while there	25.9% Yes	50% Yes
If injected, shared equipment while there	0% Yes	0% Yes
Sex without a condom while there	29.6% Yes	50% Yes



Access to Services, Prince George Needle Exchange and Wellness Van

Table 7.5: How easy/difficult was it to get clean needles in the past 6 months?

	Prince George 2012 %
Very easy	72.7
Somewhat easy	18.0
Somewhat difficult	5.3
Very difficult	1.3
Missing/Refused	2.7

Table 7.6: Where do you dispose of your needles most often?*

	Prince George 2012 %
Put in a secure container and throw in garbage	5.3
Return to needle exchange program	67.3
Return to health care facility or pharmacy	0.7
Give them to others to discard	4.7
Put in a drop box	23.3
Put in the garbage	15.3
Dispose of them on streets / parks / alleys or in sewer	2.7
Other (specify)	4.0

*Although the question specified 'most often', participants could check more than one response.



Table 7.7: Use of the Prince George NEP – All phases

This table was generated from the questions: Have you ever used the services of the Prince George needle exchange program (2008)? AND Have you ever used the services of a needle exchange program? This includes mobile outreach and other exchange (2012). The 2012 question does not specifically address the PG Needle Exchange Program.

	Prince George 2008 %	Prince George 2012 %
Used the Prince George NEP	93.6	-
Ever used an NEP	-	98.7
Used an NEP in last 6 months	-	96

Table 7.8: Wellness Van use frequency in last 6 months – All phases

This table was generated from the question: In the past 6 months, how often did you use the services of the Wellness Van (the mobile needle exchange van)?

	Prince George 2008 %	Prince George 2012 %
Never	24.2	24.0
Occasionally, not every week	41.4	44.7
Regularly, once or twice a week	16.6	16.7
Regularly, three or more times per week	8.9	10.7
Daily	7.6	2.7
Don't know/Refused	1.3	1.3



Table 7.9: Why have you not used the PG NEP or Wellness Van?

This table is comprised only of individuals who had not used either the NEP or the Wellness Van in the past 6 months. As is evident from the above two tables, this will be mostly related to the Wellness Van. Respondents could endorse plural reasons.

	Prince George 2012 %
Someone else picks up your supplies	14.7
Supplies are always on hand where you use	20.6
The hours of operation at Prince George Needle Exchange aren't convenient for you	5.9
The hours of operation of the Wellness Van aren't convenient for you	5.9
The location of services isn't convenient for you	5.9
You were concerned about being identified by the police	2.9
You were concerned about being identified by someone else	5.9
You didn't know services existed	11.8
The services available are not accessible to you	8.8
You have transportation or mobility limitations	5.9
Other*	55.8

*The two most commonly reported 'other' responses were: "Always pick up at the fixed site", and "Didn't need to."

Table 7.10: Police relations and IDU

	Prince George 2012
In the past month, have you avoided the NEP because the police might see you?	8% Yes
In the past month, have you been stopped or arrested by the police for carrying drug injecting equipment?*	5.3% Yes
In the past month, were you concerned that the police might stop or arrest you for carrying drug injection equipment?	22.7% Yes
In the past month, have you had your needles or pipes taken away by the police?*	15.3% Yes
In the past month, have you rushed or hurried your usual routine for injecting drugs?	36.7% Yes
Of those who rushed, Were you concerned you might get stopped or arrested by the police?	38.2% Yes

*Note that more respondents had equipment taken by the police than reported being stopped or arrested.



Medical Services and Access

Table 7.11: Emergency room or hospital usage within previous 6 months – All phases

	Prince George 2008	Prince George 2012
Emergency Room or hospital admittance	53.5% Yes	44.7% Yes
Average number of times admitted (range)	-	2.27 (1-8)
Out of those admitted,		
Were you seen for Overdose?	-	7.7%
Were you seen for Trauma?	-	9.2%
Were you seen for Chest pain?	-	9.2%
Were you seen for Infection?	-	23.0%
Were you seen for IV antibiotics?	-	7.7%
Were you seen for [other]?	-	69.2%

Table 7.12: Participants with family doctors – All phases

	Prince George 2008 %	Prince George 2012 %
Do you have a family doctor?	68.2% (Yes)	-
Do you have a doctor to look after your medical needs?	-	76% (Yes)
If no, why not? (Check all that apply)		
You couldn't find a doctor taking new patients	-	37.5
You are on a waiting list for an appointment	-	6.3
The walk-in clinic is too far away	-	0
Your doctor retired or left town or passed away	-	9.4
You just moved to Prince George	-	12.5
You are just visiting Prince George	-	0
You stopped going because of missed appointment fees	-	0
Other*	-	46.9

*The two most commonly reported 'other' responses were "Don't need one" and "Don't want one."



