



Sexually Transmitted and Blood-Borne Infections and Risk Behaviours Among People Who Inject Drugs in Thunder Bay

FINDINGS FROM THE TRACKS SURVEY OF PEOPLE WHO INJECT DRUGS:
THUNDER BAY SITE, PHASE 5, 2024

MARCH 2025

Land Acknowledgement

The city of Thunder Bay, where the Tracks Thunder Bay research took place, is situated on the traditional lands of Fort William First Nation, signatory to the Robinson Superior Treaty of 1850. Métis contributions to the area are also recognized. Thunder Bay District Health Unit is committed to truth and reconciliation, and striving through our work and partnerships to respect and honour Indigenous Peoples who have cared for the land since time immemorial.



Any questions or feedback about the content within this report or the Tracks survey can be directed to the TBDHU at research@tbdhu.com.

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CONFLICT OF INTEREST DECLARATIONS

All authors state they have no conflict of interest in presenting the material in this report.

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Content Warning: *The following information is related to the social and health impacts of people who inject drugs. This content may be difficult to read. We honour the individuals who are represented in these data and acknowledge the hardships experienced by their families, friends, and communities.*

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About the National Tracks Survey of People Who Inject Drugs in Canada

WHAT?

The Tracks Survey is a National Tracks Surveillance System coordinated by the Public Health Agency of Canada (PHAC). Tracks is an ongoing surveillance system that monitors risk behaviours, HIV, hepatitis C, and sexually transmitted and blood borne infections (STBBI) among people who inject drugs (PWID) in Canada. Thunder Bay, Ontario, is one of the sites across Canada that has been included in this broader national surveillance system.

Periodic Tracks surveys take place at select sites across Canada. Thunder Bay has been a Tracks site since Phase 2 (2005–2008). Participants complete an interviewer-administered, cross-sectional survey on sociodemographic data, drug use, sexual behaviours, STBBI testing and treatment, and use of health services. Participants are also asked to provide a biological sample which is tested for HIV (antibodies and RNA), hepatitis C (antibodies and RNA), hepatitis B (antigen), and syphilis (antibodies), by the National Microbiology Laboratory in Winnipeg. In this phase, Thunder Bay participants were offered the option to receive their test results.

WHO?

The target population is people who have injected drugs in the 6 months prior to the interview and meet the minimum age of consent (15 years) according to provincial regulations. Participation is voluntary and anonymous. Participants receive a \$30 honorarium upon completion of a minimum set of questions, regardless of whether they provide a biological sample. At the Thunder Bay site, a Distressed Participant Protocol was also created for interviewers to support participants who may become distressed during the interview due to the sensitivity of the questions, and provide information on available mental health supports and related services.

WHERE AND WHEN?

Survey participants are recruited from sites across Canada with support from local partners and service providers, using venue-based sampling and/or outreach in locations where the target population gathers or accesses services, like harm reduction programs. Surveys are conducted every 3 to 5 years. The pilot survey was conducted from 2002–2003 in 4 sites, followed by 5 phases of data collection: Phase 1 (2003–2005, 7 sites), Phase 2 (2005–2008, 10 sites), Phase 3 (2010–2012, 11 sites), Phase 4 (2017–2019, 14 sites), and Phase 5 (2023–2024, 12 sites). The national Phase 4 report is available on the PHAC website (PHAC, 2020). At the time of this report's publication, Phase 5 national findings are not yet published.

WHY?

Certain risk behaviours, like sharing drug equipment and unprotected sex, contribute to the transmission of STBBI including HIV and hepatitis C among PWID. The ongoing monitoring of risk behaviours among PWID can therefore serve as an early warning system for the spread of STBBI in Canada. In addition, the survey results can help inform and evaluate existing public health responses to HIV, hepatitis C and other STBBI among PWID in Canada.

This Report

This report summarizes key findings from the Tracks survey of PWID, Phase 5 in Thunder Bay, Ontario, conducted in 2024. The total sample included 201 participants (125 males, 76 females), with 176 providing dried blood spot samples (DBS) for testing. Data are shown for the total sample and by sex assigned at birth to allow for comparisons; cell counts were too low to allow for comparisons of data by gender identity. Differences between sex are noted with an asterisk and in text when statistically significant.

The results are presented as frequencies and percentages, with varying denominators (n) based on response rates or built-in survey skip patterns (which direct participants to relevant questions). The varying denominators for the total sample, males, and females are presented in the table for each indicator. Where data in the table contain small cell counts, the results should be interpreted with caution.

A summary of key findings from Tracks Phase 4 (2018–2019) in Thunder Bay is included in this report (Appendix A). Comparisons between Tracks Phase 4 and Phase 5 findings, where possible, are also included in this report (Appendix B) and implications of these can be found within the discussion.

INDIGENOUS DATA

The Tracks Phase 5 survey, created by PHAC for use at 12 sites across Canada, asked participants to report their racial background, with an Indigenous response option.

Indigenous-identifying participants were also asked:

- If they identified as First Nations, Métis, Inuit/Inuk, or another Indigenous group;
- Whether they identified as Two-Spirit for the gender identity question;
- If they spent more time living in a First Nations community (on-reserve) than in the city during the past 12 months;
- If they or their family members attended residential schools; and,
- Whether they had accessed Indigenous health or healing practices when they were sick or needed health advice in the past 12 months.

In recognition of the importance of Indigenous data sovereignty, the TBDHU does not disclose these data in the report. The TBDHU is engaging with Indigenous organizations that serve and lead the Indigenous population in Thunder Bay so these data can be handled and interpreted in a culturally safe and respectful manner. Other Indigenous organizations interested in discussing these findings can contact the project team at research@tbdhu.com.

Findings

SOCIODEMOGRAPHIC DATA, MENTAL HEALTH, AND EXPERIENCES OF STIGMA, DISCRIMINATION, AND PARTNER ABUSE

Table 1. Sociodemographic data, mental health, and experiences of stigma, discrimination, and partner abuse by total and by sex (male and female) - Phase 5 participants (Thunder Bay site)

SOCIODEMOGRAPHIC DATA		TOTAL	MALE	FEMALE
Age in years				
	16-25	4% (9)	***	***
	26-35	37% (75)	35% (44)	41% (31)
	36-45	36% (72)	34% (43)	38% (29)
	46-55	17% (35)	22% (28)	9% (7)
	56-65	5% (10)	***	***
		(n=201)	(n=125)	(n=76)
Sexual orientation				
	Heterosexual or straight	92% (183)	98% (123)*	80% (60)*
	Gay, lesbian, bisexual, two-spirit or other	9% (17)	***	***
		(n=200)	(n=125)	(n=75)
SOCIAL DETERMINANTS OF HEALTH		TOTAL	MALE	FEMALE
Highest level of education				
	Some high school or less	52% (104)	48% (59)	59% (45)
	Finished high school	32% (63)	35% (44)	25% (19)
	More than high school	17% (33)	17% (21)	16% (12)
		(n=200)	(n=124)	(n=76)
Proportion who were unemployed		50% (100)	55% (69)	41% (31)
		(n=200)	(n=125)	(n=75)
Proportion who ever had difficulty making ends meet		93% (187)	92% (115)	95% (72)
		(n=201)	(n=125)	(n=76)
Proportion who have ever experienced homelessness		91% (183)	91% (114)	91% (69)
		(n=201)	(n=125)	(n=76)

RESULTS

Two hundred and one (201) individuals participated in Tracks Phase 5 in Thunder Bay, Ontario. Over half of participants were assigned male sex at birth (62%), and 38% were assigned female sex at birth. Regarding age, the largest proportion of participants were between the ages of 26 and 35 years (37%). The majority of participants identified as heterosexual or straight (92%); however, a significantly higher proportion of males than females self-identified as heterosexual or straight (98% vs. 80%, respectively).

Over half (52%) of participants reported having less than a high school education. Half of participants were unemployed (50%), and 93% reported that they have experienced difficulties making ends meet. Nearly all participants (91%) reported having experienced homelessness at some point in time. Participants reported on the different types of places that they lived in the 6 months prior to the interview: 59% of participants reported living in a shelter or hostel, 53% reported couch surfing or living at multiple residences, and 49% reported living at their own apartment or house. Over three-quarters of participants reported that they had, at some time in their lives, been incarcerated (81%).

