

Report of the Toronto and Ottawa Supervised Consumption Assessment Study, 2012



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Executive Summary

Do Toronto and Ottawa need supervised consumption facilities? Is the implementation of supervised consumption facilities in Toronto or Ottawa feasible? To answer these questions, we conducted the Toronto and Ottawa Supervised Consumption Assessment (TOSCA) a scientific study involving the collection and analysis of data from a variety of sources.

What is a supervised consumption facility?

A supervised consumption facility is a legally sanctioned public health facility that offers a hygienic environment where people can inject illicit drugs under the supervision of trained staff. Some facilities also allow people to smoke illicit drugs. The primary goals of supervised consumption facilities include: reducing drug-related risks including the transmission of Human Immunodeficiency Virus (HIV), Hepatitis B and C and other blood-borne infections; decreasing the number of overdoses; minimizing public order problems (including public drug use); and improving access to health and social services.

To address drug-related problems, communities across the world have responded with policies and programs designed to reduce demand for illicit drugs, reduce the supply of illicit drugs, and reduce drug-related harm. Communities across Canada use a comprehensive approach, which includes

prevention, harm reduction, treatment, and enforcement. Supervised consumption facilities are an example of a harm reduction program and are a component of some drug strategies. These facilities were designed to address the health and social problems not addressed by existing drug policies and programs. Across the world, including Canada, other harm reduction programs such as needle and syringe programs and opioid substitution programs have been implemented.

In Canada, there is one supervised injection facility and another organization that offers a supervised injecting service, but no supervised smoking facilities. In September 2003, Canada's first supervised consumption facility opened in the Downtown Eastside of Vancouver, an area with a high rate of poverty, open drug use, HIV infection rate and overdose deaths. Dr. Peter AIDS Foundation in Vancouver offers a supervised injecting service that is open only to clients of the agency. Several other Canadian cities have considered the establishment of supervised consumption facilities, including Victoria and Montreal. A 2008 report explored the feasibility of a supervised injection facility for Ottawa. In 2005, Toronto City Council adopted the Toronto Drug Strategy, which included a recommendation for a needs assessment and feasibility study for supervised consumption site(s) taking into account the decentralized nature of drug use in Toronto.

The TOSCA Study

TOSCA focuses on the cities of Toronto and

Ottawa since they account for approximately half of all people who inject drugs in Ontario. Toronto has the province's largest number of people who use drugs but, unlike Vancouver, drug use is not as heavily concentrated in one area. Toronto also has relatively low HIV prevalence rates among people who inject drugs. In contrast, Ottawa has the highest new rate of HIV infections amongst people who inject drugs in Ontario.

We identified key factors to help decision makers when considering the establishment of a supervised consumption facility. We address each of these in the chapters that follow:

- What is the distribution of drug use, risk behaviours and drug-related health problems?
- Are supervised consumption facilities likely to be used by people who use drugs?
- What is the epidemiology of blood-borne infections and associated risk factors?
- Where are people who use drugs located in Toronto and Ottawa?
- What is the social and political environment relating to supervised consumption facilities?
- Are supervised consumption facilities a good use of money?

To address these questions, we used multiple research methods and data sources as follows:

- **Qualitative research methods** were used to explore attitudes towards supervised consumption facilities from residents, business owners, police, social service employees, public health officials, healthcare providers, emergency medical services, and people who use drugs.

- **Survey data** were used to characterize the epidemiology of drug use and the health of people who use drugs, the likelihood that people who use drugs would visit a supervised consumption facility, and Ontarians' public opinions about supervised consumption facilities.
- We used **geographic analysis** to map the distribution of drug use in Toronto and Ottawa.
- To understand the potential effectiveness and cost-effectiveness of supervised consumption facilities in Toronto and Ottawa, we used **mathematical modeling**. We used **cost-effectiveness analysis** to compare the costs of an intervention with its potential benefits.

The TOSCA team includes researchers with diverse expertise ranging from public health science, epidemiology, health services research, operations research, and health economics. TOSCA also has four advisory groups, with representatives from diverse health and social service providers, as well as people with past/current experience of drug use. TOSCA was funded by the Ontario HIV Treatment Network and the Canadian Institutes of Health Research. The views of this report are not necessarily the views of the funding agencies.

Detailed information about the research methods used in TOSCA and other materials are available on our study website, www.toscastudy.ca

Drug Use in Toronto and Ottawa

In Toronto, the large majority of people who inject drugs injected both cocaine (including crack cocaine) and opiates in the 6 months prior to being interviewed. In Ottawa, 79% of people who inject drugs reported injecting cocaine and 64% reported injecting opiates, in the 6 months prior to being interviewed. The proportion of people injecting cocaine most frequently was similar to the proportion injecting opiates most frequently. The frequency with which people inject drugs varied widely in both cities. In Toronto, 27% of adults and 41% of street-involved youths injected at least once a day. In Ottawa, 30% of adults reported injecting at least once a day. In both cities, about 65% of respondents who injected with other people reported that they most commonly injected with a close friend and about 30% reported that they most commonly injected with a regular sex partner. In Toronto, 21 to 27% of people reported that they injected with somebody they did not know at all or did not know well. In Ottawa, 9% of respondents reported that they had injected with somebody they did not know well.

About 18% of people who inject drugs in Toronto and 14% in Ottawa reported that they had used needles that had already been used by someone else. About 10% of adults and 20% of street-involved youth who inject drugs reported that they injected with used needles sometimes, always, or usually. In Toronto, 20% of people who inject drugs reported that someone else used their needles occasionally or sometimes. In Ottawa, 9% of people reported that someone else used their needles sometimes.

Sharing used smoking equipment was common: 73% of people who use drugs in Toronto, 71% of people who use drugs in Ottawa, 76% of street-involved youth who smoke crack cocaine in Toronto, and 81% of street-involved youth who smoke crystal methamphetamine in Toronto reported smoking with used pipes at least once in the 6 months prior to being interviewed. In Toronto, 78% of people who smoke crack cocaine had lent or sold a pipe they already used in the 6 months prior to being interviewed; 74% of people who smoke crack cocaine in Ottawa had done so.

In Toronto, 54% of people who inject drugs injected in a public place such as a washroom or stairwell and 46% injected on the street or in an alley in the 6 months prior to being interviewed. The respective percentages for Ottawa were 25% and 29%. Between 40 to 80% of people who use drugs by non-injection methods in Toronto and in Ottawa had done so in a park, in a parking lot, on the street or in an alley, a washroom, and in a stairwell or doorway in the 6 months prior to being interviewed.

Do Ontario Residents Agree or Disagree with Making Supervised Consumption Facilities Available?

Considerably more Ontarians have read, seen, or heard about supervised injection facilities compared with supervised smoking facilities. More Ontario residents strongly agreed with making supervised injection facilities available than supervised smoking facilities. Ontarians who strongly agreed with making supervised injection facilities available tended to also agree with making supervised smoking facilities available.


More Ontarians were likely to agree with implementing supervised injection facilities if the goals are to reduce negative health consequences, increase contact with health or social workers, or to reduce neighbourhood problems related to drug use. Most Ontarians agreed with implementing supervised smoking facilities if the purpose is to reduce neighbourhood problems related to drug use or improve the health of people who use drugs. However, fewer Ontario agreed with implementing supervised injection facilities and supervised smoking facilities if the goal is to encourage safer drug use among people who inject or smoke drugs.

Overall, Toronto residents were more likely to strongly agree with making supervised injection facilities available than were residents of Ottawa. Between 2003 and 2009, there was a shift in public opinion about supervised injection facilities. The percentage of Ontarians who strongly agreed with the goals of supervised consumption facilities increased over this time period. Stakeholders with mixed opinions about supervised consumption facilities indicated that they would take a more definitive position if concerns about one or more of five key issues were resolved: a better understanding of supervised consumption facility evidence in general; demonstration of need for a supervised consumption facility; understanding the relationship between supervised consumption facilities and a broader health and social response to drug use; evidence about potential impact on homes, businesses, and the community; and proposed supervised consumption facility implementation design. Among those in favour of implementing supervised consumption facilities, a pilot project

that includes a comprehensive evaluation plan was recommended as the first step towards implementation. Stakeholders also recommended the evaluation of health and other outcomes (such as drug trafficking, assaults, and other drug-related crime in the local area) and public dissemination of evaluation results.

Supervised Consumption Facility Services, Models, and Rules

Among supervised consumption facilities worldwide, the most frequently offered services address the health of people who use drugs (including education, distribution and disposal of equipment, and medical, nursing, and social work services) and their hygiene (including laundry, showers, and washrooms). Referrals to drug substitution treatment (such as methadone maintenance therapy), detoxification, rehabilitation, and health care were commonly available. Services considered important by people who use drugs included: nursing care; hygiene; counselling; detoxification beds; social workers; drug use information and education; overdose prevention and education; equipment distribution and disposal; referrals for drug treatment, other health concerns, and social services; peer support; mental health services; basic medical care; first aid; wound care; testing for blood-borne infections and pregnancy; and vaccinations. Internationally, supervised consumption facilities are commonly open 6 or 7 days a week for 7 or 8 hours a day. The average number of injecting spaces within a supervised consumption facility was about 7; the number of smoking spaces varied widely.



Stakeholders in Toronto and Ottawa focus groups often said that a supervised consumption facility should be partnered with other agencies that serve people who use drugs. Existing harm reduction programs were often identified as appropriate partners. In focus groups with people who use drugs, most people preferred supervised consumption facilities that permit both supervised injection and supervised smoking within the same facility. However, most people added that within that facility there should be some sort of physical separation between the spaces in which people use different types of drugs being used or administer drugs through different routes. In surveys of people who use drugs in Toronto, the most popular supervised consumption facility models were a separate facility for people who inject or a single facility with separate rooms for injecting and for smoking. Most stakeholders noted that both peer and non-peer workers are essential within a supervised consumption facility.

Commonly reported rules among supervised consumption facilities worldwide included registration, time limits, residency requirements, minimum age rules, rules regarding first time injecting, restricted body sites, rules about sharing drugs and assisted injection, and prohibitions on drug dealing on-site. Among stakeholders in focus groups, a friendly and welcoming facility that is safe from violence and sets clear limits on the length of stay was commonly recommended. Stakeholders in focus groups preferred service models that include policies to protect the anonymity of clients and privacy of the program. Opinions were mixed regarding a minimum age requirement to access a supervised consumption facility. Assisted injection was also debated.

Potential Use of Supervised Consumption Facilities

Up to 75% of people who use drugs said they would use a supervised injection facility and up to 65% of people who use drugs said they would use a supervised smoking facility. Projected use of a facility was similar in both Toronto and Ottawa; it was also similar between men and women. The people most likely to report that they would use a supervised consumption facility included people who are unstably housed or live on the street, people who are unaware of how to access sterile equipment, people who inject in public, and people who lent or sold a crack cocaine pipe after using it. Together, these findings suggest that supervised consumption facilities would attract people who use drugs who are especially vulnerable. These findings are important since these groups might be at particularly high risk for blood-borne infections and other adverse health consequences associated with drug use and social marginalization.

Among people who reported that they would use a supervised injection facility, over half said that they would use the facility always (30 to 36%) or usually (22 to 23%). These rates were similar in Toronto and Ottawa. Relatively few people – 14 to 20% – reported that they would only use a facility occasionally. Data about how often people would use supervised smoking facilities were not available. Projected rates were generally similar among men and women, although women in Ottawa were somewhat more likely than men to say that they would use a facility always or usually. Overall, the demand for supervised injection facilities is high among people who inject drugs in Toronto and Ottawa.

The main reasons for using a supervised consumption facility were related to concerns about safety (from arrest, from street crime, and from overdose), privacy and shelter (compared to using drugs on the street), and cleanliness (to get sterile equipment). Accessing services or referrals were of lesser importance. The main reasons for not using a supervised consumption facility were similar: safety (fear of arrest and surveillance, paranoia, and concern about other people who use drugs), privacy (compared to using drugs at home), and confidentiality. Proximity is an important consideration; people who use drugs indicated that they would like facilities to be located close to where they actually use drugs.

Deciding Where to Establish Supervised Consumption Facilities

We found broad support for locating supervised consumption facilities close to where people use drugs, particularly where drug use is visible or where people who use drugs are homeless or unstably housed. Drug use in Toronto is widely distributed throughout the city with a few foci but no single area of concentration. In Ottawa, drug use is concentrated in a few distinct neighbourhoods. The patterns of cocaine and opioid use appear similar across neighbourhoods in both cities.

In Toronto, about half of all people who inject or smoke drugs said that they would travel up 10 blocks or less to use a supervised injection facility and 28% of respondents said that they would travel more than a kilometre to a supervised injection facility. In Ottawa, about 40% of people who inject drugs said that they would walk 10 minutes or less to

use a supervised injection facility and 36% of respondents said that they would walk more 20 minutes to a supervised injection facility. People who use drugs and other stakeholders expressed preferences for implementing multiple smaller supervised consumption facilities rather than one large, centralized supervised consumption facility. People who use drugs felt that one supervised consumption facility, even if “centrally located”, would be inconvenient for potential clients who live in areas far from the facility. Multiple supervised consumption facilities, especially if integrated into existing programs for people who use drugs, may also reduce community concerns. In an analysis of possible facilities in Toronto based on the geographic dispersion of people who use drugs and their willingness to travel, we estimated the first facility would be used by about 11% of people who use drugs. Each additional facility would be used by 10%, 9%, 6%, and 4% of people who use drugs. In Ottawa, the first facility would be used by about 36% of people who use drugs. Each additional facility would be used by 22%, 10%, 1%, and 1% of people who use drugs.

Community opposition was a major theme in discussions about locating a supervised consumption facility. Even residents and business owners who were supportive of supervised consumption facility implementation did not necessarily want to see a facility in their own residential neighbourhoods or near their businesses. Many residents and business owners supported locating a supervised consumption facility in a hospital or other places away from residential or business locations. Community members, especially residents and business owners, would like to be consulted in advance

and be given the opportunity to express their concerns regarding decisions about supervised consumption facility location. Community consultation needs to be extensive and part of the decision-making process but recommendations for how that consultation should proceed were often vague. Multiple, small community meetings across the cities may be preferable to large public forums to give community members ample opportunities to participate.

Potential Health Benefits and Costs of Supervised Consumption Facilities in Toronto and Ottawa

A majority of people who use drugs were sexually active in the month prior to being interviewed. More women were sexually active than men. About 40 to 50% of people who reported being sexually active reported that their last sexual activity included using a condom. About 30 to 40% of men and 30 to 50% of women reported having multiple sex partners in the 6 months prior to being interviewed. HIV prevalence was 4% among people who use drugs in Toronto and 11% in Ottawa. In Toronto, HIV prevalence was higher among people who smoke drugs (6%) than among people who inject drugs (3%). Hepatitis C prevalence was 52% among people who use drugs in Toronto and 60% in Ottawa. In Toronto, hepatitis C virus prevalence was considerably higher among people who inject drugs (70%) than among people who smoke drugs (29%). About 1 in 5 people who use drugs in Toronto and in Ottawa reported that they had overdosed in the last 6 months. The percentage overdosing was higher among people who inject drugs (29%) than among people who smoke drugs (12%). Almost half

the people who reported smoking crack cocaine in Ottawa reported symptoms related to tooth and gum sores and about 1 in 4 reported skin problems.

We used mathematical modeling to project potential health benefits related to establishment of supervised injection facilities in Toronto and Ottawa. We modeled only the effects of supervised injection facilities since the effectiveness of supervised smoking facilities are unknown. We projected that the number of HIV infections averted by the first three facilities in Toronto was about 2 to 3 per facility per year and that the number of hepatitis C virus infections averted was about 15 to 20 per facility over 20 years. The number of additional HIV and hepatitis C virus infections averted by the 4th and 5th facilities was considerably less. We projected that the number of HIV infections averted by the first two facilities in Ottawa was 6 to 10 per facility per year and the number of hepatitis C virus infections averted was 20 to 35 per facility per year. In Ottawa, the number of additional HIV and hepatitis C virus infections averted by the 3rd, 4th and 5th facilities was considerably less.

The cost per HIV infection averted with the first supervised injection facility in Toronto is \$323,496 and with the first supervised injection facility in Ottawa is \$66,358. The cost per hepatitis C infection averted with the first supervised injection facility in Toronto is \$47,489 and with the first supervised injection facility in Ottawa is \$18,591. The greatest cost savings in the Toronto and Ottawa models come from averting hepatitis C virus infections.

Economists often measure health outcomes in quality adjusted life years (QALYs), a measure

that incorporates both quality of life and survival. The incremental cost-effectiveness of an intervention is expressed as the extra cost of the intervention divided by the extra health gain, yielding a ratio expressed in dollars per QALY. An intervention with a low incremental cost effectiveness ratio represents good value for money while an intervention with a high incremental cost effectiveness ratio is economically unattractive. Although debate exists about the threshold at which an intervention stops being considered “good value for money”, commonly used thresholds include \$50,000 / QALY and \$100,000 / QALY.