Table 7.13: Difficulty accessing services – by Aboriginal status

This table was generated from the question: In the past 6 months, have you tried to get any of these types of help for your drug use but were unable to?

	Prince George 2012	
	Aboriginal	Non-Aboriginal
Alcohol or drug counseling	7.5%	4.7%
Self help groups	3.7%	0%
Traditional healer	1.9%	0%
Methadone maintenance	5.6%	0%
Detoxification	17.8%	9.3%
Residential rehab	1.9%	7%
Other*	8.4%	20.9%

*The most common 'Other' among both Aboriginal and non-Aboriginal respondents was 'Able to access all services'.

Table 7.14: Services accessed within the past 12 months – by Aboriginal status

This table was generated from the question: Have you accessed (used) any of the following clinics or community health centres in the past 12 months for any medical attention, health information or to take part in a program?

	Prince George 2012	
	Aboriginal	Non-Aboriginal
Hospitals		
University Hospital of Northern BC	59.8%	81.4%
Other hospital(s)	3.7%	7.0%
Used a hospital, but don't know the name	0.9%	0%
Used a hospital, but refused to provide the name	0%	0%
Medical clinics or Walk-in Clinics		
Walk-in clinic	12.1%	7.0%
Central Interior Native Health	57.0%	23.3%
Nechako Medical Centre (at Spruceland Mall)	15.0%	23.3%
First Nation Health Clinic on reserve	2.8%	0%
Other Medical clinic or Walk-in clinic	4.7%	4.7%
Used a medical clinic but don't know the name	0.9%	2.3%
Used a medical clinic but refused to provide the name	1.9%	0%
Community Health Centres		
Community Health Centre(s)	4.7%	0%
Used a Community Health Centre but don't know the name	2.8%	2.3%
Used a Community Health Centre but refused to provide the name	0%	0%



Community drop-in centres		
Hadih House	15.0%	14.0%
Christian Life Centre	53.3%	60.5%
The Fire Pit	74.8%	62.8%
Other Community drop-in centre(s)	47.7%	51.2%
Used a Community drop-in centre but don't know the name	0%	2.3%
Used a Community drop-in centre but refused to provide the name	0%	0%
Detox or Drug treatment facility		
Prince George Detox Unit	20.6%	23.3%
Nechako Treatment Centre	5.6%	2.3%
Other Detox or Drug treatment facilities)	6.5%	4.7%
Used a Detox or Drug treatment facility but don't know the name	0.9%	0%
Used a Detox or Drug treatment facility but refused to provide the name	0.9%	0%
Needle exchange or Harm reduction service		
Prince George AIDS Prevention / Needle Exchange	96.3%	90.7%
Wellness Van	75.7%	69.8%
InSite: Vancouver's Supervised Injection Site	3.7%	4.7%
Other Needle exchange(s) or Harm reduction service(s)	2.8%	7.0%
Used a Needle exchange or Harm reduction service but don't know the name	0.9%	2.3%
Used a Needle exchange or Harm reduction service but refused to provide the name	0%	2.3%
Mental Health and Addictions Centre		
Northern Health Addiction Services	8.4%	11.6%
Northern Health Mental Health Services	11.2%	14.0%
Central Interior Native Health	17.8%	4.7%
Prince George Native Friendship Centre	7.5%	11.6%
Other Mental Health and Addictions Centre(s)	7.5%	7.0%
Used a Mental Health and Addictions Centre but don't know the name	0%	2.3%
Used a Mental Health and Addictions Centre but refused to provide the name	0.9%	0%
Sexual Health Centre or Facility		
Health Unit STI Services	6.5%	2.3%
Health Unit OPT Clinic	0.9%	0%
Prince George Needle Exchange	24.3%	7.0%



Other Sexual Health Centre(s) or Facilities)	4.7%	2.3%
Used a Sexual Health Centre or Facility but don't know the name	2.8%	0%
Used a Sexual Health Centre or Facility but refused to provide the name	0%	0%
Culturally-based services		
Multicultural Centre	1.9%	2.3%
Traditional Healer	3.7%	0%
Other Culturally-based service	3.7%	7.0%
Used a Culturally-based service but don't know the name	0.9%	0%
Used a Culturally-based service but refused to provide the name	0%	0%
Any options not already listed		
Other	3.7%	4.7%
Used an option not already listed, but don't know the name	0%	0%
Used an option not already listed, but refused to provide the name	0%	0%