Half of participants self-rated their mental health as fair or poor (50%). Over half of participants (59%) reported that they had, at some point in their lives, experienced stigma or discrimination based on their drug use (i.e., how they use drugs). A large proportion of participants, (62%), reported having experienced emotional partner abuse as an adult, over half (55%) of participants reported experiencing physical partner abuse as an adult, and 17% reported experiencing sexual partner abuse as an adult. Female participants reported experiencing sexual partner abuse as adults at significantly higher rates than males (38% of females and 6% of males).

HUMAN IMMUNODEFICIENCY VIRUS (HIV), HEPATITIS C (HCV), HEPATITIS B (HBV) AND SYPHILIS STATUS

Table 2. HIV, HCV, HBV, and syphilis prevalence and status awareness based on testing of biological specimens collected at the time of interview (n=176) by total and by sex (male and female) - Phase 5 participants (Thunder Bay site)

HIV PREVALENCE ^a	TOTAL	MALE	FEMALE
HIV seropositive (Dried blood spot (DBS) results) ^b	3% (6) (n=176)	***	***
HCV PREVALENCE AND AWARENESS OF INFECTION STATUS	TOTAL	MALE	FEMALE
Lifetime history of infection with HCV (DBS positive for HCV antibodies) ^b	56% (98) (n=176)	53% (57) (n=109)	61% (41) (n=67)
Currently infected with HCV (DBS positive for HCV RNA) ^b	10% (18) (n=176)	***	***
Proportion of current HCV+ participants unaware ^c of their infection (among participants who had HCV+ RNA)	72% (13) (n=18)	***	***
HBV PREVALENCE	TOTAL	MALE	FEMALE
HBV seropositive (DBS results) ^b	0% (0) (n=116)	n/a	n/a
SYPHILIS PREVALENCE AND INFECTION STATUS AWARENESS	TOTAL	MALE	FEMALE
Syphilis antibody prevalence (ever) (DBS results) ^b	16% (28) (n=176)	11% (12) (n=109)	24% (16) (n=67)
Proportion of participants unaware ^c of syphilis antibody (ever) status (among participants who had positive syphilis antibodies)	68% (19) (n=28)	50% (6)* (n=12)	81% (13)* (n=16)

Note: Missing, don't know and refused responses were removed prior to calculating percentages. Percentages shown are rounded to the nearest whole number.

^a HIV infection status awareness not reported on due to low cell counts.

^b Among participants who provided a biological sample (DBS) of sufficient quantity for testing.

^c Among participants who tested positive for the infection and who reported their diagnosis for that infection. Participants who reported their last test result was negative and who tested positive based on lab results were classified as being unaware of their positive status.

***Values suppressed due to small cell counts.

*Statistically significant difference (between males and females).



RESULTS

In total, 3% of the participants who provided a biological sample of sufficient quantity for testing were HIV positive. Lifetime exposure to HCV was high – 56% of participants were previously infected with HCV and 10% of participants were currently infected with HCV. It was found that 72% of the participants who tested positive for current HCV infection based on the biological sample provided at the time of interview were unaware of their infection. None of the tested participants were HBV positive. Regarding syphilis, 16% of participants' lab test results were positive for syphilis antibodies. Of the participants with positive syphilis lab tests, a high proportion (68%) were unaware of their lifetime exposure status. There was a statistically significant difference in positive syphilis status awareness between females and males, with 81% of females and 50% of males being unaware of their syphilis status.

TESTING, CARE, AND TREATMENT FOR HIV, HCV, HBV, AND SYPHILIS

Table 3. Testing, care, and treatment for HIV, HCV, HBV, and syphilis by total and by sex (male and female) - Phase 5 participants (Thunder Bay site)

HIV	TOTAL	MALE	FEMALE
Proportion who had ever tested for HIV	95% (182) (n=191)	95% (115) (n=121)	96% (67) (n=70)
Proportion who had tested for HIV in the 12 months prior to the interview	69% (131) (n=191)	66% (80) (n=121)	73% (51) (n=70)
Frequency of HIV testing (among participants who were self-reported HIV-negative)			
Once every six months or more often	33% (57)	37% (41)	26% (16)
Once a year	21% (37)	21% (24)	21% (13)
Once every two years	3% (6)	***	***
Not planned/when needed	43% (74) (n=174)	38% (42) (n=112)	52% (32) (n=62)
Proportion who avoided HIV testing in the 12 months prior to the interview due to fear or concerns about stigma/discrimination	14% (27) (n=196)	11% (14) (n=124)	18% (13) (n=72)
Proportion who were aware of pre-exposure prophylaxis (PrEP)	19% (38) (n=196)	17% (21) (n=124)	24% (17) (n=72)
Proportion who were aware of post-exposure prophylaxis (PEP)	20% (39) (n=196)	20% (25) (n=124)	19% (14) (n=72)

HCV	TOTAL	MALE	FEMALE
Proportion who had ever tested for HCV	93% (177) (n=191)	92% (111) (n=121)	95% (66) (n=70)
Proportion who had tested for HCV in the 12 months prior to the interview	59% (112) (n=191)	56% (68) (n=121)	63% (44) (n=70)
Frequency of HCV testing (among participants who have ever been tested for HCV)			
Once every six months or more often	34% (61)	36% (40)	32% (21)
Once a year	22% (39)	25% (28)	17% (11)
Once every two years	***	***	***
Not planned/when needed	40% (71) (n=177)	34% (38) (n=111)	50% (33) (n=66)
Proportion who have ever taken medications for HCV that were prescribed to them (among participants who self-reported a history of medical diagnosis of HCV infection)	65% (58) (n=89)	70% (39) (n=56)	58% (19) (n=33)
HBV			
	TOTAL	MALE	FEMALE
Proportion who had ever tested for HBV	59% (109) (n=185)	50% (59)* (n=118)	75% (50)* (n=67)
Proportion who had tested for HBV in the 12 months prior to the interview	36% (66) (n=185)	25% (30)* (n=118)	54% (36)* (n=67)
SYPHILIS			
	TOTAL	MALE	FEMALE
Proportion who had ever tested for syphilis	51% (91) (n=178)	45% (52)* (n=116)	63% (39)* (n=62)
Proportion who had tested for syphilis in the 12 months prior to the interview	34% (60) (n=178)	29% (25)* (n=116)	50% (31)* (n=62)

Note: Missing, don't know and refused responses were removed prior to calculating percentages. Percentages shown are rounded to the nearest whole number.

***Values suppressed due to small cell counts.

*Statistically significant difference (between males and females).

RESULTS

Most participants reported that they had, at some point in their lives, been tested for HIV (95%), with over half (69%) reporting they had been tested for HIV in the 12 months prior to the interview. Among participants who were self-reported HIV-negative, one-third (33%) reported that they are tested for HIV once every six months or more often, while 43% reported that they do not plan when they will be tested for HIV or only get tested when they feel it is needed. No significant differences were found between male and female participants with respect to history of HIV testing. It was found that 14% of participants have avoided HIV testing in the 12 months prior to the interview due to fears or concerns about stigma and/or discrimination. Only 19% of participants were aware of pre-exposure prophylaxis (PrEP), and only 20% of participants were aware of post-exposure prophylaxis (PEP).

Most participants reported that they had, at some point in their lives, been tested for HCV (93%), with over half (59%) reporting they had been tested for HCV in the 12 months prior to the interview. Among participants who reported that they have ever been tested for HCV, about one-third (34%) reported that they tested for HCV once every six months or more often, while 40% reported that they do not plan when they will be tested for HCV or only get tested when they feel it is needed. Among participants who self-reported having a lifetime infection with HCV, only 65% reported ever taking medications for HCV that were prescribed to them.

Over half (59%) of participants reported that they had at some point in their lives been tested for HBV. Just over one-third (36%) of participants reported that they had been tested for HBV in the 12 months prior to the interview. A significantly higher proportion of females reported ever testing for HBV compared to males (75% vs. 50%, respectively). Similarly, a higher proportion of females reported testing for HBV in the 12 months prior to the interview compared to males (54% vs. 25%, respectively).