At a cost-effectiveness threshold of \$50,000 / QALY, the optimal number of facilities in Toronto is three. At a cost-effectiveness threshold of \$100,000 / QALY, the optimal number of facilities is four. At a cost-effectiveness threshold of \$50,000 / QALY, the optimal number of facilities in Ottawa is two. At a cost-effectiveness threshold of \$100,000 / QALY, the optimal number of facilities is three. These estimates are sensitive to estimates of the number of people who use drugs in each city, the projected reduction in needle sharing among users of supervised injection facilities, and the fixed costs associated with running a supervised injection facility.

The differences between Ottawa and Toronto in potential infections averted and cost effectiveness estimates reflect the differences in HIV and hepatitis C prevalence rates as well as differences in the number and geographic distribution of people who use drugs in each city.

Potential Implementation and Liability Issues Involved in Establishing Supervised Consumption Facilities

In cities that have supervised consumption facilities, implementation was preceded by extensive planning and community consultation. From the stakeholders, we learned what they thought would be necessary steps and activities to complete to make supervised consumption facility implementation happen. Some stakeholders who were strongly opposed to supervised consumption facilities were harder to engage than others in discussion about an implementation plan. Stakeholders stressed that an implementation plan should include an assessment of the existing scientific evidence for supervised consumption facilities, consideration of the generalizability of this evidence to local circumstances, a clear explanation of the facility's goals, community consultations, and a service model design that addresses the unique social and political environments of each city.

Even though more stakeholders were in favour of implementing multiple facilities than a single facility, stakeholders strongly recommended starting with a single pilot facility. This recommendation may give rise to some tensions because stakeholders were also generally concerned that one facility would be highly visible in a given neighbourhood and potentially create some undesirable outcomes (for example, congregation of people who use drugs or people selling drugs). It is possible that starting with a single pilot might produce these unwanted results. This point was not raised by stakeholders who were in favour of the pilot model. Stakeholders were clear that



any pilot site that is implemented needs to include a clear and well articulated evaluation plan and also assurances to the community that the pilot supervised consumption facility would be closed if an evaluation showed that the facility was not working or was having adverse impacts on the community. It is unlikely that supervised consumption facility implementation would be achieved anywhere lacking solid support from communities and local politicians.

While reducing consumption related risks and offering other health benefits, consumption of drugs within a supervised consumption facility may lead to negative health consequences and stakeholders across Ottawa and Toronto raised concerns about these issues. Stakeholders stressed the need to consider liability and responsibility issues related to toxicity and other negative consequences from consumption of contaminated drugs and fatal overdoses on site at a supervised consumption facility. As well, stakeholders wanted an implementation plan to address the issue of assisted injection and related liability issues.

Recommendations

1. Both Toronto and Ottawa would Benefit from Implementation of Supervised Injection Facilities.

Toronto and Ottawa each have a significant number of people who use drugs. We found indicators that suggest supervised consumption facilities would be beneficial in both cities, including frequent sharing of drug equipment and public drug use. People who use drugs in both cities indicated that they are likely to use supervised consumption facilities regularly.

We project that Toronto would benefit from implementation of three supervised injection facilities and that Ottawa would benefit from implementation of two supervised injection facilities. These projections are based on considerations of the number of people who use drugs in each city, their geographic location, the projected use of supervised injection facilities, the demonstrated decrease in risky behaviours among clients of other supervised injection facilities, and the associated projected long-term costs and health benefits, including the prevention of HIV and hepatitis C infections.


Multiple supervised injection facilities are optimal to address the dispersed patterns of drug use in both cities. A similar approach has been used to establish needle and syringe programs and methadone maintenance programs. Implementation of multiple facilities that are located close to where people inject drugs will

likely optimize access and utilization. Our research indicates that people who use drugs generally did not want a single facility that could serve as the focus of opposition. Community members also preferred multiple facilities spread out across each city to minimize possible impacts on local neighbourhoods.

2. The Optimal Model for a Supervised Injection Facility is a Fixed Facility that is Integrated within an Existing Organization.

Integration and close linkages with existing organizations offering a broad range of services will ensure that supervised injection facilities provide access to needed health and social services and referrals but do not duplicate what is already available. Integration within an existing organization that already works with people who use drugs will also address concerns about establishing a relationship with people who use drugs as clients, the visibility of a facility within a community, privacy for clients, and community impact. We do not recommend mandating attendance at ancillary services within a supervised injection facility. Mandatory attendance may discourage utilization of the primary service of supervised injection.

While mobile facilities might extend access to supervised injection facilities for to hard-to-reach populations, we did not



find a strong desire for such sites among people who use drugs in either city and the evidence base for such a decision is limited.

3. A Strong Evaluation Plan is an Essential Component of any Implementation Plan.

A supervised injection facility must have a well-defined evaluation plan that includes clear objectives and specifies the actions to be taken if the objectives are not achieved. Evaluation indicators should assess the impact of a supervised injection facility, including: the number of people who visit the facility and how often they visit; the proportion of people who use drugs who are clients of the facility; the patterns of drug- and sex-related risk behaviours over time; the incidence of HIV, hepatitis C, and hepatitis B infection rates over time; and the incidence of fatal and non-fatal overdoses over time. The evaluation plan should also consider impacts at a community level, including changes in: public litter; visible public drug use; the congregation of clients around a facility; drug-related crime and arrests; property values; and local business viability.

4. A Supervised Injection Facility should have Clearly Established Rules.

These rules should balance the needs of clients and the surrounding community but not impede the potential of the facility to meet its objectives to improve the health of clients. Decisions about rules

(such as operating hours and eligibility to use the facility) are best made considering the local context in which each facility operates.

5. There is Insufficient Evidence to Support a Recommendation to Implement a Supervised Smoking Facility.

There is insufficient evidence regarding the impact of supervised smoking on risk behaviours among people who smoke drugs. Although our analyses indicate that people who smoke drugs such as crack cocaine say they would use such a facility, the frequency with which they would smoke in the facility and the potential change in short-term behaviours and long-term health benefits have not been quantified. The service model that would meet the needs of people who smoke drugs such as crack cocaine also requires further investigation. Such questions are important, but are best addressed within the structure of a formal research study into this specific question.

Research is also needed into models of facilities that allow smoking and injecting within a single facility. Many people who inject drugs also smoked drugs such as crack cocaine. Allowing supervised smoking alongside injecting might increase the use of a facility by this group, but more data is needed to evaluate mixed smoking and injecting models. If supervised smoking of illicit drugs such as crack cocaine or crystal methamphetamine is allowed within a single facility, our research indicates that

separate rooms for smokers and injectors are likely to be most acceptable to clients of the facility and maximize use.

6. The Process to Establish a Supervised Injection Facility Should be Part of a Comprehensive Drug Strategy.

This strategy should be designed to address the health and wellbeing of the individual and the broader community. The four pillars of a comprehensive drug strategy include: prevention, treatment, enforcement and harm reduction. A well-designed strategy ensures that resources are not diverted from other effective programs to implement new initiatives. While some people will always be opposed to implementation of supervised consumption facilities, our research shows that most people in Ontario will support implementation of a supervised injection facility that maximizes positive outcomes for clients and the surrounding community. Implementation plans must be transparent and include effective mechanisms for community stakeholder input. Such consultations are also relevant to considerations of where sites should be established.

Chapter 1 - Introduction

Do Toronto and Ottawa need supervised drug consumption facilities? Is the implementation of supervised consumption facilities in Toronto or Ottawa feasible? To answer these questions, we conducted the Toronto and Ottawa Supervised Consumption Assessment (TOSCA), a complex scientific study involving the collection and analysis of data from a variety of sources.

What is a Supervised Consumption Facility?

A supervised consumption facility is a legally sanctioned public health facility that offers a hygienic environment where people can inject illicit drugs under the supervision of trained staff. Some facilities also allow people to smoke illicit drugs. Supervised consumption facilities are sometimes labelled safe injection sites, fix rooms, consumption rooms, health rooms, or off-street injecting facilities.

The primary goals of supervised consumption facilities include: reducing drug-related risks including the transmission of Human Immunodeficiency Virus (HIV), Hepatitis B and C and other blood-borne infections; decreasing the number of overdoses; minimizing public order problems (including public drug use); and improving access to health and social services.

Supervised consumption facility staff members often include multiple disciplines, including medical doctors, nurses, counsellors, and social workers. Services offered at supervised consumption facilities may include provision of sterile injection supplies and safe disposal, education about safer drug use and communicable disease prevention, support, counselling, referrals to

health and social services, and first aid and resuscitation for onsite overdose.

In most supervised consumption facilities, clients can only inject drugs. However, in some facilities, clients can also smoke drugs. In this report, we use the term “supervised consumption facility” to refer to a facility where supervised drug injection and/or smoking is allowed. We use the term “supervised injection facility” to indicate facilities where clients can inject drugs and “supervised smoking facility” to indicate facilities where clients can smoke or inhale drugs. Within supervised injection facilities, the most commonly injected drugs include heroin, cocaine powder, morphine, speedballs (cocaine combined with heroin), hydromorphone (Dilaudid®) and crack cocaine (Tyndall, Kerr, Zhang et al., 2005). The most common drugs smoked in supervised smoking facilities are heroin and crack cocaine (Hedrich, 2004).

Supervised Consumption Facilities and Social Responses to Problematic Drug Use

To address drug-related problems, communities across the world have responded

with policies and programs designed to reduce demand for illicit drugs, reduce the supply of illicit drugs, and reduce drug-related harm (Babor, Caulkins, Edwards et al., 2010). Communities across Canada use a comprehensive approach, which includes prevention, harm reduction, treatment, and enforcement (Collin, 2006; Beirness, Jesseman, Notarandrea et al., 2008). Harm Reduction International (formerly known as the International Harm Reduction Association) defines harm reduction as “policies, programs and practices that aim to reduce the harms associated with the use of psychoactive drugs in people unable or unwilling to stop. The defining features are the focus on the prevention of harm, rather than on the prevention of drug use itself, and the focus on people who continue to use drugs” (IHRA, 2009). Supervised consumption facilities are an example of a harm reduction program and are a component of some drug strategies (Kimber, Dolan, van Beek et al., 2003a). These facilities were implemented to address the health and social problems that were not addressed by existing drug policies and programs. Across the world, including in Canada, other harm reduction programs such as needle and syringe programs and opioid substitution programs have also been implemented in conjunction with prevention, treatment and enforcement strategies (Cook, 2010).

Where Have Supervised Consumption Facilities been Established?

Supervised consumption facilities have most commonly been implemented in cities with high rates of overdose and HIV and Hepatitis B and C transmission among people who use

drugs, and high rates of public drug use. The first facilities were unofficial and were often run by peer workers (people who use drugs or have a history of drug use; de Jong & Weber, 1999). The first legally sanctioned supervised consumption facilities opened more than 20 years ago in Europe (Dolan, Kimber, Fry et al., 2000). Today, most supervised consumption facilities are publicly funded and have trained staff on-site. Across the world, there are more than 90 supervised consumption facilities in the Netherlands, Switzerland, Austria, Germany, Luxembourg, Norway, Spain and, more recently, in Australia and Canada (Cook 2010).

In Canada, there is one supervised injection facility and another organization that offers a supervised injecting service, but no supervised smoking facilities. In September 2003, Canada’s first supervised consumption facility opened in the Downtown Eastside of Vancouver, an area with a high rate of poverty, open drug use, HIV infection rate and overdose deaths (Tyndall, Kerr, Zhang et al., 2006a). Since it opened, this facility known as “Insite” has been the subject of controversy (Elliot, 2008). Insite was allowed to operate under an exemption from the Controlled Drug and Substances Act, the law that regulates illicit drugs in Canada (Collin, 2006). Section 56 of this law allows the government to specify circumstances under which otherwise illegal drugs can be consumed without prosecution. Although successive federal governments initially granted exemptions to the law, the federal government indicated that they would grant no further exemptions beyond July 2008. The organizations that run Insite challenged this decision in the courts. This challenge reached the Supreme Court of Canada, which

ruled in September 2011 that the failure to grant a Section 56 exemption “contravened the principles of fundamental justice.” The court decreed that “The Minister of Health is ordered to grant an exemption to Insite under section 56 of the CDSA forthwith.” (*Canada (Attorney General) v. PHS Community Services Society* 2011 SCC 44).

The court cited the evidence that Insite has improved the health of people who use drugs as a basis for its ruling and noted that for future applications for exemptions, the Minister should generally grant an exemption where “a supervised injection site will decrease the risk of death and disease, and there is little or no evidence that it will have a negative impact on public safety.” Hence, any new site needs to establish an evidence base to be granted an exemption.

Dr. Peter AIDS Foundation in Vancouver offers a supervised injecting service that is open only to clients of the agency. Several other Canadian cities have considered the establishment of supervised consumption facilities. A feasibility study for Victoria, British Columbia recommended “undertake the necessary steps to move forward on the planning and implementing of a Supervised Consumption Site.” (Fischer and Allard, 2007). Last year, the City of Montreal completed a feasibility study for a supervised consumption facility and recommended implementation (Lesard and Morrisette, 2011). The Montreal Public Health Department has recommended establishing three fixed and one mobile supervised consumption facility. A 2008 report explored the feasibility of a supervised injection facility for Ottawa (Leonard, DeRubeis, Strike, 2008). In 2005, Toronto City Council adopted the Toronto Drug Strategy, which included a recommendation for a needs

assessment and feasibility study for supervised consumption site(s) taking into account the decentralized nature of drug use in Toronto.

The TOSCA Study

TOSCA focuses on the cities of Toronto and Ottawa since they account for approximately half of all people who inject drugs in Ontario. Toronto has the province’s largest number of people who use drugs but, unlike Vancouver, drug use is not as heavily concentrated in one area. Toronto also has relatively low HIV prevalence rates among people who inject drugs. In contrast, Ottawa now has the highest rate of HIV infections amongst people who inject drugs in Ontario.

We identified key factors to help decision makers when considering the establishment of a supervised consumption facility. We address each of these in the chapters that follow:

- What is the distribution of drug use, risk behaviours and drug-related health problems?
- Are supervised consumption facilities likely to be used by people who use drugs?
- What is the epidemiology of blood-borne infections and associated risk factors?
- Where are people who use drugs located in Toronto and Ottawa?
- What is the social and political environment relating to supervised consumption facilities?
- Does investing in supervised consumption facilities yield good value for the money that is spent?

To address these questions, we used multiple research methods and data sources, as follows:

- **Qualitative research methods** were used to explore attitudes towards supervised consumption facilities from residents, business owners, police, social service employees, public health officials, healthcare providers, emergency medical services, and people who use drugs.
- **Survey data** were used to characterize the epidemiology of drug use and the health of people who use drugs, the likelihood that people who use drugs would visit a supervised consumption facility, and Ontarians' opinions about supervised consumption facilities.
- We used **geographic analysis** to map the distribution of drug use in Toronto and Ottawa.
- To understand the potential effectiveness and cost-effectiveness of supervised consumption facilities in Toronto and Ottawa, we used **mathematical** modeling. We used **cost-effectiveness analysis** to compare the costs of an intervention with its potential benefits.

The TOSCA team includes researchers with diverse expertise ranging from public health science, epidemiology, health services research, operations research, and health economics. TOSCA also has four advisory groups with representatives from diverse health and social service providers, as well as people with past/current experience of drug use. TOSCA was funded by the Ontario HIV Treatment Network and the Canadian Institutes of Health Research. The views of this report are not necessarily the views of the funding agencies.

The Structure of this Report

This report is organized as follows:

- The Recommendations section presents our recommendations for Toronto and Ottawa.
- The Executive Summary summarizes the key findings of our research.
- Chapter 2 examines several factors related to the epidemiology of drug use. We describe which drugs people are using in Toronto and Ottawa, whether people are using multiple drugs, which drugs are being most commonly injected, and how frequently people who use drugs are injecting.
- Chapter 3 examines public knowledge opinions about supervised consumption facilities. We examine whether opinions changed between 2003 and 2009 and identify the key factors that influence acceptance or rejection of supervised consumption facilities.
- Chapter 4 focuses on questions for considering how a supervised consumption facility might be implemented, including important design considerations, possible models, and potential rules for operation.
- Chapter 5 focuses on questions for determining whether supervised consumption facilities are feasible, including willingness to use a supervised consumption facility. We estimate how frequently people who use drugs would use a supervised consumption facility. We also identify features that would influence an individual's decision to use a facility.