Section 8: Risk Behaviours and HIV

Table 8.1: Knowledge and attitudes around risk behaviors – by Aboriginal status

Can having sex with only one, faithful, uninfected partner reduce the risk of HIV transmission?	Prince George 2012	
	Aboriginal	Non-Aboriginal
Yes	70.1%	88.4%
No	18.7%	4.7%
Don't know	5.6%	4.7%
Missing/Refused	5.6%	2.3%
Can using condoms reduce the risk of HIV transmission?	Prince George 2012	
	Aboriginal	Non-Aboriginal
Yes	86.9%	95.3%
No	7.5%	2.3%
Don't know	2.8%	0%
Missing/Refused	2.8%	2.3%
Can a healthy looking person have HIV?	Prince George 2012	
	Aboriginal	Non-Aboriginal
Yes	91.6%	95.3%
No	2.8%	0%
Don't know	2.8%	2.3%
Missing/Refused	2.8%	2.3%
Can a person get HIV from mosquito bites?	Prince George 2012	
	Aboriginal	Non-Aboriginal
Yes	10.3%	18.6%
No	65.4%	51.2%
Don't know	20.6%	27.9%
Missing/Refused	3.7%	2.3%
Can a person get HIV by sharing a meal with someone who is infected?	Prince George 2012	
	Aboriginal	Non-Aboriginal
Yes	9.3%	9.3%
No	75.7%	74.4%
Don't know	11.2%	14.0%
Missing/Refused	3.7%	2.3%
Is there currently a cure for HIV / AIDS?	Prince George 2012	
	Aboriginal	Non-Aboriginal
Yes	7.5%	4.7%
No	77.6%	74.4%
Don't know	11.2%	18.6%
Missing/Refused	3.7%	2.3%



Discussion and Talking Points

1. Unstable Housing and Homelessness

The 2008 and 2012 I-Track data reflects persistently high levels of homelessness among IDUs in Prince George. Approximately 70% of Aboriginal participants and 56% of non-Aboriginal participants reported living in multiple locations in the 6 months prior to the 2012 survey. These included: friend's place, hotel/motel room, parent's house, other relative's house, rooming /boarding house, shelter/hostel, jail/prison and transition homes. Furthermore, 65% of all participants reported that they had lived in their own house/apartment during the previous 6 months, but only 46% were currently living in their own house/apartment at the time of the survey. Therefore, in the 6 months prior to the survey, almost 20% of the participants had been displaced for whatever reason from their own house/apartment. The 2012 I-Track data also reflects the ongoing reliance of the IDU population on emergency shelters with 81% of participants reporting they had stayed at a shelter at least once (but on average 45 days) during the past 6 months.

Undoubtedly, there is an ongoing need for long-term stable housing for the IDU population in Prince George. This lack of secure housing may result in increased high-risk drug use and high-risk sexual behaviours. Therefore, addressing the housing issues in Prince George will need to be central to any prevention policies attempting to reduce HIV and HCV incidence and prevalence in the future.

2. Residential Mobility and HIV Prevention Efforts

Increased residential mobility amongst IDUs indicates that the HIV risks associated with injection drug use are not only isolated to Prince George, but can be found in other locations throughout BC. In the 2008 I-Track report, 41% of participants reported that they had lived in another city or community in the 6 months prior to completing the survey. This reported mobility by Prince George IDUs was substantially higher than other major centres such as Victoria (27%) and Edmonton (22%) (VIHA, 2010) and raised concerns about the potential transmission of HIV and HCV by injection drug use and sexual risk behaviours occurring outside of Prince George - especially in vulnerable remote communities in Northern BC.

The 2012 I-Track survey reflects a decrease in the reported mobility of Prince George IDUs between cities and communities, but 18% of participants still reported living outside of Prince George in the 6 months prior to the survey. Furthermore, 23.4% of Aboriginal participants reported living in more than one city or community in the previous 6 months compared with 4.7% of non-Aboriginal participants. Of the Aboriginal participants reporting travel between cities and communities, 14% had travelled to the downtown eastside of Vancouver and 25.2% had travelled to First Nations reserves. Subsequently, 25% of those travelling to First Nations reserves reporting injecting drugs while there and 30% reported having unprotected sex. Based on this data, it appears that residential mobility remains an important factor to consider when planning HIV prevention efforts in First Nations communities and other communities in northern BC.