Over half (51%) of participants reported that they have ever tested for syphilis. A significantly higher proportion of females reported ever testing for syphilis compared to males (63% vs. 45%, respectively). Only 34% of participants reported having tested for syphilis in the 12 months prior to the interview. Likewise, a significantly higher proportion of females reported testing for syphilis in the 12 months prior to the interview compared to males (50% vs. 29%, respectively).

DRUG USE AND INJECTING BEHAVIOURS

Table 4. Drug use and injecting behaviours by total and by sex (male and female) - Phase 5 participants (Thunder Bay site)

INJECTION DRUG USE	TOTAL	MALE	FEMALE
Proportion who first injected drugs when they were 16 years or younger	17% (34) (n=201)	15% (19) (n=125)	20% (15) (n=76)
Types of injection drugs used in the 6 months prior to the interview ^a			
Cocaine	84% (167)	84% (105)	83% (62)
Fentanyl	54% (107)	53% (66)	55% (41)
Methamphetamine	33% (66)	30% (37)	39% (29)
Proportion who injected alone in the 6 months prior to the interview	65% (129) (n=200)	66% (83) (n=125)	61% (46) (n=75)
Proportion who did not take any additional safety measures when injecting alone (among participants who have injected alone in the 6 months prior to the interview)	28% (36) (n=129)	25% (21) (n=83)	33% (15) (n=46)
Most commonly reported additional safety measures taken when injecting alone (among participants who have injected alone in the 6 months prior to the interview) ^b			
Took a "test shot" first	47% (61)	47% (39)	48% (22)
Used senses (e.g. taste, touch, sight) to get information about the drug	36% (46)	39% (32)	30% (14)
Asked someone to check in on them	22% (28)	20% (17)	24% (11)
Most commonly reported location of injection in the 6 months prior to the interview ^c			
Family or friend's place	55% (110)	52% (65)	60% (45)
Public place ^d	51% (101)	46% (58)	57% (43)
Own apartment or house	39% (77)	38% (48)	39% (29)
Proportion who had used a sterile needle and syringe at last injection	92% (181) (n=197)	89% (110) (n=123)	96% (71) (n=74)
Proportion who had injected with used needles and/or syringes in the 6 months prior to the interview	7% (14) (n=196)	***	***

INJECTION DRUG USE		TOTAL	MALE	FEMALE
Proportion who had injected with other used injection equipment ^e (excluding needles or syringes) in the 6 months prior to the interview		25% (49)	22% (27)	29% (22)
		(n=199)	(n=124)	(n=75)
Most commonly reported persons with whom participants shared injection equipment ^{e,f}				
	Friend(s) or others they knew well	53% (26)	52% (14)	55% (12)
	Regular sex partner(s)	51% (24)	50% (13)	52% (11)
	Family member(s)	25% (12)	***	***
NON-INJECTION DRUG USE ^g		TOTAL	MALE	FEMALE
Types of non-injection drugs used in the 6 months prior to the interview ^h				
	Crack or freebase	88% (175)	85% (105)	92% (70)
	Cocaine	71% (142)	72% (89)	70% (53)
	Alcohol	57% (114)	56% (69)	59% (45)
Frequency of reusing non-injection drug equipment ⁱ in the 6 months prior to the interview				
	Every time	4% (7)	***	***
	Most of the time	9% (17)	9% (11)	8% (6)
	Sometimes	51% (102)	45% (56)	61% (46)
	Once	8% (15)	***	***
	Never	30% (59)	33% (41)	24% (18)
		(n=200)	(n=124)	(n=76)

OVERDOSE	TOTAL	MALE	FEMALE
Proportion who experienced an overdose in the 6 months prior to the interview	33% (65) (n=196)	31% (37) (n=121)	37% (28) (n=75)
Most commonly reported substances involved in most recent overdose (among participants who overdosed in the 6 months prior to the interview) ^j			
Fentanyl	56% (36)	59% (22)	52% (14)
Other – “down” ^k	28% (18)	16% (6)	44% (12)
Crack or freebase	20% (13)	***	***
Most commonly reported methods of drug use at last overdose (among participants who overdosed in the 6 months prior to the interview) ^l			
Smoking/inhalation	58% (37)	54% (20)	63% (17)
Injection	48% (31)	54% (20)	41% (11)
Most commonly reported locations at most recent overdose (among participants who have overdosed in the 6 months prior to the interview) ^m			
Public place ^d , with other people	32% (20)	36% (13)	27% (7)
Public place ^d , alone	29% (18)	31% (11)	27% (7)
Trap house/shooting gallery	19% (12)	***	***
NALOXONE			
TOTAL			
MALE			
FEMALE			
Proportion who reported overdose/naloxone kits were available in their community (among participants who were aware of naloxone)	100% (196) (n=196)	100% (122) (n=122)	100% (74) (n=74)
Proportion who carried an overdose/naloxone kit (among participants who were aware of naloxone)	60% (118) (n=196)	56% (68) (n=122)	68% (50) (n=74)
Proportion who used an overdose/naloxone kit on anyone in the 6 months prior to the interview (among participants who were aware of naloxone)	52% (101) (n=196)	51% (62) (n=122)	53% (39) (n=74)

Note: Missing, don't know and refused responses were removed prior to calculating percentages. Percentages shown are rounded to the nearest whole number.

***Values suppressed due to small cell counts.

^a Participants recorded all drugs used by injection in the 6 months prior to the interview. The most commonly reported drugs among participants are presented. As participants could select more than one response, the total denominator is not shown.

^b Participants recorded all safety measures taken when injecting alone. The most commonly reported safety measures among participants are presented. As participants could select more than one response, the total denominator is not shown.

^c Participants indicated all locations where they had injected drugs in the 6 months prior to the interview. The most commonly reported locations among participants are presented. As participants could select more than one response, the total denominator is not shown.

^d Public place included street, park, washroom, etc.

^e Other used injection equipment included water, filters, cookers, spoons, tourniquet, ties, swabs and acidifiers.

^f Participants reported all types of people with whom they had shared injection drug equipment. The most commonly reported people are presented. As participants could select more than one response, the total denominator is not shown.

^g Means of consuming drugs without injecting included snorting, eating, drinking, or using as a patch.

^h Participants recorded all drugs used by means other than injection in the 6 months prior to the interview. The most commonly reported drugs among participants are presented. As participants could select more than one response, the total denominator is not shown.

ⁱ Non-injection drug equipment included straws, dollar bills, or pipes.

^j Participants recorded all drugs involved in their most recent overdose in the 6 months prior to the interview. The most commonly reported drugs among participants are presented. As participants could select more than one response, the total denominator is not shown.

^k Down is a street name for a mixture of varying substances but often containing opioids and benzodiazepines.

^l Participants recorded all methods of drug use involved in their most recent overdose in the 6 months prior to the interview. The most commonly reported methods among participants are presented. As participants could select more than one response, the total denominator is not shown.

^m Participants indicated all locations where they had experienced an overdose in the 6 months prior to the interview. The most commonly reported locations among participants are presented. As participants could select more than one response, the total denominator is not shown.

RESULTS

Overall, 17% of all participants reported that they had injected drugs for the first time before the age of 16 years. Participants reported a variety of substances that they had injected in the 6 months prior to the interview. Cocaine was most commonly reported among all participants (84%), followed by fentanyl (54%), and methamphetamine (33%). There were no statistically significant differences between sexes for reporting the injection of these substances.

Almost two-thirds (65%) of participants reported that they had injected alone in the 6 months prior to the interview. Among these participants, 28% reported that they did not take any additional measures when injecting alone, 47% reported taking a “test shot”, 36% used one’s senses (e.g., taste, touch, or smell) to get information about the drug, and 22% asked someone to check in on them.

Participants reported a range of locations where they had injected in the 6 months prior to the interview. The most commonly reported were: a family member’s or friend’s place (55%), public place(s) (51%), and one’s own apartment or house (39%).

Almost all participants reported using a sterile needle and syringe during their last injection (92%). However, 25% of participants reported injecting with other used injection equipment in the last 6 months. The most commonly reported persons with whom participants shared injection equipment with were their friend(s) or others they knew well (53%), their regular sex partner(s) (51%), and/or their family member(s) (25%).

Participants reported a variety of non-injection drugs they had used in the 6 months prior to the interview. Crack or freebase was most commonly reported among participants (88%), followed by cocaine (71%), and alcohol (57%). Over half of participants (51%) reported reusing non-injection drug equipment ‘sometimes’, while 4% of participants reported reusing non-injection drug equipment ‘every time’.