- Chapter 6 focuses on questions that are important to consider when deciding where to establish a supervised consumption facility. We examine where drug use occurs in Toronto and Ottawa, review the arguments in favour of one or multiple supervised consumption facilities, and explore community concerns about establishing supervised consumption facilities.
- Chapter 7 explores the potential health benefits and costs associated with establishing supervised consumption facilities in Toronto and Ottawa. We review the sexual risk behaviours associated with drug use, since sexual transmission might be important among people who use drugs and also characterize the number of people who use drugs who are living with HIV and Hepatitis C virus infection in Toronto and Ottawa. We also describe overdose rates and other harms related to smoking crack cocaine. We used these data, as well as inputs from the scientific literature, to construct mathematical models of the populations of Toronto and Ottawa, focusing on drug use HIV infection, Hepatitis C infection, and HIV-Hepatitis C virus co-infection. We estimated the potential benefits and cost-effectiveness of supervised injection facilities in each city.
- Chapter 8 explores factors that would influence implementation of a supervised consumption facility from various stakeholders' perspectives. We explore which supervised consumption facility implementation plan issues stakeholders identify as important and examine the issues regarding liability and

responsibility within an implementation plan.

- We conclude with several appendices, which contain detailed information about the research methods used in TOSCA, a glossary of key terminology, and details about the study team and advisory group members.

This report was written for a general rather than an academic audience. Scientific articles with technical explanations of methods and details of statistical tests are forthcoming.

More information is available on our study website, www.toscastudy.ca

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Chapter 2 - Drug Use in Toronto and Ottawa

Background: In this chapter, we examine several factors related to the epidemiology of drug use, making use of existing surveys and data sources. We first describe which drugs people are using in Toronto and Ottawa, whether people are using multiple drugs, which drugs are being most commonly injected, and how frequently people who use drugs are injecting.

Summary: In Toronto, the large majority of people who inject drugs injected both cocaine (including crack cocaine) and opiates in the 6 months prior to being interviewed. In Ottawa, 79% of people who inject drugs reported injecting cocaine and 64% reported injecting opiates, in the 6 months prior to being interviewed. The proportion of people injecting cocaine most frequently was similar to the proportion injecting opiates most frequently. The frequency with which people inject drugs varied widely in both cities. In Toronto, 27% of adults and 41% of street-involved youths injected at least once a day. In Ottawa, 30% of adults reported injecting at least once a day.

In both cities, about 65% of respondents who injected with other people reported that they most commonly injected with a close friend and about 30% reported that they most commonly injected with a regular sex partner. In both cities, women were considerably more likely than men to report that they injected with a regular sex partner. In Toronto, 21 to 27% of people reported that they injected with somebody they did not know at all or did not know well. In Ottawa, 9% of respondents

reported that they had injected with somebody they did not know well.

About 18% of people who inject drugs in Toronto and 14% in Ottawa reported that they had used needles that had already been used by someone else. About 10% of adults and 20% of street-involved youth who inject drugs reported that they injected with used needles sometimes, always, or usually. In Toronto, 20% of people who inject drugs reported that someone else used their needles occasionally or sometimes. In Ottawa, 9% of people reported that someone else used their needles sometimes.

Sharing used smoking equipment was common: 73% of people who use drugs in Toronto, 71% of people who use drugs in Ottawa, 76% of street-involved youth who smoke crack cocaine in Toronto, and 81% of street-involved youth who smoke crystal methamphetamine in Toronto reported smoking with used pipes at least once in the 6 months prior to being interviewed. Street-involved youth frequently said that they always smoke with used pipes (15% for smoking crack and 33% for smoking crystal methamphetamine). In Toronto, 78% of people who smoke crack cocaine had lent or sold a pipe they already used in the 6 months prior to being interviewed; 74% of people who smoke crack cocaine in Ottawa had done so as had 54% of street-involved youth who smoke crack cocaine and 50% of street-involved youth who smoke crystal methamphetamine.

About 90% of people who inject drugs in Toronto and 69% of people in Ottawa injected at their own home or at a friend or family member's home in the 6 months prior to being interviewed. However, public drug use was also common. In Toronto, 54% of people who inject drugs injected in a public place such as a washroom or stairwell and 46% injected on the street or in an alley in the 6 months prior to being interviewed. The respective percentages for Ottawa were 25% and 29%. For 13% of people in Toronto and 12% of people in Ottawa, the most common place to inject drugs was in a public place such as a washroom. The most common place was on the street or in an alley for 11% of people in Toronto and 16% of people in Ottawa. More than 15% of street-involved youth reported injecting in a public washroom, park, parking lot, street or alley.

Non-injection use of drugs was also commonly done in private: 80% of people who use non-injection drugs in Toronto and 66% of people who smoke drugs in Ottawa used drugs had done so at their own home or at a friend or family member's home in the 6 months prior to being interviewed. However, public use was also common. Between 40 to 80% of people who use drugs by non-injection methods in Toronto and in Ottawa had done so in a park, in a parking lot, on the street or in an alley, a washroom, and in a stairwell or doorway in the 6 months prior to being interviewed. In Toronto, 31% of people reported that the most common place that they used drugs by methods other than injection was on the street or in an alley. In Ottawa, 34% of people reported that the most common place they smoked drugs was on the street or in an alley. Street-involved youth in Toronto were particularly likely to use drugs

in public places such as parks, parking lots, streets, alleys, stairwells, doorways, and public washrooms.

Section 2.1

What are the Patterns of Drug Use in Toronto and Ottawa?

Background: Understanding the patterns of drug use is important for determining the feasibility and design of a supervised consumption facility. In particular, it is important to determine whether people are using multiple drugs, which drugs are being most commonly used, the routes by which drugs are being used, and how frequently people are using drugs.

Data: We used data from three sources: 1) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users (I-Track), a survey of 477 people who used drugs; 2) the 2008 Shout Clinic Street Youth Harm Reduction Survey, a survey of 92 street-involved youth who used drugs; and 3) the 2006 Ottawa I-Track study, a survey of 292 people who use drugs. The text in the table indicates the wording that was used for each question.

We have used the drug name as specified in the question. Sometimes this is the name of the generic drug (such as heroin), sometimes it is the name of a brand (such as Talwin®), and sometimes this is a name used commonly by people who use drugs (such as speedballs).

Findings:

In Toronto, 89% of people who inject drugs had injected cocaine and 86% injected opiates. Street-involved youth in Toronto reported similar use of these drugs. In Ottawa, 79% of people who inject drugs reported injecting crack or powdered cocaine and 64% reported injecting opiates.

Focusing on the most commonly injected drugs, 47% of people who use drugs in Toronto reported injecting cocaine most often and 47% reported injecting opiates most often. Use was similar in Ottawa; 53% of people

reported injecting cocaine most often and 46% reported injecting opiates most often.

There was a wide range of injecting frequencies among people who use drugs. In Toronto, 27% of people injected at least once a day in the month prior to being interviewed. Among street-involved youth in Toronto, 41% reported injecting at least once a day. In Ottawa, 30% reported injecting at least once a day.

Table 2.1.1 Drugs Injected by People who Inject Drugs in Toronto, by Gender

In the past 6 months, which of the following drugs did you inject (shoot/fix)?	All (n=257) N (%)	Men (n=177) N (%)	Women (n=78) N (%)
Crack or cocaine	228 (89)	157 (89)	69 (88)
Opiates	220 (86)	157 (89)	62 (79)
Speedballs (heroin & cocaine)	52 (20)	40 (23)	12 (15)
Amphetamines (speed, uppers, bennies) or Methamphetamines (Crystal meth, Ice)	50 (19)	39 (22)	11 (14)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Opiates includes: prescribed methadone, non-prescribed methadone, prescribed morphine, non-prescribed morphine, heroin, fentanyl patches, heroin, Dilaudid®, oxycontin/oxycodone

Findings

- The most common drugs injected at least once by people who used drugs in Toronto in the 6 months prior to being interviewed were crack cocaine or powdered cocaine and opiates. About 85% to 90% of survey respondents reported injecting these drugs.
- About 1 in 5 respondents reported injecting a combination of heroin and cocaine. About 1 in 5 respondents also reported injecting amphetamines or methamphetamines. Men were more likely than women to inject opiates, opiate/cocaine combinations, and amphetamines or methamphetamines.
- Other classes of drugs were taken by 5% of respondents or fewer and are not reported because of small numbers, including: sedatives (benzodiazepines, barbiturates); steroids or hormones; hallucinogens (LSD or PCP); Talwin® and Ritalin®
- 11% of participants reported injecting Ritalin® alone.

Table 2.1.2 Drugs Injected by People who Inject Drugs in Ottawa, by Gender

In the past 6 months, which of the following drugs have you injected?	All (n=292) N (%)	Men (n=220) N (%)	Women (n=71) N (%)
Crack or cocaine	230 (79)	168 (76)	61 (86)
Opiates	187 (64)	137 (62)	49 (69)
Amphetamines (speed, uppers, bennies) or Methamphetamines (crystal meth, ice)	24 (8)	14 (6)	10 (14)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Opiates includes: prescribed methadone, non-prescribed methadone, prescribed morphine, non-prescribed morphine, heroin, oxycodone, fentanyl patches, Dilaudid®, other opiates (Demerol®, Talwin®, Percocet®, codeine)

Findings

- In Ottawa, the most common drugs injected at least once by people who used drugs in the 6 months prior to being interviewed were crack cocaine or powdered cocaine and opiates. Approximately, 80% of survey respondents reported injecting crack or cocaine.
- About 65% of survey respondents reported injecting opiates.
- Women were more likely than men to report injecting crack or cocaine.
- Other classes of drugs were taken by 5% of respondents or fewer and are not reported because of small numbers, including: heroin and cocaine combinations; sedatives (benzodiazepines or barbiturates); steroids or hormones; hallucinogens (LSD or PCP); Ritalin® alone; and Talwin® and Ritalin®.

Table 2.1.3 Drugs Injected by Street-Involved Youth who Inject Drugs in Toronto

Have you ever injected	All (n=92) N (%)
Crack, crack and heroin, powder cocaine, or speedballs	23 (25)
Opiates	26 (28)
Amphetamines (speed, uppers, bennies) or Methamphetamines (crystal meth, Ice, crank)	9 (10)
Hallucinogens	16 (17)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

The analysis by gender excludes transgendered people due to small numbers

Opiates includes: heroin, oxycontin/oxycodone, fentanyl, morphine, other opiates (Demerol®, Talwin®, Percocet®, codeine), or methadone (non-prescription).

Hallucinogens includes: acid, ecstasy, MDA, ketamine, PCP, or GHB

Findings

- About 1 in 4 street-involved youth who use drugs in Toronto reported ever injecting crack cocaine, other forms of cocaine or cocaine/heroin combinations.
- About 1 in 4 street-involved youth who use drugs in Toronto reported ever injecting opiates.
- About 1 in 10 street-involved youth who use drugs in Toronto reported ever injecting amphetamines, including methamphetamine.
- About 1 in 6 street-involved youth who use drugs in Toronto reported ever injecting hallucinogens.
- Drug use was similar by gender. Detailed results are not reported due to small numbers.

Table 2.1.4 Substances Used by Street-involved youth who use Drugs in Toronto

Substances used in the past 6 months	All (n=92) N (%)	Men (n=67) N (%)	Women (n=19) N (%)
Alcohol	83 (90)	60 (90)	17 (89)
Crack, crack and heroin, powder cocaine, or speedballs	78 (85)	57 (85)	16 (84)
Cannabis (pot, weed, hash, oil, marijuana)	75 (82)	56 (84)	15 (79)
Hallucinogens	74 (80)	54 (81)	15 (79)
Opiates	59 (64)	42 (63)	12 (63)
Amphetamines (speed, uppers, bennies) or Methamphetamines (crystal meth, Ice)	44 (48)	33 (49)	5 (26)
Prescription and over the counter medication	42 (46)	28 (42)	11 (58)
Sedatives (benzodiazepines, barbiturates)	21 (23)	13 (19)	7 (37)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

The analysis by gender excludes transgendered people due to small numbers

Opiates includes: heroin, oxycontin/oxycodone, fentanyl, morphine, other opiates, or methadone (non-prescription).

Hallucinogens includes: acid, ecstasy, MDA, ketamine, PCP, or GHB

Prescription and over the counter medication: Acetaminophen with codeine, over the counter drugs (e.g. cough syrup, Gravol®, Sudafed®), sildenafil, PAVA/PABA

Findings

- In the 6 months prior to the interview, the substances most commonly consumed by street-involved youth in Toronto who use drugs was alcohol (90%) followed by crack cocaine, powdered cocaine or cocaine/heroin combinations (85%).
- Most street-involved youth reported using cannabis (82%) and hallucinogens (80%).
- Opiates were taken by about 2 out of 3 street-involved youth who use drugs in Toronto in the 6 months prior the interview.
- Amphetamine use was considerably more common among male street-involved youth than among female street-involved youth.
- Taking prescription and over the counter medication and sedatives was considerably more common among female street-involved youth than among male street-involved youth.
- Other classes of drugs were taken by 5% of respondents or fewer and are not reported because of small numbers, including: poppers, methamphetamine and ketamine combination, crystal methamphetamine and GHB (Gamma-Hydroxybutyric acid) combination, solvents and non-beverage alcohol (e.g. Listerine® /rubbing alcohol), steroids/hormones, Ritalin® only, solvents (e.g. gas, glue, Lysol®, Pam®)

Table 2.1.5 Most Common Drugs Injected by People who Inject Drugs in Toronto, by Gender

In the past 6 months, which of these drugs did you inject (fix/shoot up) most often?	All (n=257) N (%)	Men (n=177) N (%)	Women (n=78) N (%)
Crack or cocaine	122 (47)	79 (45)	42 (54)
Opiates	122 (47)	87 (49)	35 (45)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Opiates includes: Opiates includes: prescribed methadone, non-prescribed methadone, prescribed morphine, non-prescribed morphine, heroin, fentanyl patches, heroin, Dilaudid®, oxycontin/oxycodone

Findings

- The most common drugs injected by people who use drugs in Toronto in the 6 months prior to being interviewed were crack or powdered cocaine and opiates.
- About 1 in 2 people reported injecting each type of drug most commonly.
- Patterns of drug use were generally similar for men and women.
- Other classes of drugs were injected by 5% of respondents or fewer and are not reported because of small numbers. These include: heroin and cocaine combinations; amphetamines (speed, uppers, bennies) and methamphetamines (crystal meth, ice); and steroids or hormones.

Table 2.1.6 Most Common Drugs Injected by People who Inject Drugs in Ottawa, by Gender

In the past 6 months, which of these drugs did you inject most often?	All (n=292) N (%)	Men (n=220) N (%)	Women (n=71) N (%)
Crack or cocaine	154 (53)	121 (55)	32 (45)
Opiates	135 (46)	96 (44)	39 (55)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Opiates includes: prescribed methadone, non-prescribed methadone, prescribed morphine, non-prescribed morphine, heroin, oxycodone, fentanyl patches, Dilaudid®, other opiates (Demerol®, Talwin®, Percocet®, codeine)

Findings

- The most common drug injected by people who use drugs in Ottawa in the 6 months prior to being interviewed were crack or powdered cocaine, closely followed by opiates.
- About 1 in 2 people reported injecting each type of drug most commonly.
- Patterns of drug use were generally similar for men and women.
- Other classes of drugs were injected most commonly by fewer than 5% of respondents and are not reported because of small numbers. These include amphetamines (speed, uppers, and bennies) and methamphetamines (crystal meth, ice).

Table 2.1.7 Drug Injection Frequency among People who Inject Drugs in Toronto, by Gender

In the past month, how often did you inject drugs (shoot up/fix)?	All (n=257) N (%)	Men (n=177) N (%)	Women (n=78) N (%)
Not at all	32 (12)	24 (14)	8 (10)
Once in a while, not every week	58 (23)	36 (20)	22 (28)
Regularly, once or twice a week	57 (22)	43 (24)	12 (15)
Regularly, three or more times a week	40 (16)	23 (13)	17 (22)
Every day	70 (27)	51 (29)	19 (24)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- There was a wide range of injecting frequencies among people who inject drugs in Toronto.
- About 1 in 4 people injected at least once a day in the month prior to being interviewed.
- About 1 in 8 people had not injected at all in the month prior to being interviewed.
- Injection frequency was similar among men and women.
- In the 2008 Shout Clinic Street Youth Harm Reduction Survey, 41% of respondents who reported injecting drugs injected at least once a day in the 6 months prior to being interviewed. Of these, about 20% injected once a day and about 20% injected between two and ten times a day. Detailed results are not reported due to small numbers.