3. Sexual Risk Behaviours

The I-Track data reveal elevated sexual risk behaviour within the IDU population. This is particularly concerning because according to the BCCDC HIV Annual Report 2011, new incidence of HIV through heterosexual sex has surpassed new incidences by injection drug use since 2008. Furthermore, trend patterns show that the number of new HIV incidence through



injection drug use has been steadily declining since 2007. However, the number of new HIV incidence through heterosexual sex has only been slightly decreasing each year since its peak in 2009.

Both the 2008 and 2012 I-Track data report that sexual behaviors among IDUs continue to be high-risk for infectious disease transmission due to increased reporting of casual and client sex and inconsistent use of condoms. Particularly concerning is the 15% increase in the number of female IDUs who are reporting client sexual partners since 2008, but are not reporting the regular and consistent use of condoms. Apparently, female IDUs are sexually involved with a client population of non-IDUs who are possibly being exposed to HIV and HCV through unprotected heterosexual sex. This data strongly supports the ongoing education campaigns and widespread HIV and HCV testing in the general population.

4. Access to Health Care Services

When comparing the 2008 and 2012 I-Track data, there are several notable improvements regarding access to services for IDUs in Prince George. For example, 76% of participants reported that they had a doctor to look after their medical needs which was an increase of 12% from 2008. Furthermore, HIV treatment showed some astounding improvements with over 80% of participants having been tested in the previous 2 years. Of those who were aware they were HIV+, 100% of non-Aboriginal participants were under the care of a doctor for their HIV and 95% of the Aboriginal participants were also. In the 2008 survey, only 10% of participants who were aware they were HIV+ were receiving HIV medications. However, by 2012, 75% of non-Aboriginal participants and 69% of Aboriginal participants reported they were currently taking HIV medication. This is a significant improvement in the provision and monitoring of HIV care for IDUs in Prince George.

One prominent feature that stands out from the HCV data is that IDUs who are aware they are HCV+ are not receiving follow-up testing, medical care or medication treatment for HCV infections. This begs the question of *why* IDUs are not receiving HCV treatment. Undoubtedly, there are multiple medical, financial and social barriers to IDUs receiving HCV treatment. But it is an open question right now whether the rigid requirements for receiving HCV treatment might be imposing a substantial barrier to care for those populations clearly in need of such services.



References

- British Columbia Centre for Disease Control (2012). *HIV Annual Report 2011*. Retrieved from http://www.bccdc.ca/NR/ronlyres/54BFF7F2-E283-4E72-BF2A-73EC2813F0D1/0/HIV_Annual_Report_2011_20111011.pdf
- Public Health Agency of Canada (2006). *Enhanced Surveillance of Risk Behaviours Among Injection Drug Users in Canada*. Retrieved from <http://www.phac-aspc.gc.ca/i-track/sr-re-1/index-eng.php>
- Spittal PM, Pearce ME, Chavoshi N, Christian WM, Moniruzzaman AK, Teegee M, Schechter, MT. The Cedar Project: high incidence of HCV infections in a longitudinal study of young Aboriginal people who use drugs in two Canadian cities. *BMC Public Health*, 2012, 12:632
- Spittal PM, Craib KJ, Teegee M, Baylis C, Christian WM, Moniruzzaman AK, Schechter MT. The Cedar project: prevalence and correlates of HIV infection among young Aboriginal people who use drugs in two Canadian cities. *International Journal of Circumpolar Health*. 2007 Jun;66(3):226-40.
- Tyndall MW, Currie S, Spittal P, Li K, Wood E, O'Shaughnessy MV, Schechter MT. Intensive injection cocaine use as the primary risk factor in the Vancouver HIV 1 epidemic. *AIDS*. 2003 Apr 11;17(6):887-93. PubMed PMID: 12660536.
- Tyndall MW, Craib KJ, Currie S, Li K, O'Shaughnessy MV, Schechter MT. Impact of HIV infection on mortality in a cohort of injection drug users. *Journal of Acquired Immune Deficiency Syndrome*. 2001 Dec 1;28(4):351-7. PubMed PMID: 11707672.
- Vancouver Island Health Authority (2010). *I-Track 2009 Special Study: Monitoring Trends in the Prevalence of HIV, Hepatitis C and Associated risk behaviours among people who inject drugs in Victoria, BC*.