In the 6 months prior to the interview, 33% of participants reported experiencing an overdose. Participants reported a variety of substances involved in their most recent overdose. Fentanyl was most commonly reported among participants who experienced a recent overdose (56%), followed by ‘other substances’ in which ‘down’ was the most common (28%), followed by crack or freebase (20%). Participants reported the method of drug use at their last overdose. The most commonly reported methods were smoking/inhalation (58%) and injection (48%). Participants were also asked to report the location of their most recent overdose. The most commonly reported locations were: a public place with other people (32%), a public place alone (29%), and a trap house/shooting gallery (19%).

All participants reported that they knew naloxone was available in their community (100%), but only 60% carried an overdose/naloxone kit. Over half of participants (52%) had used an overdose/naloxone kit on someone in the 6 months prior to the interview.

SEXUAL RISK BEHAVIOURS

Table 5. Sexual risk behaviours by total and by sex (male and female) – Phase 5 participants (Thunder Bay site)

SEXUAL RISK BEHAVIOURS	TOTAL	MALE	FEMALE
Proportion who had two or more sex partners in the 6 months prior to the interview	49% (62) (n=127)	42% (36) (n=86)	63% (26) (n=41)
Proportion who had been given money, drugs, goods or anything else in exchange for sex (among participants who had sex in the 6 months prior to the interview)	20% (26) (n=132)	***	***
Frequency of drug or substance use during sex or within 2 hours before sex in the 6 months prior to the interview (among participants who had sex in the 6 months prior to the interview)			
Never	12% (15)	8% (7)	18% (8)
Sometimes, but not every time	55% (72)	55% (47)	57% (25)
Always	33% (43) (n=130)	37% (32) (n=86)	25% (11) (n=44)
Most commonly reported strategies used to reduce risk of HIV through sex in the 6 months prior to the interview (among participants who had sex in the 6 months prior to the interview) ^a			
Condoms	60% (75)	51% (42)*	77% (33)*
Reduced partner numbers	34% (42)	33% (27)	35% (15)
Chose same 'HIV status' partner(s)	6% (7)	***	***

Note: Missing, don't know and refused responses were removed prior to calculating percentages. Percentages shown are rounded to the nearest whole number.

*Statistically significant difference (between males and females).

***Values suppressed due to small cell counts.

^a Participants recorded all safe sex strategies they used in the 6 months prior to the interview. The most commonly reported safe sex strategies among participants are presented. As participants could select more than one response, the total denominator is not shown.



RESULTS

Overall, almost half (49%) of participants reported having two or more sex partners in the 6 months prior to the interview. Of participants who reported having had sex in the 6 months prior to the interview, 20% reported being given money, drugs, goods or anything else in exchange for sex. Among participants who reported having had sex in the 6 months prior to the interview, 55% reported 'sometimes, but not every time' and 33% reported 'always' using drugs or substances during sex or within 2 hours before sex in the 6 months prior to the interview. The most common strategies participants reported for reducing risk of HIV through sex in the 6 months prior to the interview were: condom use (60%), which was significantly higher among females compared to males (77% vs. 51%, respectively); reduced sexual partner numbers (34%); and choosing partner(s) with the same HIV status (i.e., serosorting) (6%).

USE OF HEALTH SERVICES

Table 6. Use of health services by total and by sex (male and female) – Phase 5 participants (Thunder Bay site)

HEALTHCARE SERVICES	TOTAL	MALE	FEMALE
Proportion who have a place they usually go to when they are sick or need health advice	64% (125) (n=196)	67% (83) (n=124)	58% (42) (n=72)
Proportion who have a regular healthcare provider	51% (99) (n=193)	50% (61) (n=122)	54% (38) (n=71)
Proportion who have avoided healthcare services due to fears/concerns about stigma or discrimination in the 12 months prior to the interview	35% (68) (n=196)	33% (41) (n=124)	38% (27) (n=72)
Most common types of healthcare accessed ^a			
Hospital emergency rooms	43% (54)	41% (34)	48% (20)
Community health or wellness centres	41% (51)	41% (34)	40% (17)
Walk-in clinics	37% (46)	35% (29)	40% (17)
Proportion who reported use of the following healthcare services in the 12 months prior to the interview ^b			
Drop-in centres for people who use drugs	73% (141)	69% (86)	79% (55)
Needle and syringe distribution programs	68% (132)	66% (82)	71% (50)
Nurse outreach services	43% (83)	39% (48)	50% (35)
Other outreach or mobiles services	36% (70)	35% (43)	39% (27)
Withdrawal management/detox	24% (47)	22% (27)	29% (20)
MENTAL HEALTH SERVICES	TOTAL	MALE	FEMALE
Proportion who reported using mental health counselling services in the 12 months prior to the interview	24% (48) (n=196)	25% (31) (n=124)	24% (17) (n=72)
Proportion who tried to use mental health counselling services in the 12 months prior to the interview, but could not access the services	13% (26) (n=196)	11% (14) (n=124)	17% (12) (n=72)

HARM REDUCTION SERVICES	TOTAL	MALE	FEMALE
Proportion who reported accessing opioid agonist therapy (OAT) in the 12 months prior to the interview (among participants who reported being aware of OAT)	68% (131)	69% (83)	68% (48)
	(n=192)	(n=121)	(n=71)
Barriers encountered when trying to access OAT (among participants who accessed or tried to access OAT in the 12 months prior to the interview) ^c			
No difficulties or barriers	79% (30)	85% (22)	67% (8)
Hours of service	14% (6)	***	***
Proportion who accessed drug checking services (DCS) in the 12 months prior to the interview (among participants who were aware of DCS)	32% (45)	34% (30)	29% (15)
	(n=140)	(n=89)	(n=51)
Barriers encountered when trying to access DCS (among participants who accessed or tried to access the services in the 12 months prior to the interview) ^c			
No difficulties or barriers	79% (30)	85% (22)	67% (8)
Hours of service	14% (6)	***	***
Proportion who accessed safe supply services (SSS) in the 12 months prior to the interview (among participants who reported being aware of SSS)	35% (41)	39% (30)	28% (11)
	(n=118)	(n=78)	(n=40)
Barriers encountered when trying to access SSS (among participants who accessed or tried to access the services in the 12 months prior to the interview) ^c			
No difficulties or barriers	91% (32)	96% (24)	80% (8)
Proportion who accessed supervised injection or consumption sites (SCS) in the 12 months prior to the interview (among participants who reported being aware of SCS)	36% (60)	34% (37)	40% (23)
	(n=167)	(n=109)	(n=58)
Barriers encountered when trying to access SCS (among participants who have accessed or tried to access the services in the 12 months prior to the interview) ^c			
No difficulties or barriers	79% (38)	79% (22)	80% (16)
Hours of service	16% (9)	***	***
Location	11% (6)	***	***

Note: Missing, don't know and refused responses were removed prior to calculating percentages. Percentages shown are rounded to the nearest whole number.

*Statistically significant difference (between males and females).

***Values suppressed due to small cell counts.

^a Participants recorded all types of healthcare they accessed. The most commonly reported types among all participants are presented. As participants could select more than one response, the total denominator is not shown.

^b Participants recorded all healthcare services they accessed in the 12 months prior to the interview. The most commonly reported services among all participants are presented. As participants could select more than one response, the total denominator is not shown.

^c Participants recorded all barriers to accessing this service in the 12 months prior to the interview. The most commonly reported barriers among all participants are presented. Due to low cell counts, most barriers cannot be presented. As participants could select more than one response, the total denominator is not shown.

RESULTS

Nearly two-thirds (64%) of participants reported using healthcare services when they are sick or need health advice, with the most common being hospital emergency rooms (43%), community health or wellness centres (41%), and walk-in clinics (37%). Participants reported using a variety of health services aimed at reducing drug-related harms, including drop-in centres for people who use drugs (73%), needle and syringe distribution programs (68%), nurse outreach services (43%), other outreach or mobile services (36%), and withdrawal management or detox services (24%).