Table 2.1.8 Drug Injection Frequency among People who Inject Drugs in Ottawa, by Gender

In the past 6 months, how often did you inject drugs?	All (n=292) N (%)	Men (n=220) N (%)	Women (n=71) N (%)
Once in a while, not every week	125 (43)	103 (47)	22 (31)
Regularly, once or twice a week	52 (18)	37 (17)	14 (20)
Regularly, three or more times a week	26 (9)	20 (9)	6 (8)
Every day	89 (30)	60 (27)	29 (41)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- There was a wide range of injecting frequencies among people who inject drugs in Ottawa.
- About 1 in 3 people injected at least once a day in the 6 months prior to being interviewed.
- About 2 in 5 people had not injected at all in the 6 months prior to being interviewed.
- Women were more likely than men to report injecting every day.

Section 2.2

Injecting Partners and Equipment Sharing among People who use Drugs

Background: One of the primary goals of supervised consumption facilities is to reduce risky drug use. Among people who inject drugs, those who share injection equipment with multiple partners or inject with strangers have a greater risk of contracting bloodborne disease; sharing and lending of used injection equipment can lead to HIV and HCV transmission. Understanding the frequency of these risk behaviours and how taking drugs within a supervised consumption facility might decrease these behaviours are important in determining the feasibility of a supervised consumption facility. The risks of disease transmission from sharing and lending of used pipes for smoking drugs and other inhalation equipment are not as well documented as the risks with injection. However, infections such as hepatitis B and C might be transmitted

through such methods if people who share equipment have cuts, burns or other lesions on their lips or in their mouths. We describe how often people who inject drugs do so with partners and who those partners are, how often people who inject drugs borrow or lend used equipment, and how often people who smoke drugs borrow or lend used equipment.


Data: We used data from three sources: 1) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users (I-Track), a survey of 477 people who use drugs; and 2) the 2006 Ottawa I-Track study, a survey of 292 people who use drugs; and 3) the 2008 Shout Clinic Street Youth Harm Reduction Survey, a survey of 92 street-involved youth who used drugs. The text in the table indicates the wording that was used for each question.

Findings:

In Toronto, 21 to 27% of people reported that they had injected with somebody they did not know at all or did not know well. In Ottawa, 9% of respondents reported that they had injected with somebody they did not know well.

In both cities, about 65% of respondents who injected with other people reported that they most commonly injected with a close friend and about 30% reported that they most commonly injected with a regular sex partner. In both cities, women were considerably more likely than men to report that they injected with a regular sex partner.

18% of people who inject drugs in Toronto and 14% of people who inject drugs in Ottawa reported that they had used needles or syringes that had already been used by



someone else. About 10% of adults who inject drugs and 20% of street-involved youth who inject drugs reported that they used a used needle sometimes, always, or usually.

20% of people who inject drugs in Toronto and 9% of people who inject drugs in Ottawa reported borrowing or lending a used needle or syringe. 42% of street-involved youth who inject drugs reported giving others their used needles.

73% of people who use drugs in Toronto, 71% of people who use drugs in Ottawa, 76% of street-involved youth who smoke crack cocaine in Toronto, and 81% of street-involved youth who smoke crystal methamphetamine in Toronto reported having used a pipe that had been used by others in the 6 months prior to being interviewed. Street-involved youth frequently said that they always used

a used pipe (15% for crack smoking and 33% for crystal methamphetamine smoking).

78% of people who use drugs in Toronto and 74% of people who use drugs in Ottawa had lent or sold a used crack pipe. 54% of street-involved youth crack smokers and 50% of street-involved youth crystal meth smokers had lent or sold a used pipe.

Table 2.2.1 Injecting Partners of People who Inject Drugs in Toronto, by Gender

In the past 6 months, with whom did you inject drugs (shoot up/fix)?	All (n=257) N (%)	Men (n=177) N (%)	Women (n=78) N (%)
Injected alone	207 (81)	148 (84)	58 (74)
Close friend(s)	188 (73)	131 (74)	56 (72)
People I don't know well	70 (27)	56 (32)	14 (18)
Regular sex partner(s)	68 (26)	39 (22)	29 (37)
People I don't know at all	55 (21)	42 (24)	13 (17)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Column totals are more than 100% since the question asks for all responses that apply

Findings

- About 8 of 10 people who inject drugs in Toronto reported that they had injected drugs alone at least once in the 6 months prior to being interviewed.
- About 7 of 10 people reported that they had injected drugs with a close friend at least once in the 6 months prior to being interviewed.
- Between 20 and 30% of people who inject drugs in Toronto reported that they had injected with somebody they did not know well or did not know at all.
- Men were considerably more likely than women to report that they injected with people they did not know well or at all.
- About 1 in 4 respondents reported that they injected with a regular sex partner.
- Women were considerably more likely than men to report that they injected with a regular sex partner.
- Fewer than 5% of respondents reported injecting with a family member.

Table 2.2.2 Injecting Partners of People who Inject Drugs in Ottawa, by Gender

In the past 6 months, with whom have you injected drugs?	All (n=292) N (%)	Men (n=220) N (%)	Women (n=71) N (%)
Always injected alone	122 (42)	103 (47)	19 (27)
Close friend(s)	124 (42)	90 (41)	33 (46)
Regular sex partner(s)	56 (19)	31 (14)	25 (35)
People I don't know well	26 (9)	17 (8)	8 (11)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Column totals are more than 100% since the question asks for all responses that apply

Findings

- About 4 of 10 people who inject drugs in Ottawa reported that they always injected drugs alone in the 6 months prior to being interviewed. Note that this question is different than the one asked in Toronto (which asked about *ever* injecting alone).
- About 4 of 10 people reported that they had injected drugs with a close friend at least once in the 6 months prior to being interviewed.
- About 1 in 10 people who inject drugs in Ottawa reported that they had injected with somebody they did not know well.
- About 1 in 5 respondents reported that they injected with a regular sex partner.
- Women were considerably more likely than men to report that they injected with a regular sex partner.
- Fewer than 5% of respondents reported injecting with a family member or with somebody they did not know at all.

Table 2.2.3 Most Common Injecting Partners of People who Inject Drugs in Toronto, by Gender

In the past 6 months, with whom did you inject most often?	All (n=116) N (%)	Men (n=79) N (%)	Women (n=36) N (%)
Close friend(s)	75 (65)	54 (68)	20 (56)
Regular sex partner(s)	34 (29)	19 (24)	15 (42)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- Among people who inject drugs in Toronto who reported having injected with a partner, about 2 in 3 reported that they most commonly injected with a close friend.
- About 1 in 3 reported that they most commonly injected with a regular sexual partner.
- Women were considerably more likely than men to report that they most commonly injected with a regular sex partner and considerably less likely to report injecting with a close friend.
- Other responses were reported by 5% of respondents or fewer and are not reported because of small numbers. These include: family, people not known well, and people not known at all.

Table 2.2.4 Most Common Injecting Partners of People who Inject Drugs in Ottawa, by Gender

In the past 6 months, with whom have you injected the most?	All (n=170) N (%)	Men (n=117) N (%)	Women (n=52) N (%)
Close friend(s)	109 (64)	84 (72)	24 (46)
Regular sex partner(s)	52 (31)	27 (23)	25 (48)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- Among people who inject drugs in Ottawa who reported having injected with a partner, about 2 in 3 reported that they most commonly injected with a close friend.
- About 1 in 3 reported that they most commonly injected with a regular sexual partner.
- Women were considerably more likely than men to report that they most commonly injected with a regular sex partner and considerably less likely to report injecting with a close friend.
- Other responses were reported by 5% of respondents or fewer and are not reported because of small numbers. These include people not known well and people not known at all.

Table 2.2.5 Injection with Used Needles or Syringes by People who Inject Drugs in Toronto and Ottawa

In the past 6 months, when you injected drugs, did you use needles (and /or syringes) that had already been used by someone else? (this includes your sex partners)	N (%)
Toronto (n=256)	47 (18)
Men (n=177)	29 (16)
Women (n=77)	18 (23)
Ottawa (n=292)	40 (14)
Men (n=220)	22 (10)
Women (n=71)	18 (25)

Sources: 2006 Toronto I-Track Survey and 2006 Ottawa I-Track Survey

The Toronto questionnaire asked about use of "Needles that had already been used by someone else (this includes your sex partners)". The Ottawa questionnaire asked about "Needles or syringes that had already been used by someone else (this includes your sex partners)"

Findings

- About 1 in 5 people who inject drugs in Toronto reported they had injected with needles that had already been used by someone else, while 1 in 7 people who inject drugs in Ottawa reported that they had injected with needles or syringes that had already been used by someone else.
- Women were more likely than men to report injecting with used equipment. Results are not shown due to small numbers.
- Of people who inject drugs in Ottawa and reported injecting with used equipment in the 6 months prior to being interviewed, 18% reported doing so only once and 70% reported doing so sometimes.

Table 2.2.6 Injection with Used Needles by People who Inject Drugs in Toronto, by Gender

In the past 6 months, how often had the needles (fits, rigs) that you used to inject drugs (shoot up/fix) already been used by someone else?	All (n=253)	Men (n=174)	Women (n=77)
	N (%)	N (%)	N (%)
Didn't use a used needle	210 (83)	148 (85)	60 (78)
Occasionally (1 to 25%)	22 (9)	14 (8)	8 (10)
More than 25% of the time	21 (8)	12 (7)	9 (12)

Source: 2006 Toronto I-Track Survey. Some people who answered the question in Table 2.2.6 Injection with Used Needles by People who Inject Drugs in Toronto, by Gender did not answer this question).

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 5 of every 6 people who inject drugs in Toronto reported that they had not injected with a needle that had already been used by someone else in the 6 months prior to being interviewed.
- About 1 in 10 people reported that they injected with a used needle less than 25% of the time.
- About 1 in 12 reported that they injected with a used needle sometimes, always, or usually (25% of the time or more)
- Men and women reported similar rates of injecting with used needles.

Table 2.2.7 Injection with Used Needles by Street-involved youth who Inject Drugs in Toronto

In the past 6 months, how often had the needles/syringes that you used to inject drugs (shoot up/fix), already been used by someone else?	All (n=33)
	N (%)
Never	26 (79)
Occasionally (1/4 of the time)	7 (21)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 8 of every 10 street-involved youth who inject drugs in Toronto reported that they had never injected with a needle that had already been used by someone else in the 6 months prior to being interviewed.
- About 2 of 10 street-involved youth reported that they occasionally (25% of the time or less) injected with a needle or a syringe that had been used by someone else.
- Responses by gender are not reported in detail due to small numbers.

Table 2.2.8 Reuse of Needles by People who Inject Drugs in Toronto, by Gender

In the past 6 months, how often were the needles (fits, rigs) that you used to inject drugs (shoot up/fix), then used again by someone else?	All (n=256)	Men (n=176)	Women (n=78)
	N (%)	N (%)	N (%)
Never	200 (78)	143 (81)	55 (71)
Occasionally (1-25%)	31 (12)	20 (11)	11 (14)
Sometimes (26-74%)	21 (8)	11 (6)	10 (13)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 8 of 10 people who use drugs in Toronto reported that they never lent or sold a used needle to someone else in the 6 months prior to being interviewed.
- About 1 in 10 people reported that they gave used needles to other people to inject occasionally (25% of the time or less) and 1 in 10 reported that they did so sometimes (26 to 74% of the time).
- Men and women gave similar responses.

Table 2.2.9 Reuse of Used Needles by People who Inject Drugs in Ottawa, by Gender

In the past 6 months, did you pass on needle/syringes that you had already used to someone else (including sex partners)?	All (n=287)	Men (n=216)	Female (n=70)
	N (%)	N (%)	N (%)
Never	252 (88)	197 (91)	54 (77)
Sometimes	26 (9)	14 (6)	12 (17)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 9 of 10 people who use drugs in Ottawa reported that they never given a needle or syringe that they had used to someone else in the 6 months prior to being interviewed.
- About 1 in 10 people reported that they sometimes gave a needled that they had used to somebody else.
- Other responses (“only once” and “usually”) are not reported due to small numbers.
- Women were considerably more likely to pass along used needles than men.

Table 2.2.10 Reuse of Needles by Street-involved youth who Inject Drugs in Toronto

In the past 6 months how often were the needles/syringes and other injection equipment that you used to inject drugs (shoot up/fix), then used again by someone else?	All (n=31) N (%)
Never	16 (52)
Occasionally (1/4 of the time)	7 (23)
Sometimes (1/2 of the time)	6 (19)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey
The analysis by gender excludes transgendered people due to small numbers

Findings

- About 5 of 10 street-involved youth who use drugs in Toronto reported that they never gave a needle or syringe that they had used to someone else in the 6 months prior to being interviewed.
- About 1 in 4 street-involved youth reported that they occasionally gave a needle or syringe to someone else; 1 in 4 reported doing so sometimes.
- Responses by gender are not reported due to small numbers.

Table 2.2.11 Smoking with Used Crack Pipes by People who Use Drugs in Toronto, by Gender

In the past 6 months, have you borrowed or bought a crack pipe from other people that they had already used and used it yourself?	N (%)
All (n=454)	332 (73)
People who inject drugs (n=236)	179 (76)
People who smoke crack cocaine but do not inject (n=218)	153 (70)
Men (n=326)	241 (74)
Women (n=125)	89 (71)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 7 of 10 people who use drugs in Toronto reported having smoked with a used crack pipe at least once in the 6 months prior to being interviewed.
- People who inject drugs and people who smoke crack cocaine but do not inject smoked with a used crack pipe at about the same frequency.
- Men and women smoked with a used crack pipe at about the same frequency.

Table 2.2.12 Frequency of Smoking with Used Crack Pipes by People who Use Drugs in Ottawa, by Gender

In the past 6 months, have you used a pipe that someone else had already used or was still using and used it yourself?	All (n=276) N (%)	Men (n=210) N (%)	Women (n=65) N (%)
Never use other people's pipes	81 (29)	64 (30)	17 (26)
Sometimes	135 (49)	100 (48)	35 (54)
Usually	34 (12)	26 (12)	7 (11)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 7 of 10 people who use drugs in Ottawa reported having smoked with a used crack pipe at least once in the 6 months prior to being interviewed.
- About 1 in 8 people reported usually smoking with a used crack pipe.
- Men and women report smoking with a used crack pipe at about the same frequency.
- Other categories (“every time” and “once”) are not reported due to small numbers.

Table 2.2.13 Frequency of Inhalation Equipment Sharing among People who Use Drugs in Ottawa, by Gender

In the past 6 months, how many times have you shared equipment (e.g., straw, pipe, etc.) that had already been used by someone else (including sex partners) to smoke, inhale, or sniff drugs?	All (n=289)	Men (n=219)	Women (n=69)
	N (%)	N (%)	N (%)
Never borrowed equipment	70 (24)	55 (25)	15 (22)
Once or Sometimes*	158 (55)	119 (54)	39 (56)
Usually	33 (11)	26 (12)	7 (10)
Every time	28 (10)	19 (9)	8 (12)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

*These categories are merged due to small numbers.

Findings

- About 3 of 4 people who use drugs in Ottawa reported having borrowed equipment for smoking, inhaling, or sniffing drugs at least once in the 6 months prior to being interviewed.
- About 2 in 10 people reported usually or always sharing inhalation equipment.
- Men and women shared inhalation equipment at about the same frequency.

Table 2.2.14 Frequency of Smoking with Used Crack Pipes by Street-involved Youth who Use Drugs in Toronto

In the past 6 months, how often had the pipe that you used to smoke crack, already been used by someone else?	All (n=62)
	N %
Always (all of the time)	9 (15)
Usually (3/4 of the time)	7 (11)
Sometimes (1/2 of the time)	10 (16)
Occasionally (1/4 of the time)	15 (24)
Never	21 (34)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

Findings

- About 3 of 4 street-involved youth who use drugs in Toronto reported having borrowed a crack pipe at least once in the 6 months prior to being interviewed.
- About 1 in 4 street-involved youth reported usually or always using a used crack pipe.
- Results by gender are not reported due to small numbers.

Table 2.2.15 Frequency of Smoking with Used Crystal Methamphetamine Pipes by Street-involved youth who Use Drugs in Toronto

In the past 6 months, how often had the pipe that you used to smoke crystal meth already been used by someone else?	All (n=43) N (%)
Always (all of the time)	14 (33)
Usually (3/4 of the time)	6 (14)
Sometimes (1/2 of the time)	6 (14)
Occasionally (1/4 of the time)	9 (21)
Never	8 (19)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

Findings

- About 4 of 5 street-involved youth who smoke crystal methamphetamine in Toronto reported having borrowed a pipe for this at least once in the 6 months prior to being interviewed.
- More than 1 in 2 street-involved youth reported usually or always using a used crystal methamphetamine pipe.
- Among street-involved youth who inject and also smoke drugs, 40% said they always used a crystal methamphetamine pipe that had had been used by someone else.
- Among street-involved youth who smoke drugs but do not inject, 29% said they always used a crystal methamphetamine pipe that had been used by someone else.
- Results by gender and detailed reports by type of drug use are not reported due to small numbers.