Less than one-quarter (24%) of participants reported using mental health counselling services in the 12 months prior to the interview, and 13% of participants tried to use mental health counselling services, but were unable to access them. Over one-third (35%) of participants reported that in the 12 months prior to the interview, they had avoided healthcare due to fears or concerns about stigma and/or discrimination.

Over two-thirds (68%) of participants reported accessing opioid agonist therapy (OAT) in the 12 months prior to the interview. 79% reported experiencing no barriers to accessing OAT, the proportion of females who reported no barriers was significantly higher than males. The most commonly reported barriers to accessing OAT were location (17%) and hours of service (13%).

Close to one-third (32%) of participants reported accessing drug checking services (DCS) in the 12 months prior to the interview. A large proportion (79%) reported experiencing no barriers to accessing DCS. The most commonly reported barrier reported was hours of service (14%).

Over one-third (35%) of participants reported accessing safe supply services (SSS) in the 12 months prior to the interview. Most (91%) reported experiencing no barriers to accessing SSS.

Over one-third (36%) of participants reported accessing SCS in the 12 months prior to the interview. Over three-quarters (79%) reported experiencing no barriers to accessing SCS. The most commonly reported barriers were hours of service (16%) and location (11%).

Discussion

SOCIODEMOGRAPHICS AND SOCIAL DETERMINANTS OF HEALTH

Understanding the sociodemographic characteristics of participants and their experiences with social determinants of health, including poverty, housing, mental health status, experiences of stigma, discrimination, and partner abuse is essential, as these interconnected factors are often associated with substance use disorders and related harms (Bahji, 2024; Fleury et al., 2014).

Overall, reports of poverty, unemployment, homelessness, transient living situations, and experiences of stigma, discrimination, partner abuse, and incarceration were very high among Tracks Phase 5 Thunder Bay participants. These factors highlight the continued need for investment in targeted programs and services that are effective in reaching people who are systemically oppressed, as well as for interventions that address social determinants of health like income and safe housing and/or shelter options. In addition, experiences of stigma/discrimination and various forms of partner abuse were prevalent among participants, highlighting the importance of mental health services, as well as trauma-informed and culturally safer care.

STBBI TESTING AND PREVALENCE

Overall, testing rates for HIV and HCV were generally high among Tracks Phase 5 participants in Thunder Bay; however, testing rates were lower for HBV and syphilis, especially among males. It is important to note that barriers to accessing services such as testing and treatment among PWID include stigma related to sexuality, STBBI, and substance use (PHAC, 2024). Newer STBBI testing methods include point-of-care and mobile testing availability (e.g., 'pop-up clinics', or through mobile outreach services). These methods help reduce barriers experienced by people who are systemically oppressed and should be continued. Health care providers who engage with PWID should also promote ongoing, routine STBBI testing with these individuals.

Sexually transmitted and blood-borne infections are a key public health issue and disproportionately impact PWID. Further, STBBIs can have substantial negative impacts on health, especially if left undiagnosed or untreated (PHAC, 2024). Overall, the lifetime prevalence of HCV infection was high among Tracks Phase 5 participants in Thunder Bay. A high proportion of participants with a current HCV infection and/or positive syphilis antibodies were unaware of their positive status.

The low testing rate for syphilis, combined with a lack of awareness of positive status among participants who had syphilis antibodies, is of particular concern. Female participants had significantly less awareness of their positive syphilis status than males. Syphilis incidence rates in the Thunder Bay District have rapidly increased in recent years, especially impacting females of child-bearing age (TBDHU, 2024). More investment and efforts are needed to increase syphilis testing specifically among local PWID and particularly among females.

Given that a high proportion of participants had a history of prior or current STBBI, it is also important that public health continues surveillance and monitoring of local STBBIs to track progress and priority populations (specifically PWID). Surveillance systems provide key information about where action is needed to reduce the public health impacts of STBBIs and contribute to monitoring and evaluation of policies and programs (PHAC, 2018).

Since some STBBIs can have little to no symptoms initially, routine and integrated STBBI testing among PWID is essential. Increased testing will promote infection status awareness and limit the spread of infection. Testing provides early detection allowing for a lower risk of complications and transmission, as well as provides an opportunity to link individuals to required health and social support services (PHAC, 2018). These findings highlight the need for continued access to testing and prevention services that are accessible to people who are systemically oppressed.

From Phase 4 to 5, there was a significant increase in HIV testing during the 12 months prior to the interview among Tracks Thunder Bay participants (see Appendix B). This finding shows that local efforts by public health and other health care organizations are having a positive impact on STBBI testing among PWID.

There were also low reports of knowledge of PrEP and PEP among among Phase 5 participants, highlighting the need for education on these and other HIV preventative measures by public health and health care providers.

DRUG USE BEHAVIOURS

Several drug use behaviours increase the risk of substance-related harms, such as STBBI and experiences of overdose. It is important to understand the drug use and injecting risk behaviours of PWID in Thunder Bay to inform harm reduction programming and interventions.

Most Tracks Phase 5 participants had injected alone in the previous 6 months. Injecting alone increases the likelihood of fatal events, by reducing access to life-saving interventions like naloxone (Irvine et al., 2022; Norton et al., 2022). This highlights the need for education and investment in safety measures, such as drug checking services (DCS), overdose prevention smartphone apps like Lifeguard Connect, and supervised consumption sites (SCS).

Supervised consumption sites allow private injection without the risks of overdosing while injecting alone (Ontario HIV Treatment Network (OHTN), 2024). NorWest Community Health Centres has operated an SCS in Thunder Bay since 2018 called Path 525. Path 525 provides a safe place for clients to consume illicit drugs as well as offering safe consumption education, harm reduction supplies and overdose response. Services also include social service navigation to connect clients to the community resources and health supports including housing, mental health and addiction services, and primary health care and more. Due to changes to provincial legislation, Path 525, which is Thunder Bay's only SCS, is anticipated to close in spring 2025. It is likely that after this closure, the proportion of local PWID who inject alone will increase (Law, 2024).

The proportion of participants who had injected at a SCS increased significantly from Phase 4 to 5, likely due to Path 525 opening shortly before Phase 4 took place (see Appendix B). Moreover, the proportion of participants who injected at private residences decreased in Phase 5. This shift from private residences to an SCS is an encouraging finding, as injecting drugs in settings without supervision and readily available medical support and naloxone increases the risk of overdose (OHTN, 2024). An increase in injecting at private residences in the future is expected with the anticipated closure of Path 525.

Regarding reusing drug equipment during the 6 months prior to the interview, the proportion of participants who reused needles and/or syringes remained very low from Tracks Phase 4 to 5, and those who reused non-injection equipment remained high (see Appendix B). An encouraging finding is that the proportion of participants who had reused other injection equipment (for example, water, filters, or cookers) significantly decreased in Tracks Phase 5. Continued efforts to distribute and promote new drug equipment as a method of STBBI prevention are needed to further reduce these rates.

Overall, although some participants reported safe injection and drug use practices, many still reported factors and behaviours that place them at increased risk of STBBI and overdose, including reusing non-injection drug equipment and using drugs in a public place (PHAC, 2024). Using non-sterile, shared, or reused equipment, and injecting in public places increase the risk of STBBI and transmission (CATIE, 2021; Tran et al., 2020). Supervised consumption sites reduce public drug use while helping PWID adopt safer injection practices and access new supplies (OHTN, 2024).

Fentanyl was reported as the substance used most commonly among participants who had a recent overdose. Fentanyl is known to be 20–40 times more potent than heroin and 100 times more potent than morphine, contributing to a very high risk of accidental overdose (Health Canada, 2024). Although fentanyl was not one of the most commonly injected drugs among participants, its use increased significantly, by 1.5 times, from Tracks Phase 4 to Phase 5 (see Appendix B). Increased fentanyl use is likely part of the reason a significant increase was seen in the proportion of participants who had experienced an overdose in the 6 months prior to the interview in Phase 5 (from 22% to 33% of participants). The same trend has been seen in other datasets; compared to the period before the COVID-19 pandemic, during the first two years of the COVID-19 pandemic,

there was a significant increase in the role of fentanyl directly contributing to opioid-related deaths in the Thunder Bay District (Opioid Surveillance and Response Task Force, 2023). Nationally and locally in recent years, fentanyl has often been detected in drugs sold as other substances, for example cocaine/crack, therefore PWID may accidentally use fentanyl (Canadian Centre on Substance Use and Addiction, 2022; TBnewswatch.com, 2023). Interventions like drug checking and safer supply services can save lives by ensuring drug safety. In Ontario, safer supply programs have reduced unregulated drug use, overdoses, ED visits, hospital admissions, and healthcare costs (London Intercommunity Health Centre, 2023). Safer supply and drug checking services are currently provided through Path 525 in Thunder Bay, but in spring 2025 these services will no longer be available, putting current and potential clients at increased risk for overdose.

Inhalation was the most common method of drug use for participants who had a recent overdose. More than half of participants shared non-injection drug equipment at least sometimes. Reports from local community partners indicate that there has been an increase in inhalation/smoking as the preferred method of drug use (Opioid Surveillance and Response Task Force, 2023). It is important to consider this trend when planning prevention and harm reduction programs, for example, ensuring supervised consumption services include smoking/inhalation spaces, and increasing the availability of inhalation supplies.

It is encouraging that all participants knew that naloxone kits were available locally, and that most carried a naloxone kit. From Tracks Phase 4 to 5, the proportion of participants who ever used an overdose or naloxone kit on anyone increased significantly (see Appendix B). In recent years, naloxone has become much more accessible to the public in Ontario and distribution in the Thunder Bay District has significantly increased, which may explain the increase in naloxone use among participants

(Opioid Surveillance and Response Task Force, 2023). This finding demonstrates how increased access to naloxone in the community is contributing to increased use by the public, which can reduce opioid-related mortality. Increased naloxone accessibility is also especially important given the finding that fentanyl use has increased among PWID. It will be important to strengthen naloxone distribution even more with the anticipated closure of Path 525.

SEXUAL RISK BEHAVIOURS

Several sexual behaviours can increase the risk for contracting and transmitting STBBI. These behaviours include but are not limited to: having multiple sex partners, using substances before sex, having sex without the use of barrier protection (e.g., condom), engaging in sex work, and having sex with persons with an STBBI (Cheng et al., 2016; PHAC, 2024). Overall, various sexual risk behaviours were prevalent among Tracks Phase 5 participants in Thunder Bay, Ontario. Specifically, there were notable reports of engaging in sex work, using substances before sex, having multiple sex partners, and a lack of condom use. As such, it is important to prioritize STBBI prevention measures that reach this population.

In addition to increasing access and engagement to STBBI testing, treatment, and care, other prevention measures such as education on safe sex practices, helping individuals understand and minimize their sexual risk behaviours, and providing safer-sex materials such as condoms should be prioritized (PHAC, 2024). Consistent, person-centred care that is rooted in harm reduction principles can prevent STBBI transmission and ultimately provide better quality of life to people at risk for or living with STBBI (PHAC, 2018). As seen in these findings, local PWID are systemically oppressed due to the impact of impact of social determinants of health (SDOH), and this creates barriers to navigating the health care system and trusting health care providers. Health care providers need to be equipped with the knowledge and skills

to provide comprehensive care and support to PWID, and improvements must be made towards linking health and social support for PWID (PHAC, 2024).

HEALTH SERVICE USE

Overall, access to and engagement with primary healthcare services among PWID in Thunder Bay was low. Only half of participants reported having a regular healthcare provider, and the most common type of healthcare accessed was hospital emergency rooms. Primary care visits can provide important opportunities to prevent illness and comorbidities among PWID and reduce the use of emergency department visits for health concerns. There are many factors that contribute to PWID not engaging in healthcare, including stigma and unstable environments. Services that address the SDOH, like housing, can create more stable environments for PWID. Co-location of primary care services with other health services accessed by PWID, like SCS and harm reduction programs, is a facilitator to primary care (CATIE, 2024).

Most participants did report accessing services like drop-in centres for people who use drugs, needle exchange programs, and outreach/mobile services within the 12 months prior to the interview. Usage of harm reduction services such as opioid agonist therapy (OAT), drug checking services (DCS), safe supply services (SSS), and supervised consumption sites (SCS) was high among participants, and most reported experiencing little to no barriers in doing so. Usage of needle and syringe distribution programs significantly decreased between Phase 4 and Phase 5, but this may be due to the shift from injection to inhalation as the preferred mode of drug use in recent years. Since the Phase 4 study was conducted (2018–2019), the number of distribution points for these programs in Thunder Bay have significantly increased with many being co-located with other harm reduction services (e.g., OAT clinics), so participants may not identify all these locations as ‘needle and syringe distribution programs’.

The proportion of participants who used a SCS for health services in the 12 months prior to the interview increased by 2.5 times between Tracks Phase 4 and Phase 5 (see Appendix B), likely due to Path 525 opening shortly before Phase 4 took place. This highlights the importance and value of programs for PWID that are barrier-free, mobile, and based on harm reduction principles. Through these programs, clients are often also assisted with physical and mental health needs, and connected to social services. When Path 525 closes, it can be expected that those who accessed the site for health services will need to seek other venues. Although the site will transition to a Homelessness and Addiction Recovery Treatment Hub (HART Hub), which will provide primary care, mental health services, social services, and employment support, there will be a significant gap in local harm reduction services (Lundmark, 2025).

People who inject drugs often face complex and unmet healthcare needs, leading to disproportionately poor health outcomes (Austin et al., 2022). Engaging with primary healthcare is vital for preventative care, early diagnosis, and management of disease, such as STBBI (Heidari et al., 2023). This engagement can also reduce the burden of emergency department visits for health concerns, which are associated with higher health care costs and a delay in care for patients in urgent need (CATIE, 2024; Mehta et al., 2017).

Addressing negative health outcomes from substance use requires access to healthcare and harm reduction services, including drop-in centres for people who use drugs, needle distribution programs, mental health counselling, outreach services, and detox programs; all of which improve health outcomes and reduce substance-related harms (Substance Abuse and Mental Health Services Administration, 2023). Increasing access and engagement with these services for PWID in Thunder Bay is crucial. Understanding barriers like stigma, transportation, and service hours can help reduce obstacles to care. An integrated, comprehensive approach is needed to meet the specific needs of PWID.

Limitations

There are limitations to the survey that should be taken into consideration when interpreting the results. First, participants were identified through non-random sampling methods. Therefore, the findings may not be representative of all people who inject drugs in Thunder Bay (PHAC, 2020). Second, the findings are based on factors and behaviours that participants chose to self-report to the researchers, which may introduce social desirability and/or recall bias. As such, it is possible that certain risk behaviours may be over- or under-represented, and may not accurately reflect the population studied (PHAC, 2020). Additionally, in recent years, local data suggests that there has been an increase in smoking/inhalation of drugs (Opioid Surveillance and Response Task Force, 2023). As this study includes only people who have injected drugs in the 6 months prior, valuable information in the current context from people who use drugs in a manner other than injection may have been missed.

Conclusions

The findings from Tracks Phase 5 Thunder Bay can help contextualize the epidemiology of STBBI and associated risk behaviours among PWID. These findings have implications for all levels of government, public health, health care providers, and health and social services organizations. Although many of the Tracks Phase 5 Thunder Bay, Ontario participants did report practicing safe sexual and drug use behaviours, many still reported various factors and behaviours that place them at an increased risk of substance-related harms, such as STBBI or overdose (PHAC, 2024). These factors and behaviours include but are not limited to: experiences of unstable housing (i.e., homelessness, incarceration, transient living), infrequent testing for STBBI, high prevalence of HCV and syphilis, engaging in sexual risk behaviours (e.g., having sex with multiple partners, not using a condom, engaging in sex work), and drug use risk behaviours (e.g., injecting alone, injecting in public, sharing/borrowing used equipment). It is crucial that collective efforts are made to address these known risk factors and behaviours among PWID in order to lessen the burden of STBBI and substance-related harms in Thunder Bay.