Table 2.2.16 Frequency of Smoking with Used Pipes by Street-involved youth who Use Drugs in Toronto, by Type of Drug Use

In the past 6 months, how often had the pipe that you used to smoke crack, already been used by someone else?	People who inject drugs (n=23)	People who smoke crack or crystal meth (n=39)
	N (%)	N (%)
Never	5 (22)	16 (41)
Occasionally (1/4 of the time)	5 (22)	10 (26)
Sometimes, usually, or always (more than 1/4 of the time)	13 (57)	13 (33)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

Findings

- More than half of street-involved youth who inject drugs frequently used a used crack pipe when smoking crack cocaine.
- About one-third of street-involved youth who smoke drugs frequently smoked with a used crack pipes when smoking crack cocaine.
- The categories “sometimes”, “usually”, and “always” are combined due to small numbers.

Table 2.2.17 Lending or Selling Used Crack Pipes by People who Smoke Crack Cocaine in Toronto, by Gender

In the past 6 months, have you lent or sold a crack pipe to other people to use, after you had already used it?	N (%)
All (n=454)	352 (78)
People who inject drugs (n=236)	187 (79)
People who smoke crack cocaine but do not inject (n=218)	165 (76)
Men (n=325)	251 (77)
Women (n=325)	99 (79)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 8 of 10 people who use drugs in Toronto reported lending or selling a used crack pipe at least once in the 6 months prior to being interviewed.
- People who predominantly inject drugs and people who smoke crack cocaine but do not inject lent or sold a used crack pipe at about the same frequency.
- Men and women lent or sold a used crack pipe at about the same frequency.

Table 2.2.18 Lending of Used Crack Pipes by People who Use Drugs in Ottawa, by Gender

In the past 6 months, have you lent a pipe to other people to use after you had already used it, or were still using it?	All (n=276) N (%)	Men (n=210) N (%)	Women (n=65) N (%)
Never lend my pipe to other people	72 (26)	60 (29)	12 (18)
Once or Sometimes	156 (57)	113 (54)	43 (66)
Usually or Every Time	48 (17)	37 (18)	10 (15)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 3 of 4 people who use drugs in Ottawa reported having lent a used crack pipe to someone else at least once in the 6 months prior to being interviewed.
- About 7 in 10 men said they never lent a used crack pipe compared to 8 out of 10 women.
- People who predominantly inject drugs and people who smoke crack cocaine but do not inject lent a used crack pipe at about the same frequency.
- Categories are grouped together due to small numbers.

Table 2.2.19 Lending or Selling of Used Crack Pipes by Street-involved youth who Use Drugs in Toronto, by Gender

In the past 6 months, have you lent, rented or sold a pipe to other people to use, after you had already used it?	N (%)
Crack use (n=63)	34 (54)
Men (n=46)	25 (54)
Women (n=12)	6 (50)
People who inject (n=23)	15 (65)
People who smoke (n=40)	19 (48)
Crystal meth use (n=42)	21 (50)
People who inject (n=15)	8 (53)
People who smoke (n=27)	13 (48)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey
The analysis by gender excludes transgendered people due to small numbers

Findings

- About 5 of 10 street-involved youth who use drugs in Toronto reported having passed long a used crack pipe at least once in the 6 months prior to being interviewed.
- Street-involved youth who predominantly use crack cocaine and street-involved youth who predominantly use crystal methamphetamine lent or sold a used crack pipe at about the same frequency.
- Male and female street-involved youth who use crack lent or sold a used crack pipe at about the same frequency.
- Street-involved youth who inject and street-involved youth who smoke crack but do not inject lent or sold a used crack pipe at about the same frequency.
- Street-involved youth who inject and street-involved youth who smoke crystal methamphetamine but do not inject lent or sold a used crack pipe at about the same frequency.

Section 2.3

Locations where People Use Drugs

Background: One of the goals of supervised consumption facilities is to reduce the risks associated with using drugs in outdoor locations. From a public health perspective, outdoor drug use can be less hygienic and more risky and rushed than drug use indoors. From a public safety perspective, reduction of drug-related litter in public areas such as parks, washrooms, or schoolyards is desirable. From a public acceptance perspective, making drug use less visible might be desirable for neighbourhoods where there is a high level of public drug use. Conversely, establishing a more public place to use drugs, such as a supervised consumption facility, might be undesirable if most drug use already occurs in private or hidden environments. We describe the locations where people inject or smoke drugs in Toronto and Ottawa.

Data: We used data from three sources: 1) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users (I-Track), a survey of 477 people who use drugs; and 2) the 2006 Ottawa I-Track study, a survey of 292 people who use drugs; and 3) the 2008 Shout Clinic Street Youth Harm Reduction Survey, a survey of 92 street-involved youth who used drugs. The text in the table indicates that wording that was used for each question.

Findings:

Almost all people who inject drugs in Toronto and 69% of people in Ottawa injected at their own home or at a friend or family member's home.


54% of people who inject drugs in Toronto injected in a public place such as a washroom or stairwell and 46% injected on the street or

in an alley. The percentages for Ottawa were 25% and 29%, respectively.

More than 40% of people who inject drugs in Toronto reported injecting in a public space such as a washroom or toilet, parking lot, street or alley, stairwell or doorway, or park.

For 68% of people who inject drugs in Toronto and for 58% of people in Ottawa, the most common place to inject was in a private home. The most common place was in a public place such as a washroom for 13% of people in Toronto and for 12% of people in Ottawa. The most common place was on the street or in an alley for 11% of people in Toronto and 16% of people in Ottawa.

Street-involved youth were less likely to report injecting at home (30%). More than 15% reported injecting in a public washroom, park, parking lot, street or alley.



80% of people who use drugs through methods other than injection in Toronto and 66% of people who smoke drugs in Ottawa used drugs at their own home or at a friend or family member's home.

Other common public places to use drugs by methods other than injection (40 to 80%) in Toronto and in Ottawa were in a park, in a parking lot, on the street or in an alley, a washroom, and in a stairwell or doorway.

31% of people in Toronto reported that the most common place that they used drugs by methods other than injection was on the street or in an alley. 34% of people in Ottawa reported that the most common place they smoked drugs was on the street or in an alley.

Street-involved youth in Toronto were particularly likely to use drugs (by any method) in public places such as parks, parking lots, streets, alleys, stairwells, doorways, and public washrooms.

Both people who use drugs and other stakeholders acknowledged the undesirability of using drugs in public.

Table 2.3.1 Locations where People have Injected Drugs in Toronto, by Gender

In the past 6 months, where in Toronto have you injected drugs at all?	All (n=257) N (%)	Men (n=177) N (%)	Women (n=78) N (%)
At home or friend's or family's place	231 (90)	160 (90)	70 (90)
Public place (e.g. washroom or stairwell or woods)	139 (54)	94 (53)	43 (55)
Street/alley	117 (46)	80 (45)	36 (46)
Hotel, motel or boarding house	116 (45)	84 (47)	31 (40)
Shelter/hostel	59 (23)	45 (25)	13 (17)
Squats (abandon buildings)	22 (9)	15 (8)	7 (9)
Transition house, recovery/detox, psychiatric institution, or supportive housing	16 (6)	10 (6)	5 (6)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- Almost all people who inject drugs in Toronto injected, in the 6 months prior to being interviewed, at their own home or at a friend or family member's home.
- About 1 in 2 people who inject drugs in Toronto injected, in the 6 months prior to being interviewed, in a public place such as a washroom or stairwell.
- About 1 in 2 people who inject drugs in Toronto injected on the street or in an alley in the 6 months prior to being interviewed.
- Men and women injected in similar locations.
- Fewer than 5% of people injected in a jail, penitentiary, or correctional facility.

Table 2.3.2 Detailed Locations where People have Injected Drugs in Toronto, by Gender

In the past 6 months, have you ever injected in any of the following places?	All (n=219) N (%)	Men (n=154) N (%)	Women (n=64) N (%)
Public washroom or toilet	127 (58)	88 (57)	38 (59)
Parking lot of street or alley	96 (44)	66 (43)	29 (45)
Place where you pay to use or exchange drugs to use (i.e. shooting gallery crack house)	88 (40)	64 (42)	23 (36)
Stairwell or doorway of a building	85 (39)	59 (38)	26 (41)
Park	81 (37)	55 (36)	25 (39)
Car	62 (28)	42 (27)	20 (31)
Abandon building (not a shooting gallery or crack house)	44 (20)	30 (19)	13 (20)
Places where you buy drugs	44 (20)	26 (17)	17 (27)
School yard	29 (13)	14 (9)	14 (22)
None of the above	34 (16)	24 (16)	10 (16)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- Among people who inject drugs in Toronto, more than 1 in 2 reported that they had injected at least once in a public washroom or toilet in the 6 months prior to being interviewed.
- About 4 in 10 reported injecting at least once in each of the following public locations:
 - A parking lot, on a street, or in an alley
 - A stairwell or doorway
 - A park
- About 1 in 7 reported having injected at least once in a schoolyard.
- Men and women gave similar responses to this question

Table 2.3.3 Locations where People have Injected Drugs Most Often in Toronto, by Gender

In the past 6 months, what one place did you inject in the most often?	All (n=240) N (%)	Men (n=165) N (%)	Women (n=73) N (%)
At home or friend's or family's place	162 (68)	112 (68)	50 (68)
Public place (e.g. washroom or stairwell or woods)	32 (13)	21 (13)	9 (12)
Street/alley	26 (11)	17 (10)	9 (12)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- The most common place where people who inject drugs in Toronto injected in the 6 months prior to being interviewed was at their own home or at a friend or family member's home.
- For about 1 in 4 people who inject drugs in Toronto, the most common place was outside the home. These places were about evenly split between public places (such as washrooms and stairwells) and a street and alley way.
- Other places were reported by 5% of respondents or fewer and are not reported because of small numbers, including: a hotel, motel or boarding house; a shelter or hostel; and other locations.

Table 2.3.4 Locations where People have Injected Drugs in Ottawa, by Gender

In the past 6 months, where were you when you injected drugs?	All (n=292) N (%)	Men (n=220) N (%)	Women (n=71) N (%)
At home or friend's or family's place	202 (69)	144 (65)	58 (82)
Street/alley	84 (29)	59 (27)	24 (34)
Public place (e.g. washroom or stairwell or woods)	73 (25)	47 (21)	26 (37)
Hotel, motel or boarding house	56 (19)	44 (20)	12 (17)
Shelter/hostel	20 (7)	15 (7)	5 (7)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 7 in 10 people who inject drugs in Ottawa injected, in the 6 months prior to being interviewed, at their own home or at a friend or family member's home.
- About 1 in 3 people who inject drugs in Ottawa injected on the street or in an alley in the 6 months prior to being interviewed.
- About 1 in 4 people who inject drugs in Ottawa injected, in the 6 months prior to being interviewed, in a public place such as a washroom or stairwell.
- Women were more likely than men to report injecting at their own home or at a friend or family member's home.
- Women were more likely than men to report injecting in a public place such as a washroom or stairwell.
- Other locations were reported by 5% of respondents or fewer and are not reported because of small numbers, including: transition houses; recovery or detoxification centre; psychiatric institutions; supportive housing; squats (abandoned buildings); jail, penitentiaries, correctional facilities; cars; parking lots or garages.

Table 2.3.5 Locations where People have Injected Drugs Most Often in Ottawa, by Gender

In the past 6 months, where were you most often when you injected drugs?	All (n=292) N (%)	Men (n=220) N (%)	Women (n=71) N (%)
At home or friend's or family's place	169 (58)	121 (55)	48 (68)
Street/alley	46 (16)	36 (16)	9 (13)
Public place (e.g. washroom or stairwell or woods)	34 (12)	24 (11)	10 (14)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- The most common place where people who inject drugs in Ottawa injected in the 6 months prior to being interviewed was at their own home or at a friend or family member's home.
- For about 1 in 4 people who inject drugs in Ottawa, the most common place was outside the home. Injecting in streets or alleys was slightly more common than in public places (such as washrooms and stairwells).
- Other places were reported by 5% of respondents or fewer and are not reported because of small numbers, including: a hotel, motel or boarding house; a shelter or hostel; a transition house, recovery or detoxification centre, psychiatric institution, or supportive housing; squats; and other locations.

Table 2.3.6 Locations where Street-involved youth have Injected Drugs in Toronto

In the past 6 months, have you injected at any of the following places?	All (n=28) N (%)
At home or friend's or family's place	28 (30)
Public or business washroom	19 (21)
A park	16 (17)
An abandon building and or squat	15 (16)
Parking lot or street/alley way	15 (16)
Transition house, recovery/detox, community health centre, drop-in centre, or hospital	13 (14)
In a stairwell/doorway of a store, office or other building	13 (14)
A place you buy drugs and/or pay to use or exchange drugs to use (e.g. shooting gallery or crack house)	12 (13)
Hotel, or motel room	12 (13)
Shelter/hostel	12 (13)
A car or other vehicle	11 (12)
Bathhouse, club or bar, sex party, or rave/circuit party	10 (11)
Work place	8 (9)
School or school yard	8 (9)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 1 in 3 street-involved youth who inject drugs in Toronto injected, in the 6 months prior to being interviewed, at their own home or at a friend or family member's home.
- About 1 in 6 reported injecting at least once in each of the following public locations:
 - A public washroom
 - A park
 - A parking lot, on a street, or in an alley
- About 1 in 12 reported having injected at least once in a schoolyard.
- Results by gender are not reported due to small numbers.

Table 2.3.7 Locations where People have used Drugs through Non-Injection Methods in Toronto, by Gender

In the past 6 months, where in Toronto have you used drugs (i.e. non-injection use) at all?	All (n=220) N (%)	Men (n=162) N (%)	Women (n=57) N (%)
At home or friend's or family's place	177 (80)	127 (78)	49 (86)
Street/alley	169 (77)	124 (77)	44 (77)
Public place (e.g. washroom or stairwell or woods)	136 (62)	97 (60)	38 (67)
Hotel, motel or boarding house	118 (54)	86 (53)	31 (54)
Shelter/hostel	66 (30)	56 (35)	10 (18)
Squats (abandon buildings)	35 (16)	29 (18)	5 (9)
Transition house, recovery/detox, psychiatric institution, or supportive housing	27 (12)	17 (10)	10 (18)
Jail/penitentiary/correctional facility	18 (8)	13 (8)	5 (9)
Other locations	11 (5)	6 (4)	5 (9)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 8 of 10 people who use drugs by methods other than injection in Toronto, in the 6 months prior to being interviewed, used at their own home or at a friend or family member's home.
- About 8 of 10 people who use drugs by methods other than injection in Toronto, in the 6 months prior to being interviewed, used on the street or in an alley.
- About 6 in 10 people who inject drugs in Toronto injected, in the 6 months prior to being interviewed, in a public place such as a washroom or stairwell.
- Men and women used drugs in similar locations.

Table 2.3.8 Detailed Locations where People have used Drugs through Non-Injection Methods in Toronto, by Gender

In the past 6 months, have you ever used in any of the following places?	All (n=189) N (%)	Men (n=140) N (%)	Women (n=48) N (%)
Parking lot or street or alley	144 (76)	107 (76)	36 (75)
Park	133 (70)	96 (69)	36 (75)
Public washroom or toilet	132 (70)	94 (67)	37 (77)
Stairwell or doorway of a building	112 (59)	81 (58)	30 (63)
Place where you pay to use or exchange drugs to use (i.e. shooting gallery crack house)	103 (54)	76 (54)	27 (56)
Car	94 (50)	64 (46)	30 (63)
Places where you buy drugs	71 (38)	49 (35)	22 (46)
Abandon building (not a shooting gallery or crack house)	59 (31)	43 (31)	16 (33)
School yard	56 (30)	36 (26)	19 (40)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- Among people who use drugs by methods other than injection in Toronto, about 7 in 10 reported that they had used at least once, in the 6 months prior to being interviewed, in:
 - A parking lot, street, or alley
 - A park
 - A public washroom or toilet
- About 1 in 3 reported having used at least once in a schoolyard.
- Men and women gave generally similar responses to this question.

Table 2.3.9 Locations where People have used Drugs through Non-Injection Methods Most Often in Toronto, by Gender

In the past 6 months, what one place did you use in most often (i.e. non-injection use)?	All (n=179) N (%)	Men (n=130) N (%)	Women (n=48) N (%)
At home or friend's or family's place	94 (53)	66 (51)	28 (58)
Street/alley	56 (31)	39 (30)	16 (33)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- The most common place where people who use drugs by methods other than injection in Toronto in the 6 months prior to being interviewed, was at their own home or at a friend or family member's home.
- For about 1 in 3 people who inject drugs in Toronto, the most common place was in the street or in an alley.
- Other places were reported by 5% of respondents or fewer, and are not reported because of small numbers, including: a hotel, motel or boarding house; a public place such as a washroom, stairwell or in the woods; a shelter or hostel; a transition house, recovery or detoxification centre, psychiatric institution, or supportive housing; an abandoned building, and other locations.