RECOMMENDATIONS

Based on the findings of this study,

National, provincial, and local governments should prioritize investment in:

- Making existing income supports more generous (e.g., disability support, unemployment benefits, social assistance, and child benefits), and/or establishment of a basic income program to reduce poverty
- Safe, affordable, barrier-free housing and/or shelter options that are supportive and keep people housed who are systemically oppressed and/or shelter options for people who are systemically oppressed
- Mental health services for people who use drugs that provide trauma-informed and culturally-competent care
- Supervised consumption sites, with space for supervised inhalation
- Drug checking services
- Overdose prevention apps (e.g. Lifeguard Connect)
- Safer supply programs
- Naloxone accessibility
- Opioid agonist therapy
- Barrier-free, mobile harm reduction services
- Connecting people who use drugs with primary care providers
- Public education initiatives and/or campaigns that promote anti-stigma approaches and attitudes for people who use drugs

Public health should prioritize:

- Surveillance and monitoring of local STBBI, with enhanced surveillance of priority populations (e.g. PWID) as required, and regular communication of trends with local health care providers
- Promotion of PrEP and PEP for people living with or at risk for HIV
- Point-of-care STBBI testing and testing through mobile/outreach services
- Increased syphilis testing for PWID, particularly females
- Expanded availability of new drug use supplies, including non-injection supplies
- Continued naloxone training and distribution
- Promotion of bystander intervention with naloxone
- Widespread condom and safe sex supply distribution, including through outreach services
- Promotion of condom and/or barrier use
- Comprehensive care and support to people who use drugs through street outreach programming



Healthcare providers should prioritize:

- Supporting service navigation for clients who require supports for housing, social services, and food security
- Routine STBBI testing among clients who use drugs
- Increased education on PrEP and PEP for clients living with or at risk for HIV
- Promotion of condom use and safer sex practices with clients who use drugs
- Comprehensive care and support to clients who use drugs, including linking to social supports

Health and social services organizations should prioritize:

- Point-of-care STBBI testing, and testing through mobile/outreach services
- Continued naloxone training and distribution
- Widespread condom and safe sex supply distribution
- Comprehensive care and support to clients who use drugs, including linking to social supports
- Providing and/or expanding barrier-free, mobile harm reduction services
- Expanded access to drop-in centres for people who use drugs and other outreach services

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Appendix A – Summary of Key Findings – Tracks Thunder Bay Phase 4, 2019

BACKGROUND

Phase 4 of the Tracks survey was conducted at 14 sites across Canada, including Thunder Bay, from 2018–2019. The target population was the same as in Phase 5: people who had injected drugs in the 6 months prior to recruitment and who met the minimum age of consent (15 years). A total of 200 individuals participated in Thunder Bay. Consenting participants completed an interviewer-administered questionnaire covering demographics, drug use and injecting behaviours, sexual behaviours, HIV and HCV testing and treatment history, and use of health services. Participants were also asked to provide a biological sample which was tested for HIV (antibodies) and HCV (antibodies and RNA).

Due to multiple factors, most notably pressures from the COVID-19 pandemic, a report of key findings was not published for Phase 4. This appendix reports some of the key findings from Phase 4 in Thunder Bay. Additional Phase 4 results that were comparable to Phase 5 results are shared in Appendix B.

STIGMA AND DISCRIMINATION

- 72% of participants had experienced stigma or discrimination based on their drug or alcohol use

HIV AND HCV STATUS AND TESTING

- HIV:
 - » 8% of participants who provided a blood sample were HIV seropositive
 - » 50% of participants who were HIV seropositive were unaware of their HIV positive status
 - » 52% of participants were tested for HIV in the 12 months prior to the interview
- HCV:
 - » 23% of participants who provided a sufficient blood sample were previously infected with HCV

- » 31% of participants who provided a sufficient blood sample were currently infected with HCV
- » 36% of participants who were HCV-positive were unaware of their lifetime exposure to HCV
- » 58% of participants were tested for HCV in the 12 months prior to the interview

RISK BEHAVIOURS RELATED TO DRUG USE

- 35% of participants injected with used equipment other than a needle (e.g, cookers, ties, filters) in the 6 months prior to the interview
- 59% of participants reused non-injection drug equipment 'sometimes' or 'every time'
- 49% of participants injected drugs in a public place in the 6 months prior to the interview
- 22% of participants experienced an overdose in the 6 months prior to the interview
- 48% of participants carried an overdose kit (among participants who were aware of naloxone)
- 46% had used an overdose kit on anyone (among participants who were aware of naloxone)

RISK BEHAVIOURS RELATED TO SEXUAL PRACTICES

- 46% of those with at least one sex partner used drugs or substances during sex or within 2 hours before sex, in the 6 months prior to the interview
- 62% of participants who had more than one sex partner used a condom to reduce their risk of HIV infection through sex

USE OF HEALTH SERVICES

- Most common types of health care accessed:
 - » Walk-in clinic: 69%
 - » Hospital emergency room: 68%
 - » Community health or wellness centre: 63%

Appendix B – Comparison of Tracks Thunder Bay Phases 4 and 5 Results

BACKGROUND

Phase 4 of the Tracks survey was conducted in Thunder Bay in 2018-2019. The target population was the same as in Phase 5: people who had injected drugs in the 6 months prior to recruitment and who met the minimum age of consent (15 years). Although many results cannot be compared to Phase 5 due to differences in wording, responses, or the

'universe' of respondents (i.e., the subset of participants eligible to respond to the question), some questions are comparable. This information provides insights into trends among PWID in Thunder Bay. Key comparable findings are presented in this appendix, with implications discussed above in the main report. Significant differences, defined as a p value of ≤ 0.05 , are noted with an asterisk where applicable.

RESULTS – TESTING FOR HIV AND HCV

Table 7. HIV and HCV testing – Phase 4 and Phase 5 participants (Thunder Bay site)

	Phase 4 (2018-2019)	Phase 5 (2023-2024)
Proportion who had tested for HIV in the 12 months prior to the interview	53%*	68%*
Proportion who had tested for HCV in the 12 months prior to the interview	58%	59%

*Indicates a statistically significant difference between Phase 4 and 5.

From Phase 4 to 5, the proportion of participants who had been tested for HIV in the 12 months prior to the interview increased significantly. The proportion who had been tested for HCV in the 12 months prior to the interview was about the same.

DRUG USE AND INJECTING BEHAVIOURS

Table 8. Most common locations where participants injected in the 6 months prior to the interview – Phase 4 and Phase 5 participants (Thunder Bay site)

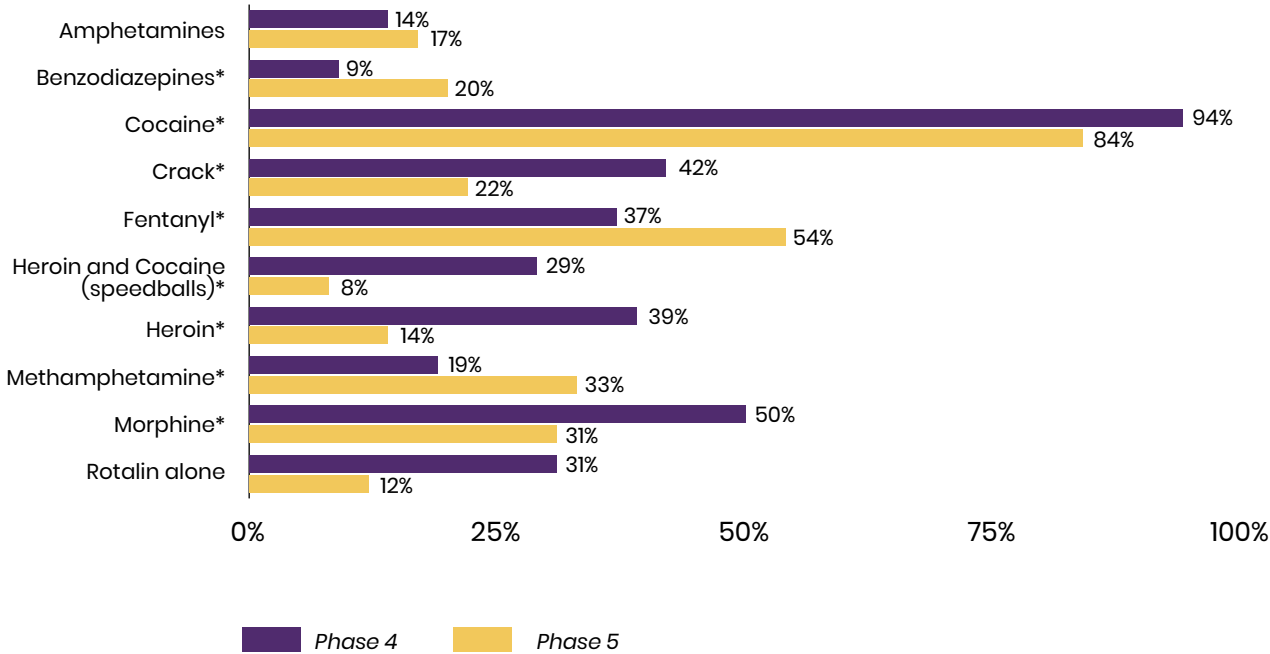
	Phase 4 (2018-2019)	Phase 5 (2023-2024)
Family or friend's place	64%	55%
Own apartment or house	57%*	39%*
Public place ^a	49%	51%
Shooting gallery or trap house	37%	38%
Supervised injection or consumption site	14%*	24%*

*Indicates a statistically significant difference between Phase 4 and 5.