Table 2.3.10 Locations where People have Smoked Drugs in Ottawa, by Gender

In the past 6 months, have you smoked crack/crystal meth at/in	All (n=292) N (%)	Men (n=220) N (%)	Women (n=71) N (%)
Street/alley	200 (68)	147 (67)	52 (73)
At home or friend's or family's place	194 (66)	144 (65)	50 (70)
Public place (e.g. washroom or stairwell or woods)	118 (40)	85 (39)	33 (46)
Hotel, motel or boarding house	93 (32)	67 (30)	26 (37)
Shelter/hostel	43 (15)	34 (15)	9 (13)
Other locations	20 (7)	15 (7)	5 (7)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Findings

- About 2 in 3 people who smoke drugs in Ottawa smoked, in the 6 months prior to being interviewed, on the street or in an alley.
- About 2 in 3 people who smoke drugs in Ottawa smoked, in the 6 months prior to being interviewed, at their own home or at a friend or family member's home.
- About 4 in 10 people who smoke drugs in Ottawa smoked, in the 6 months prior to being interviewed, in a public place such as a washroom or stairwell.
- Women and men generally gave similar responses to this question.
- Other locations were reported by 5% of respondents or fewer and are not reported because of small numbers, including: transition houses; recovery or detoxification centre; psychiatric institutions; supportive housing; squats (abandoned buildings); and jail, penitentiaries, or correctional facilities.

Table 2.3.11 Locations where People have Smoked Drugs Most Frequently in Ottawa, by Gender

In the past 6 months, where did you smoke crack/ crystal meth the most?	All (n=276) N (%)	Men (n=210) N (%)	Women (n=65) N (%)
At home or friend's or family's place	125 (45)	93 (44)	32 (49)
Street/alley	95 (34)	69 (33)	25 (38)
Hotel, motel or boarding house	23 (8)	--	--
Public place (e.g. washroom or stairwell or woods)	23 (8)	17 (8)	6 (9)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people due to small numbers

Cells with a dash indicate that numbers are too small to report.

Findings

- The most common place where people who smoke drugs in Ottawa smoked in the 6 months prior to being interviewed was at their own home or at a friend or family member's home. About 1 in 2 people reported such locations as their most common place to smoke drugs.
- For about 1 in 3 people who smoke drugs in Ottawa, the most common place was on the street or in an alley.
- Men and women gave generally similar responses to this question.

Table 2.3.12 Locations where Street-involved youth have Used Drugs in Toronto, by Gender

In the past 6 months, have you used drugs at any of the following places?	All (n=92) N (%)	Men (n=67) N (%)	Women (n=19) N (%)
At home or friend's or family's place	86 (93)	62 (93)	18 (95)
A park	69 (75)	48 (72)	16 (84)
Bathhouse, club or bar, sex party, or rave/circuit party	65 (71)	48 (72)	12 (63)
Parking lot or street/alley way	64 (70)	44 (66)	14 (74)
In a stairwell/doorway of a store, office or other building	56 (61)	37 (55)	14 (74)
Public or business washroom	54 (59)	37 (55)	14 (74)
Hotel, or motel room	53 (58)	37 (55)	11 (58)
A car or other vehicle	51 (55)	36 (54)	11 (58)
Shelter/hostel	50 (54)	36 (54)	9 (47)
Transition house, recovery/detox, community health centre, drop-in centre, or hospital	49 (53)	34 (51)	12 (63)
A place you buy drugs and/or pay to use or exchange drugs to use (e.g. shooting gallery or crack house)	46 (51)	31 (46)	12 (67)
An abandon building and or squat	41 (45)	28 (42)	11 (58)
School or school yard	29 (32)	18 (27)	9 (47)
Work place	25 (27)	16 (24)	6 (32)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

Findings

- Among all street-involved youth who use drugs in Toronto, almost all, in the 6 months prior to being interviewed, used at their own home or at a friend or family member's home.
- About 3 in 4 street-involved youth reported using drugs in a park.
- Public places, such as parks, parking lots, streets, alleys, stairwells, doorways, and public washrooms were common place for street-involved youth to use drugs.
- Male and female street-involved youth generally gave similar responses to this question.

Table 2.3.13 Locations where Street-involved youth have Used Drugs in Toronto, by Type of Drug Use

In the past 6 months, have you used drugs at any of the following places?	People who inject drugs (n=35)	People who smoke crack cocaine and/or crystal meth (n=57)
	N (%)	N (%)
At home or friend's or family's place	31 (89)	55 (96)
A park	25 (71)	44 (77)
Bathhouse, club or bar, sex party, or rave/circuit party	22 (63)	43 (75)
Parking lot or street/alley way	23 (66)	41 (72)
In a stairwell/doorway of a store, office or other building	23 (66)	33 (58)
Public or business washroom	26 (74)	28 (49)
Hotel, or motel room	17 (49)	36 (63)
A car or other vehicle	16 (46)	35 (61)
Shelter/hostel	16 (46)	34 (60)
Transition house, recovery/detox, community health centre, drop-in centre, or hospital	20 (57)	29 (51)
A place you buy drugs and/or pay to use or exchange drugs to use (e.g. shooting gallery or crack house)	19 (56)	27 (47)
An abandon building and or squat	19 (54)	22 (39)
School or school yard	11 (31)	18 (32)
Work place	9 (26)	16 (28)
Detention/jail/prison	6 (17)	10 (18)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

Findings

- Street-involved youth who smoke drugs and street-involved youth who inject drugs generally use drugs in similar locations.
- Street-involved youth who inject drugs were more likely to report that they had used drugs in a public or business washroom than street-involved youth who smoke drugs.

Table 2.3.14 Locations where Street-involved youth have Taken Drugs Most Frequently in Toronto

In the past 6 months, what were the three places where you most frequently used drugs?	All (n=92)	People who inject drugs (n=35)	People who smoke crack cocaine or crystal meth (n=57)
	N (%)	N (%)	N (%)
At home or friend's or family's place	59 (64)	21 (60)	38 (67)
A park	34 (37)	10 (29)	24 (42)
Parking lot or street/alley way	28 (30)	11 (31)	17 (30)
In a stairwell/doorway of a store, office or other building	16 (17)	5 (14)	11 (19)
Public or business washroom	12 (13)	7 (20)	5 (9)
An abandon building and or squat	10 (11)	5 (14)	5 (9)
Bathhouse, club or bar, sex party, or rave/circuit party	10 (11)	--	--
Shelter/hostel	9 (10)	--	--
Hotel, or motel room	8 (9)	--	--

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

Findings

- The most common place where street-involved youth who inject drugs in Toronto injected in the 6 months prior to being interviewed was at their own home or at a friend or family member's home. About 2 in 3 street-involved youth listed this location as one of the three most common places that they injected drugs.
- For about 1 in 3 street-involved youth who inject drugs in Toronto, the three most common place to inject drugs included places outside the home, including parks and parking lots / streets / always.
- Other places were reported by 5% of respondents or fewer and are not reported because of small numbers, including: a school or schoolyard; a work place; and other locations.
- Street-involved youth who inject and street-involved youth who smoke generally use drugs in similar locations.

Chapter 3

Do Ontario Residents Agree or Disagree with Making Supervised Consumption Facilities Available?

Background: In this chapter we examine public opinions about supervised consumption facilities and consider the following seven questions: 1) Do Ontario residents know about supervised injection facilities and supervised consumption facilities?; 2) Do residents of Ontario agree with the four goals of supervised consumption facilities?; 3) Does agreement with making supervised consumption facilities available differ depending on the goals of the facility; 4) What do stakeholders identify as reasons for or against implementing a supervised consumption facility?; 5) Did Ontario residents' overall opinions of supervised consumption facilities change between 2003 and 2009?; 6) What are the characteristics of Ontario residents who agree with making supervised injection facilities and supervised smoking facilities available; and 7) What are the key factors that influence the acceptance of supervised consumption facilities?

Summary: Considerably more Ontarians have read, seen, or heard about supervised injection facilities compared with supervised smoking facilities. More Ontario residents strongly agreed with making supervised injection facilities available than supervised smoking facilities. Ontarians who strongly agreed with making supervised injection facilities available tended to also agree with making supervised

smoking facilities available.

More Ontarians were likely to agree with implementing supervised injection facilities if the goals are to reduce negative health consequences, increase contact with health or social workers, or to reduce neighbourhood problems related to drug use. Most Ontarians agreed with implementing supervised smoking facilities if the purpose is to reduce neighbourhood problems related to drug use or improve the health of people who use drugs. However, fewer Ontario agreed with implementing supervised injection facilities and supervised smoking facilities if the goal is to encourage safer drug use among people who inject or smoke drugs.

We created two measures to gauge Ontario residents' overall opinions of supervised injection facilities and supervised smoking facilities. More Toronto than Ottawa residents strongly agreed with making supervised injection facilities available than supervised smoking facilities. Most Ontarians had mixed opinions about the goals of supervised smoking facilities; approximately 2 out of 3 residents somewhat agreed or disagreed with the supervised smoking facilities for all goals.

Overall, Toronto residents were more likely to strongly agree with making supervised injection facilities available than were

residents of Ottawa. Between 2003 and 2009, there was a shift in public opinion about supervised injection facilities. The percentage of Ontario residents who somewhat agreed or disagreed with supervised injection facilities decreased and the proportion of residents who strongly agreed with each of the four goals increased.

Among those with mixed opinions about supervised consumption facilities, stakeholders said they would take a more definitive position if concerns about one or more of five key issues were resolved. The five key issues were: a better understanding of supervised consumption facility evidence in general; demonstration of need for a supervised consumption facility; understanding the relationship between supervised consumption facilities and a broader health and social response to drug use; evidence about potential impact on homes, businesses, and the community; and proposed supervised consumption facility implementation design.

Among those in favour of implementing supervised consumption facilities, a pilot project that includes a comprehensive evaluation plan was recommended as the first step towards implementation. Also recommended were evaluation of health and other outcomes (e.g., drug trafficking, assaults, and other drug-related crime in the local area) and public dissemination of evaluation results.

Section 3.1

What do Ontario Residents Know about Supervised Injection Facilities and Supervised Smoking Facilities?

Background: Public policy relating to illicit drug use has implications for the health and safety of individuals, families and communities, and involves many stakeholders. Governments and other decision-making bodies look to public opinion as important input when determining policies. Governments are more likely to act when public opinion is supportive of particular policies and practices.

Public opinion data are used to help guide decisions regarding supervised consumption facility implementation along with data about disease transmission, overdose, and public disorder. Public opinion is influenced in part by the level of awareness of such facilities and by opinions regarding appropriate societal responses to illicit drug use.

Perceptions of negative public opinion that are not based in evidence can have profound implications for public health programming. Public opinion is not static and it is important to understand when it changes. As such, an accurate understanding of public opinion grounded in evidence is crucial given its importance for decisions regarding public policy responses to illicit drug use.

Data: We used data from the 2009 CAMH Monitor, a telephone-administered public opinion survey of Ontario residents that included questions about supervised injection facilities and supervised smoking facilities.

Findings: Ontarians have read, seen or heard information about supervised injection facilities (58%) more

often than about supervised smoking facilities (18%). People living in Toronto and Ottawa have similar levels of knowledge about supervised injection facilities. Residents of Ottawa are more aware of supervised smoking facilities than residents of Toronto.

Table 3.1.1 Ontario Residents' Knowledge of Supervised Injection Facilities and Supervised Smoking Facilities

Have you ever read, seen or heard any information about:	Ontario (n=1004)	Toronto (n=205)	Ottawa (n=62)
	N (%)	N (%)	N (%)
Supervised Injection Facility	578 (58)	137 (67)	44 (70)
Supervised Smoking Facility	177 (18)	15 (17)	15 (24)

Source: 2009 CAMH Monitor Survey

The sample is representative of Ontario residents aged 18 and older. Missing values are not shown.

Findings

- Approximately 3 out of every 5 residents in Ontario have ever read, seen or heard any information about supervised injection facilities.
- Approximately 1 out of every 5 residents in Ontario have ever read, seen or heard any information about supervised smoking facilities.
- People living in Toronto and Ottawa have similar levels of knowledge about supervised injection facilities.
- More people living in Ottawa have ever read, seen or heard any information about supervised smoking facilities compared with people living in Toronto.

Section 3.2

Does Agreement with Making Supervised Consumption Facilities Available Differ Depending on the Goals of the Facility?

Background: Supervised consumption facilities have four main goals to: prevent disease transmission; prevent overdose; reduce public nuisance and order; and, increase access to health and social services. Overall opinion about supervised consumption facilities is built on opinions about each specific goal. Understanding the level of agreement regarding specific supervised consumption facility goals is important to understand which supervised consumption facility goals the public will support.

Data: We used data from the 2003 and 2009 CAMH Monitor, which is a telephone-administered public opinion survey of Ontario residents that included questions about supervised injection facilities (2003 and 2009) and supervised smoking

facilities (2009 only). Survey participants were asked if they “strongly agree”, “somewhat agree”, “somewhat disagree” or “strongly disagree” with a range of positions about these two types of facilities.

Findings:

More than half of Ontario residents surveyed “strongly agreed” that supervised injection facilities should be available to people who inject drugs when the goal was to reduce neighbourhood problems related to injection drug use.

Nearly 1 out of every 2 residents of Ontario strongly agreed that supervised injection facilities should be made available to people who inject drugs when the goals were to improve health, to increase contact with health and social workers or to be safe from crime on the street

In Toronto and Ottawa, residents showed the greatest support for supervised injection facilities when the goals were to reduce neighbourhood problems, overdoses or infectious diseases, and increase contact with health and social workers.

About 4 of every 10 Ottawa residents strongly opposed the supervised injection facility objective to encourage safer drug use compared with about 3 of every 10 Toronto residents.

Approximately 2 out of every 5 Ontario residents strongly agreed that supervised smoking facilities should be made available to people who smoke crack cocaine or methamphetamine if the goals were to improve the health of people who use drugs or reduce neighbourhood problems related to drug use.

Table 3.2.1 Ontario Residents' Opinions about the Goals of Supervised Injection Facilities

Supervised injection facilities should be made available to injection drug users	Strongly Agree	Somewhat agree/disagree	Strongly Disagree
	N (%)	N (%)	N (%)
To encourage safer drug use (n=900)	279 (31)	368 (41)	253 (28)
If it can be shown that supervised injection facilities reduce overdose death or infectious disease among users (n=930)	449 (48)	312 (34)	170 (18)
If supervised injection facilities can increase drug users' contact with health and social workers (n=919)	441 (48)	347 (38)	132 (14)
If it can be shown that supervised injection facilities reduce neighbourhood problems related to injection drug use (n=936)	520 (56)	294 (31)	121 (13)

Source: 2009 CAMH Monitor Survey.

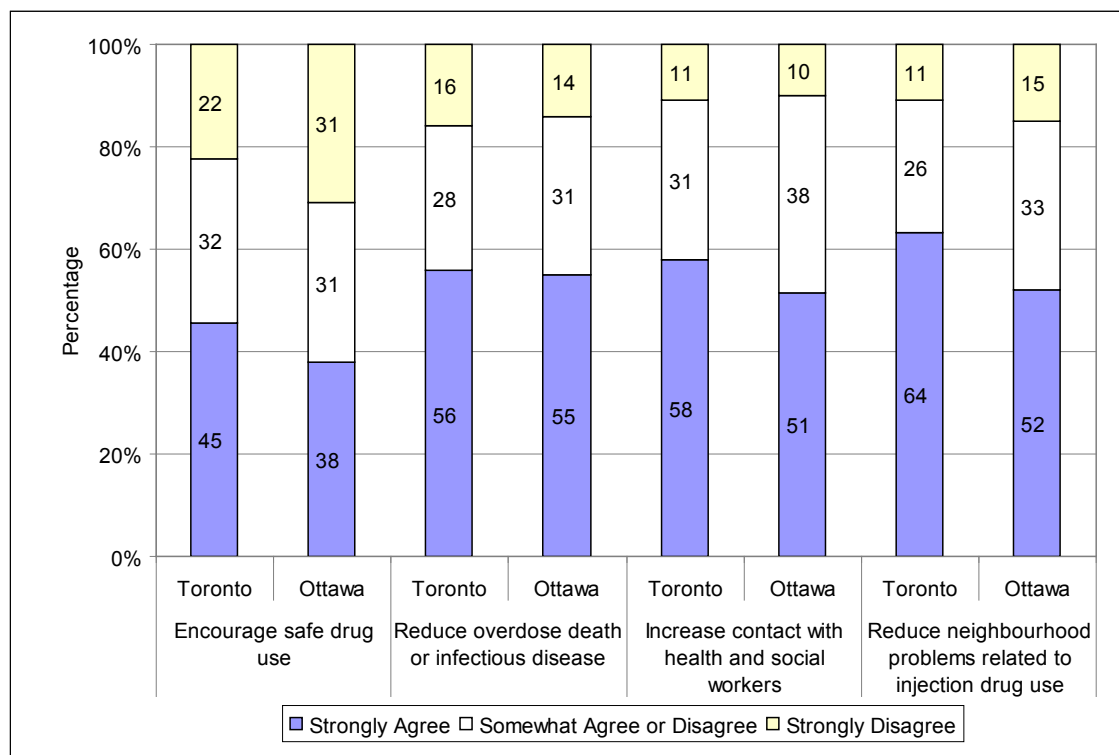
The sample is representative of Ontario residents aged 18 and older.