^a includes street, park, washroom, etc.

In the 6 months prior to the interview, the proportion of participants who injected in their own apartment or house decreased significantly from Phase 4 to 5 (57% to 39%). The proportion who had injected at a supervised injection or consumption site increased significantly from 14% to 24%. The proportion who injected at a family or friend’s place, public place, or shooting gallery/trap house remained high but similar across phases.

Figure 1. Injection drugs used by participants in the 6 months prior to the interview; **Phase 4** and **Phase 5**.

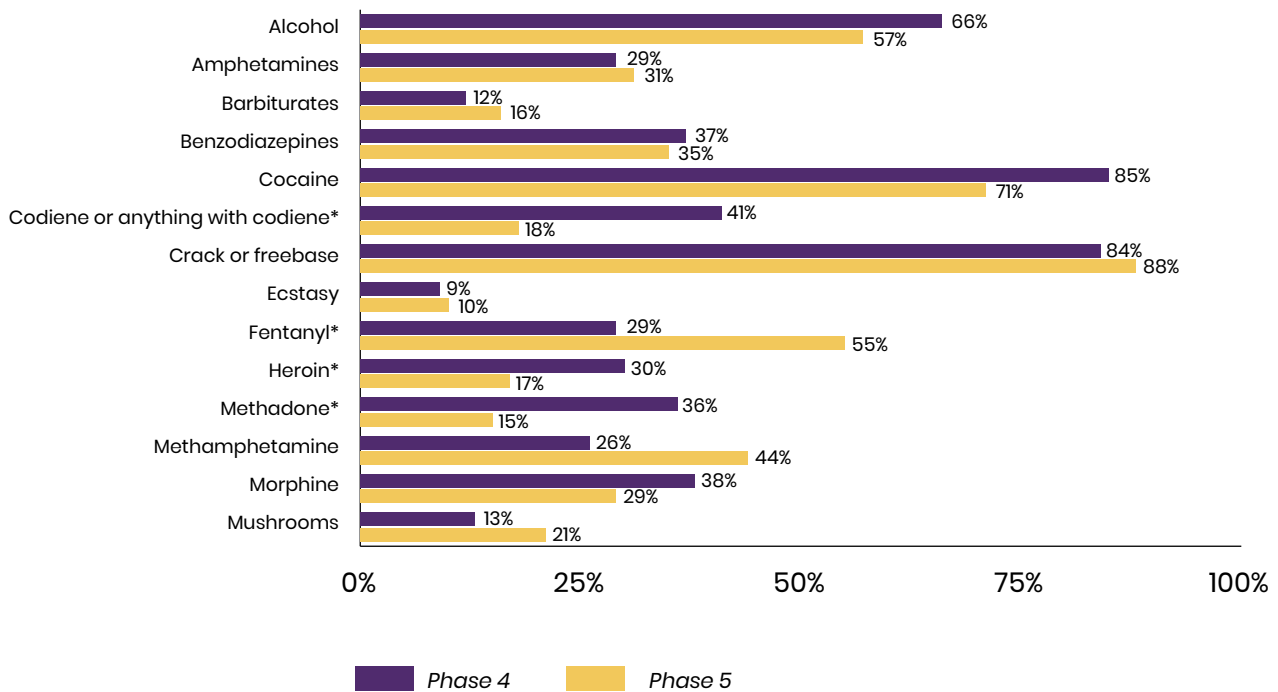


Note: only comparable substances are reported in the figure. Substances were not included if they were asked differently in one phase (thus could have differing interpretations), asked in one phase but not the other, or cell counts from a phase(s) were too small.

*Indicates a statistically significant difference between Phase 4 and 5.

While cocaine remained the most commonly injected drug among participants, its use decreased in Phase 5. Crack, heroin, morphine, and Ritalin use also decreased in Phase 5. Fentanyl, benzodiazepines, and methamphetamine use by injection increased significantly in Phase 5.

Figure 2. Drugs used by means other than injection in the 6 months prior to the interview; Phase 4 and Phase 5.



Note: only comparable substances are reported in the figure. Substances were not included if they were asked differently in one phase (thus could have differing interpretations), asked in one phase but not the other, or cell counts from a phase(s) were too small.

*Indicates a statistically significant difference between Phase 4 and 5.

Regarding drugs used by means other than injection in the 6 months prior to the interviews, from Phase 4 to 5 there was a significant increase in use of fentanyl and marijuana. There was a significant decrease in the use of codeine or anything with codeine (i.e. T3s), heroin, marijuana and cannabis, and methadone.

Table 9. Additional comparable questions related to drug use behaviours – Phase 4 and Phase 5 participants (Thunder Bay site)

	Phase 4 (2018–2019)	Phase 5 (2023–2024)
Proportion who had injected with used needles and/or syringes in the 6 months prior to the interview one or more times	4%	7%
Proportion who had injected with other used equipment ^a (excluding needles or syringes) in the 6 months prior to the interview one or more times	35%*	25%*
Proportion who had reused non-injection drug equipment ^b in the 6 months prior to the interview one or more times	66%	71%
Proportion who experienced an overdose in the 6 months prior to the interview	22%*	33%*
Most commonly reported substances involved in most recent overdose (among participants who reported experiencing an overdose in the 6 months prior to the interview)	1. Heroin (51%) 2. Fentanyl (41%) 3. Cocaine (36%)	1. Fentanyl (56%) 2. Other ('down') (29%) 3. Crack or freebase (20%)
Proportion who ever used an overdose/naloxone kit on anyone	46%*	73%*

*statistically significant difference between Phase 4 and 5.

^a Other used injection equipment included water, filters, cookers, spoons, tourniquet, swabs, and acidifiers.

^b Non-injection drug equipment included straws, dollar bills, or pipes.

The proportion of participants who had reused needles and/or syringes and non-injection drug equipment in the 6 months prior to the interview did not differ significantly from Phase 4 to 5. The proportion who injected with other used equipment (excluding needles or syringes) significantly decreased.

The proportion of participants who experienced an overdose in the 6 months prior to the interview increased significantly, from 22% in Phase 4 to 33% in Phase 5.

In Phase 4, Heroin was the common reported substance involved in participants' most recent overdoses, followed by fentanyl and cocaine. In Phase 5, fentanyl was reported by a higher proportion of participants and was the most common involved substance reported, followed by other (most common response was 'down'), and crack or freebase.

The proportion of participants who ever used an overdose/naloxone kit on anyone significantly increased in Phase 5, from 46% to 73%.

USE OF HEALTH SERVICES

Table 10. Use of health services – Phase 4 and Phase 5 participants (Thunder Bay site)

	Phase 4 (2018–2019)	Phase 5 (2023–2024)
Had a regular healthcare provider	55%	51%
Accessed opioid agonist therapy (OAT) in year prior to the interview	55%*	68%*
Accessed supervised injection or consumption site in year prior to the interview	15%*	36%*
Accessed needle and syringe distribution program in year prior to the interview	88%*	68%*

*statistically significant difference between Phase 4 and 5.

The proportion of participants who had a regular healthcare provider remained similar in Phase 4 and 5, at about half. However, the proportion who accessed OAT in the 12 months prior to the interview significantly increased (from 55% to 68%). The proportion who accessed supervised injection or consumption sites in the 12 months prior also significantly increased (from 15% to 36%) and the proportion who accessed needle and syringe distribution programs decreased (88% to 68%).



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