Findings

- More than half of Ontario residents strongly agreed that supervised injection facilities should be available to people who inject drugs if it can be shown that supervised injection facilities reduce neighbourhood problems related to injection drug use.
- Nearly 1 out of every 2 residents of Ontario strongly agreed that supervised injection facilities should be made available to people who inject drugs if the goals were to improve health and increase contact with health and social workers.
- Less than a third of Ontario residents agreed that supervised injection facilities should be made available to encourage safer drug use.

Figure 3.2.1 Toronto and Ottawa Residents' Opinions about the Goals of Supervised Injection Facilities

Supervised injection facilities should be made available to people who inject drugs if they:



Source: 2009 CAMH Monitor Survey

The sample is representative of Ontario residents aged 18 and older

Findings

- In both cities, more than half of residents agreed that supervised injection facilities should be made available if the goals were to reduce neighbourhood problems, reduce overdoses or infectious diseases, and increase contact with health and social workers.
- In Toronto, the most common reason residents agreed with implementing a supervised injection facility was to reduce neighbourhood problems related to injection drug use.
- In Ottawa, the most common reason residents agreed with implementing a supervised injection facility was to reduce overdoses and infectious diseases.
- Of all the reasons to implement a supervised injection facility, Ottawa residents were least likely to strongly agree with doing so to encourage safe drug use (4 out of every 10 Ottawa residents). Conversely, 3 out of every 10 Ottawa residents strongly disagreed with this goal for supervised injection facility implementation.

Table 3.2.2 Ontario Resident's Opinions about the Goals of Supervised Smoking Facilities

Supervised smoking facilities should be made available to people who smoke crack cocaine and methamphetamine:	Strongly Agree	Somewhat agree or disagree	Strongly Disagree
	N (%)	N (%)	N (%)
To encourage safer drug use (n=889)	175 (20)	365 (41)	349 (39)
If it can be shown that supervised consumption facilities reduce infectious disease among people who smoke drugs (n=917)	317 (35)	367 (40)	233 (25)
If supervised consumption facilities can increase drug users' contact with health and social workers (n=919)	365 (40)	371 (40)	183 (20)
If it can be shown that supervised consumption facilities reduce neighbourhood problems related to crack cocaine and methamphetamine use (n=930)	420 (45)	342 (37)	168 (18)

Source: 2009 CAMH Monitor Survey

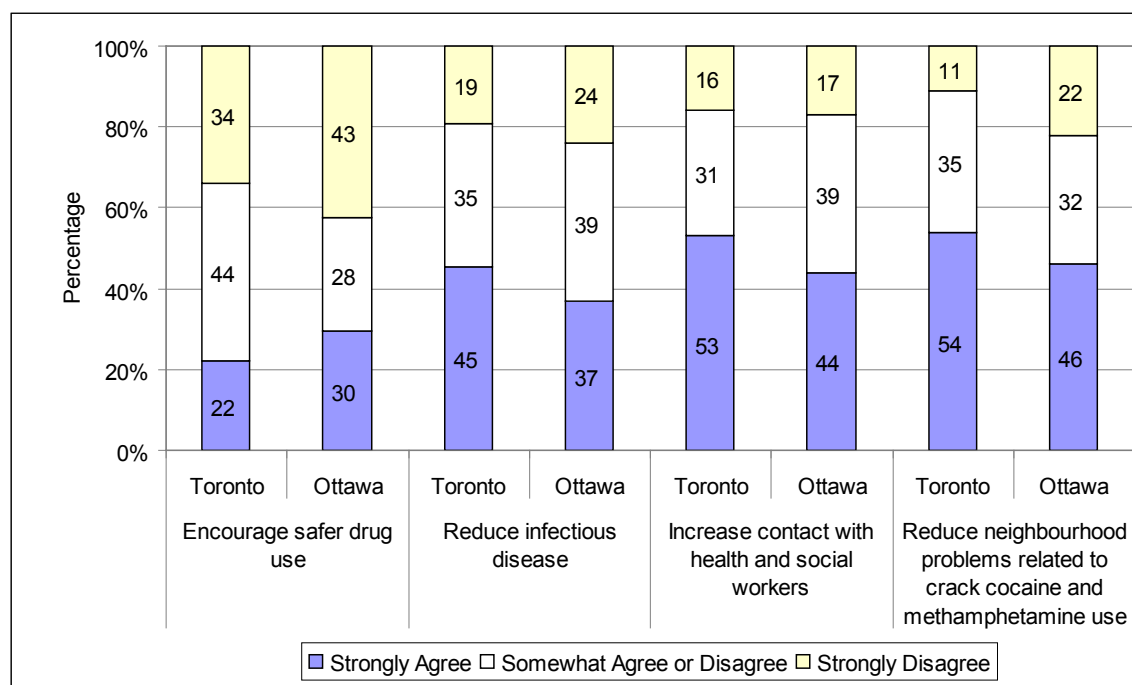
The sample is representative of Ontario residents aged 18 and older

Findings

- Approximately 2 out of every 5 Ontario residents strongly agreed supervised smoking facilities should be made available to people who smoke crack cocaine and methamphetamine if it can be shown that supervised smoking facilities reduce neighbourhood problems related to drug use or improve the health of people who use drugs.
- Only 1 out of every 5 residents agreed with implementing a supervised smoking facility if the goal was to encourage safe drug use.

Figure 3.2.3 Toronto and Ottawa Residents' Opinions about the Goals of Supervised Smoking Facilities

Supervised smoking facilities should be made available to people who smoke crack cocaine and methamphetamine if they:



Source: 2009 CAMH Monitor Survey

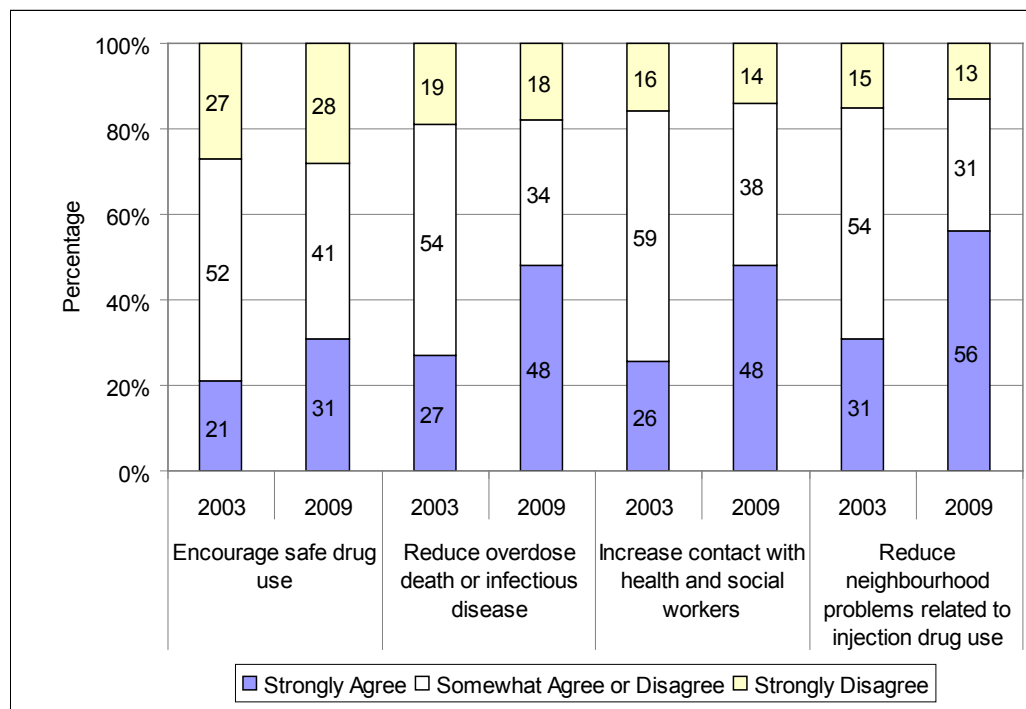
The sample is representative of Ontario residents aged 18 and older

Findings

- In Toronto and Ottawa, residents were most likely to strongly agree with implementing supervised smoking facilities if the goals were to reduce neighbourhood problems or to increase contact with health and social workers.
- In both cities, the goals that elicited the least support for implementation of a supervised smoking facility were to reduce infectious disease or to encourage safer drug use.
- More Ottawa residents (more than 4 in 10) strongly disagreed with a supervised smoking facility if the goal was to encourage safer drug use compared to Toronto residents (slightly more than 3 in 10).

Figure 3.2.4 Differences in Ontario Residents' Opinions about Supervised Injection Facilities between 2003 and 2009

Supervised injection facilities should be made available to people who inject drugs if they:



Source: 2003 & 2009 CAMH Monitor Surveys

The sample is representative of Ontario residents aged 18 and older

Findings

- Between 2003 and 2009, there was an increase in the percentage of residents who strongly agreed with each of the four supervised injection facility goals.
- The greatest increase over time in the percent who strongly agree with supervised injection facility implementation was seen for reducing neighbourhood problems related to injection drug use, an increase of 25%.
- The percentage of Ontario residents who strongly disagreed with each of the four supervised injection facility goals remained unchanged across time.
- Between 2003 and 2009, the percentage of Ontario residents who indicated they strongly agreed increased for each of the four supervised injection facility goals.

Section 3.3

What do Stakeholders Identify as Reasons to Implement or not Implement Supervised Consumption Facilities?

Background: While public opinion survey data provides an assessment of overall support or opposition towards supervised consumption facilities, it does not provide detailed information regarding the reasons why stakeholders hold such views. These reasons identify the specific concerns of community members about illicit drug use in their communities. Consequently, these reasons not only help to determine if a supervised consumption facility will be successfully implemented, but also what goals a facility should have to address community concerns.

Data: We used data from interviews and focus group discussions with 95 people who use drugs and 141 various other stakeholders in Ottawa and Toronto.

Findings:

According to stakeholders, the main reasons to implement supervised consumption facilities are to: improve personal and physical safety of people who use drugs; reduce the transmission of human immunodeficiency virus (HIV), hepatitis C, and other blood-borne infections; increase access to harm reduction supplies; reduce publicly discarded drug-use supplies; and improve neighbourhood safety.

According to stakeholders, the main reasons not to implement supervised consumption facilities are: concerns about congregation of people who use drugs and drug dealers around a supervised consumption facility; negative impact

on the desirability of the neighbourhood for shopping, living, and operating a business; perceptions that a supervised consumption facility will not be well utilized; and beliefs that a supervised consumption facility will not solve underlying addiction problems or will encourage people to keep using drugs.

Table 3.3.1 Reasons why Supervised Consumption Facilities should be Implemented

Quotations

Many lives will be changed and saved. People's lives, like the people right now, if a person walked into a crack house...they'll be lucky if they walk home or walk out with nothing wrong with them. (Toronto person who uses drugs)

Say if you didn't have somewhere to go, and it's two o'clock in the morning and it's dark, and you're sitting in a laneway with two or three friends, and you're high and you don't know which fit is which. That's a bad situation to be in. And to have somewhere to go would be huge. (Ottawa person who uses drugs)

Reduced morbidity, mortality, reduction of high-risk drug use, increased uptake of health and social care, including drug treatment, decreases risk of individuals losing their housing. Those are all benefits. Safe and non-judgmental environment in which they can go and seek further assistance. (Toronto healthcare provider)

It will give them [people who use drugs] more access to services and hopefully build a bit of self-esteem because they're in a place that's not seen as negatively as in the back of parking lots and the corner of yards and hiding out to inject. (Ottawa healthcare provider)

I do think that safe injection sites are important in terms of the safety of the people who use, but also the safety of folks that live in those neighbourhoods, including myself. In a selfish way, as a taxpayer, I want to reduce the number of people who contract AIDS or other diseases that are highly susceptible to being contracted and transmitted through unsafe injection or crack use. (Toronto advisory group participant)

People have found ways to inject crack and it's extremely damaging. And had they had a safe place for water, or for sterile water, sterile equipment, the damage would have been a lot less. (Toronto city employee)

I think it would be a good idea. One, you're less likely to experience those overdoses or drug interactions when there's somebody available who can provide some education and guidance. So from a patient advocacy standpoint, it would be better for the client and, definitely, potentially decrease the workload on the paramedics as well. (Ottawa EMS participant)

I think anything that's making it safer for the people doing drugs and safer for the community at large is good. And so I'd support it. It strikes me that, like when they started the needle exchange program it didn't take very long to not see spent needles everywhere, in parks. And it was so glorious! (Toronto resident)

[T]here wouldn't be used needles in the sand that, you know, parents sift through weekly...if it's taken out and put somewhere safe off the street, that might be a benefit. (Ottawa business owner)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.



Findings

Stakeholder groups most often endorsed the following reasons for implementing supervised consumption facilities in their community:

- Improve the personal/physical safety of people who use drugs
- Reduce transmission of Human Immunodeficiency Virus (HIV) and Hepatitis C virus
- Provide people who use drugs with sterile needles and other supplies, and facilitate proper disposal of those supplies
- Connect people who use drugs to other health and social services (for example, counselling and referrals for medical care)
- Reduce publicly discarded needles and other drug-use supplies
- Improve public or neighbourhood safety

Table 3.3.2 Reasons why Supervised Consumption Facilities should not be Implemented

Quotations

I think there is risk because it [a supervised consumption facility] is, from experience, a place where drug users will concentrate in great numbers. It is a place where those who prey upon drug users will constantly find great numbers. It is a place where there must inevitably be more violence, more disorder, and more crime. (Toronto Senior Police Officer)

[W]hat we're seeing in Vancouver, where Insite's own studies would show that less than five percent of all drug users in the Downtown Eastside actually use that facility. And of the five percent that are using it, the majority of their injections are still taking place outside Insite. (Ottawa police participant)

[O]n the business side, property values go down, crime goes up. You have major problems with everything on the streets. Your own residents are scared...there's been a lot of problems because of drugs in every community. And if...supervised injection sites are there, on the business level, it's definitely, definitely bad. (Ottawa community safety participant)

Well, do you not think that every drug dealer in town is going to know that this place is where these people need drugs to do? So it becomes all around, there's going to be drug dealers wanting to sell their drugs to these people. (Ottawa business owner)

You're going to end up attracting more drug users to downtown, so more drug dealers, because you have that concentrated populations of drug users. And that's just going to increase the crime rate downtown...it's taken, what, ten years now for the market to really revitalize itself, and a lot of the flop houses to be cleaned up, and we've got a lot more families living downtown now. And they're all just going to leave. (Ottawa resident)

When it comes down to it, all you're doing – in my opinion – all you're doing is you're giving people a place to do this in, a safe place to do it in, so there's one less reason for them to not do it anymore. There's no...there's less motivation to actually stop. (Toronto fire service participant)

It's NIMBY all over again because people are going to be concerned that you're going to be attracting people that they would consider somewhat less than desirable into their community. I think that's going to be, in all likelihood, the biggest problem...You'd get a lot of reaction from people. In Toronto, I think there will be speeches from the pulpit against it. (Toronto EMS participant)

Nobody will want this next door to their own home, I presume. (Ottawa healthcare provider)
It would be a dangerous area wherever it was because, you know, you'd have the crack man standing out front, and all that stuff. (Toronto person who uses drugs)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.



Findings

The main concerns stakeholder groups had about implementing supervised consumption facilities in their community included:

- People who use drugs will congregate at and around a supervised consumption facility
- Drug dealers will congregate at and around a supervised consumption facility
- A neighbourhood with a supervised consumption facility will be a less desirable place to live, to shop, and to run a business
- Not enough people who use drugs will actually use a supervised consumption facility (for example, concerns that only a small proportion of people who inject drugs will use the facility)
- A supervised consumption facility is not wanted in the community
- A supervised consumption facility will not solve underlying addiction problems and will encourage people to keep using drugs

Section 3.4

Did Ontario Residents' Overall Opinions of Supervised Consumption Facilities Change between 2003 and 2009?

Background: An understanding of the overall level of agreement with implementation of supervised consumption facilities is key to decision making. Furthermore, understanding if/how public opinion has changed over time can provide direction for decisions about supervised consumption facility policy and practice.

Data: We used data from the 2003 and 2009 CAMH Monitor surveys. We created three composite measures to categorize opinions about supervised consumption facilities: 1) overall opinions about supervised injection facilities in 2003; 2) overall opinions about supervised injection facilities in 2009; and 3) overall opinions about supervised smoking facilities in 2009. We created three variables to capture overall opinion about supervised injection facilities in 2003, supervised injection facilities

in 2009, and supervised smoking facilities in 2009 by grouping the respective responses to the four goals as follows:

Strongly agreed: respondents who strongly agreed with all four goals.

Strongly disagreed: respondents who strongly disagreed with all four goals.

Mixed opinions: all other responses.

Findings:

Most Ontarians (about 3 of every 5) agreed with all supervised injection facility goals: to reduce neighbourhood problems; to reduce overdoses and infectious diseases; to increase access to health and social workers; and, to encourage safe drug use.

Toronto residents more often strongly agreed with all supervised injection facility goals than Ottawa residents.

Between 2003 and 2009, the percentage of Ontario residents who agreed with all supervised injection facility goals increased by 14% (95% CI: 11% to 17%).

Over the same period, there was little change in the percentage of Ontarians who disagreed with all supervised injection facility goals.

Roughly equal percentages of residents in both cities disagreed with all supervised injection facility goals.

Most Ontarians (about 2 of every 3) had mixed opinions about supervised smoking facility goals.

Ottawa residents more commonly strongly agreed with all supervised smoking facility goals than Toronto residents.

More Ottawa residents strongly disagreed with all supervised smoking facility goals than Toronto residents.

Table 3.4.1 Ontario Residents' Overall Opinions about Supervised Injection Facilities, 2009

Public Opinions	Ontario (n=968)	Toronto (n=198)	Ottawa (n=61)
	N (%)	N (%)	N (%)
Strongly agreed with all supervised injection facility goals	262 (27)	73 (37)	20 (34)
Mixed opinions (Somewhat agree or disagree)	597 (62)	106 (53)	34 (56)
Strongly disagreed with all supervised injection facility goals	110 (11)	19 (9)	6 (10)

Source: 2009 CAMH Monitor

The sample is representative of Ontario residents aged 18 and older

Findings

- Most Ontarians had mixed opinions about the supervised injection facility goals; approximately 3 out of every 5 residents somewhat agreed or disagreed with the supervised injection facilities goals.
- Approximately 1 out of every 4 residents of Ontario strongly agreed with making supervised injection facilities available for all four goals: reducing neighbourhood problems, reducing overdoses and infectious diseases, increasing access to health and social workers, and encouraging safe drug use.
- Approximately 1 out of every 10 residents of Ontario strongly disagreed with all supervised injection facility goals.

Table 3.4.2 Ontario Residents' Overall Opinions about Supervised Smoking Facilities, 2009

Public Opinion	Ontario (n=955)	Toronto (n=196)	Ottawa (n=59)
	N (%)	N (%)	N (%)
Strongly agreed with all supervised smoking facility goals	180 (19)	43 (22)	16 (28)
Mixed opinions (Somewhat agree or disagree)	623 (65)	131 (67)	34 (57)
Strongly disagreed with all supervised smoking facility goals	152 (16)	22 (11)	9 (15)

Source: 2009 CAMH Monitor

The sample is representative of Ontario residents aged 18 and older

Findings

- Most Ontarians had mixed opinions about the supervised smoking facility goals; approximately 2 of 3 residents somewhat agreed or disagreed with the supervised smoking facility goals.
- Just under 20% of Ontarians strongly agreed with making supervised smoking facilities available for all four goals: reducing neighbourhood problems; reducing infectious diseases; increasing access to health and social workers; and encouraging safer drug use.
- Approximately 1 out of 6 Ontarians disagreed with all supervised smoking facility goals.
- Ottawa residents voiced stronger opinions about supervised smoking facilities than Toronto residents. More residents of Ottawa agreed with all the goals for supervised smoking facilities than residents of Toronto (28% versus 22%, respectively). Also, a larger proportion of Ottawa residents strongly disagreed with all the supervised smoking facility goals compared to Toronto residents (15% versus 11%, respectively).

Table 3.4.3 Ontario Residents' Overall Opinions about Supervised Injection Facilities, 2003 versus 2009

Public Opinion	Year of Survey		
	2003 (n=1206)	2009 (n=968)	Total (n=2174)
	N (%)	N (%)	N (%)
Strongly agreed with all supervised injection facility goals	161 (13)	262 (27)	422 (19)
Mixed opinions (Somewhat agree or disagree)	936 (78)	597 (62)	1533 (71)
Strongly disagreed with all supervised injection facility goals	109 (9)	110 (11)	219 (10)

Source: 2009 CAMH Monitor

The sample is representative of Ontario residents aged 18 and older

Findings

- The percentage of Ontario residents who agreed with all supervised injection facility goals increased by 14% (95% CI: 11% to 17%) from 2003 to 2009.
- There was little change in the percentage of Ontarians who disagreed with all supervised injection facility goals: 9% in 2003 and 11% in 2011.

Section 3.5

What are the Characteristics of Ontario Residents who Agree or Disagree with Making Supervised Injection Facilities and Supervised Smoking Facilities Available?

Background: Understanding who does and does not agree with implementing supervised consumption facilities is important information for decision makers.

Data: We used data from the 2003 and 2009 CAMH Monitor surveys. We created three composite measures to categorize opinions about supervised consumption facilities: 1) overall opinions about supervised injection facilities in 2003; 2) overall opinions about supervised injection facilities in 2009; and 3) overall opinions about supervised smoking facilities in 2009. We created three variables to capture overall opinion about supervised injection facilities in 2003, supervised injection facilities in 2009, and supervised smoking facilities in 2009

by grouping the respective responses to the four goals as follows:

Strongly agreed: respondents who strongly agreed with all four goals.

Strongly disagreed: respondents who strongly disagreed with all four goals.

Mixed opinions: all other responses.

Findings:

Using statistical modeling, we found that:

Ontarians who had ever used cannabis were more likely to strongly agree with making supervised injection facilities available than those who have never used cannabis.

Younger Ontarians, those who had consumed alcohol or had ever used cannabis

were more likely than others to strongly agree with making supervised smoking facilities available.

Ontario residents who had attended at least one religious service in the past year were less likely to strongly agree with making supervised injection facilities or supervised smoking facilities available.

Knowledge of supervised injection facilities or supervised consumption facilities was not associated with increased support but was associated with decreased opposition.

Table 3.5.1 Characteristics of Ontario residents' Support for Supervised Injection Facilities

Variable	Comparison	Odds Ratio
Age (years)		
18-34		1 (Reference)
35-54		1.08 (0.69, 1.70)
55 and older		0.85 (0.55, 1.32)
Male (compared to female)		1.01 (0.71, 1.42)
Education		
Some post-secondary		1 (Reference)
Less than high school		1.11 (0.64, 1.91)
Completed high school		1.49 (0.91, 2.42)
University degree		1.36 (0.91, 2.02)
Attended ≥1 religious service in the past year (compared to attended no religious service)		0.66 (0.47, 0.94)
Any alcohol in the past year (compared to no alcohol)		1.29 (0.84, 1.98)
Ever used cannabis (compared to never used)		1.44 (1.01, 2.05)
Knowledge of facility	Strongly agree vs. Others	0.96 (0.84, 1.10)
	Others vs. Strongly oppose	0.83 (0.75, 0.92)

Source: 2009 CAMH Monitor

The sample is representative of Ontario residents aged 18 and older.

Where not specified, the odds ratios comparing support to others and others to oppose are equivalent.

Findings

- We used statistical modeling to determine which characteristics of Ontario residents were independently associated with being likely to support a supervised injection facility.
- Ontarians who had ever used cannabis, compared with residents who had never used cannabis, were more likely to strongly agree with supervised injection facilities and less likely to strongly oppose supervised injection facilities.
- Ontario residents who had attended religious services were less likely to strongly agree with supervised injection facilities and more likely to strongly oppose supervised injection facilities.
- Knowledge of supervised injection facilities was not associated with increased support for supervised injection facilities, but was associated with decreased opposition to such facilities.

Table 3.5.2 Characteristics of Ontario Residents' Support for Supervised Smoking Facilities.

Variable	Comparison	Odds Ratio
Age (years)		
18-34		1 (Reference)
35-54		0.89 (0.56, 1.42)
55 and older	Strongly agree vs. Others	0.57 (0.34, 0.97)
	Others vs. Strongly oppose	1.08 (0.66, 1.75)
Male (compared to female)		0.84 (0.59, 1.20)
Education		
Some post-secondary		1 (Reference)
Less than high school		0.83 (0.50, 1.38)
Completed high school		1.20 (0.74, 1.96)
University degree		1.47 (1.00, 2.17)
Attended ≥1 religious service in the past year (compared to attended no religious service)		0.68 (0.47, 0.97)
Any alcohol in the past year (compared to no alcohol)	Strongly agree vs. Others	1.94 (1.20, 3.14)
	Others vs. Strongly oppose	0.95 (0.56, 1.62)
Ever used cannabis (compared to never used)		1.18 (0.82, 1.69)
Knowledge of facility	Strongly agree vs. Others	1.01 (0.87, 1.17)
	Others vs. Strongly oppose	0.85 (0.76, 0.96)

Source: 2009 CAMH Monitor

The sample is representative of Ontario residents aged 18 and older.

Where not specified, the odds of support vs. others and others vs. oppose are equivalent.

Findings

- We used statistical modeling to determine which characteristics of Ontario residents were independently associated with being likely to support a supervised smoking facility.
- Ontarians 55 years and older were less likely to strongly agree with a supervised smoking facility than younger Ontarians, but not more likely to strongly oppose a supervised smoking facility.
- Ontarians who had attended religious services were less likely to strongly agree with supervised smoking facilities and more likely to strongly oppose supervised smoking facilities.
- Ontarians who consumed alcohol were more likely to strongly agree with supervised smoking facilities than non-drinkers, but not more likely to strongly oppose supervised smoking facilities.
- Knowledge of supervised smoking facilities was not associated with increased support for supervised smoking facilities, but was associated with decreased opposition to such facilities.

Section 3.6

What are the Key Factors that Influence the Acceptance of Supervised Consumption Facilities?

Background: Mixed opinions about supervised consumption facilities create opportunities and dilemmas for those making decisions about policies and programs. Depending on the issue or the context, those with mixed opinions may be persuaded to take a more definitive stance in either direction or may remain ambivalent, creating uncertainty about how the public will respond to particular policy decisions. Attempts to influence opinion and anticipate and respond to opposition depend in part on an understanding of the specific issues linked with ambivalence.

Data: Interviews and focus group discussions with 95 people who use drugs and 141 various stakeholders in Ottawa and Toronto.

Findings: Most stakeholders held mixed opinions about supervised consumption facilities, neither completely

supporting nor opposing supervised consumption facilities, and were willing to hear both sides of the issue

Among people with mixed opinions about supervised consumption facilities, they would take a more definitive opinion if concerns about one or more of the following five key issues were resolved:


- better understanding of supervised consumption facility evidence in general
- demonstration of need for a supervised consumption facility
- understanding the relationship between supervised consumption facilities and a broader health and social response to drug use
- evidence about potential impact on homes, businesses, and the community

- proposed supervised consumption facility implementation design

Stakeholders with mixed opinions wanted to have a better understanding of the evidence demonstrating positive and also negative supervised consumption facility outcomes.

Stakeholders who believed that supervised consumption facilities are a solution only for communities experiencing very severe drug problems tended to reject the idea of supervised consumption facilities for Toronto or Ottawa.

Stakeholders who believed that “the drug problem” in their community is complex said that the ideal solution is a comprehensive health and social response, including facilitating access to drug treatment and services to improve housing, mental health, and primary medical care.



Stakeholders who were most focused on recovery from addiction believed that supervised consumption facilities, without an explicit abstinence focus, are a missed opportunity to help someone stop using drugs.

Finding the “right place” for a supervised consumption facility was the most important consideration for many stakeholders. Some thought that a supervised consumption facility might be appropriate for their city, but did not always specify an exact location.

Concerns that a given neighbourhood already carries too much of the “burden” of drug-related problems were linked with concerns about “concentrating” drug-related problems and services in one neighbourhood.

Residents in neighbourhoods where drug-related problems, such as public drug use, had been reduced worried that a supervised consumption facility would bring back the very problems that they “worked hard” to get rid of.

Stakeholders in support of implementing supervised consumption facilities would like decision makers to begin with a pilot project that includes a comprehensive evaluation plan.

Stakeholders indicated that accountability requires thorough and rigorous consultation about implementation plans. Accountability also demands public dissemination of evaluation results to ensure that community members can make informed decisions about the continuation or closure of a supervised consumption facility.

Beyond health outcomes, stakeholders felt that specific short- and long-term outcomes to be evaluated should include levels of drug trafficking, assaults, and other drug-related crime in the local area.

Table 3.6.1 Mixed Opinions about Supervised Consumption Facilities

Quotations

I kind of sit on the fence: neither bad nor good, because I think I see as much potential benefit as I do see harm. (Toronto EMS participant)

I'm emotionally and intellectually really torn on the whole topic of consumption sites because a part of me thinks we're just contributing to continuing despair, because the goal of the site is not to cure. The goal of the site is to enable and hopefully – that's why I asked whether, that's why I asked how we judge success. And success is judged by many parameters, as I understood it, one of them being transmission rates of other diseases. But – and correct me if I'm wrong – the goal of these consumption sites is not to get people to stop. (Toronto resident)

I came in here all for it. But now I'm actually more on the fence, and leaning towards not supporting it. (Toronto EMS participant)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Opinions about supervised consumption facilities can be divided into three main groups: unconditional acceptance, vehement opposition, and mixed opinion.
- People who are most accepting believed that supervised consumption facilities are an important component of a harm reduction strategy designed to reduce drug-related problems, such as transmission of HIV and other sexually transmitted and blood-borne infections.
- People who are vehemently opposed believed that the best way to reduce drug-related harm in the community is through improved prevention, abstinence-based drug treatment, and enforcement.
- With the exception of the police – who were consistently opposed to supervised consumption facilities – we heard support for, opposition to, and mixed opinions about supervised consumption facilities amongst all other stakeholder groups.

Table 3.6.2 The Need to Better Understand Supervised Consumption Facility Issues and Evidence in General

Quotations

Seeing more evidence or more information about it may help make better decisions. (Toronto EMS participant)

If we had stats saying that supervised safe injection works, to help people get better on their mental health, then I would maybe sit down and consider who's in my community and what we can do to help them out... But right now, we're not there. So I can't answer anything. (Ottawa community safety participant)

It's easy just to say... "Well I wouldn't want one because I'm going to have all these people wandering around downtown as high as kites." But then once you find out, well, actually no, because this is set in place so that doesn't happen... it could change people's opinions, and they might be like, "Okay, well I can see the benefit of that then." Knowledge can change everything. (Toronto business owner)

[L]ook historically at what's happened in Vancouver, what's happened in Europe... if statistics show that there hasn't been a dramatic change in crime or in drug paraphernalia being found, or criminal effects of it, I'd say, just show me what the studies have shown. And if it doesn't show anything significant, then I'd be okay with it. (Toronto healthcare provider)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Stakeholders with mixed opinions about supervised consumption facilities often said that they did not have enough knowledge about supervised consumption facility goals and evidence regarding outcomes to offer a more definitive opinion.
- To make a decision about supporting or opposing supervised consumption facility implementation, stakeholders with mixed opinions wanted to have a better understanding of the evidence regarding supervised consumption facility outcomes.
- The importance of evidence to those who have mixed opinions cannot be understated because some refused to offer any opinion until they had been provided with the information they said they need to form an opinion.

Table 3.6.3 Demonstration of Need for a Supervised Consumption Facility

Quotations

We haven't hit that crisis point, as Vancouver has hit ... where they were doing it [injecting] in the daytime, around strollers and stuff. Get them off the street. We haven't hit that point yet, so why would we even put all our money into that when we haven't gotten there yet? (Toronto EMS participant)

And obviously it would have to be in our neighbourhood because we have the drug users in the neighbourhood – we need that facility. Where do we put it that keeps all of those people [i.e., residents] in that area happy? It would not be in that neighbourhood because residents don't want to believe and they don't want to accept that those drug users are there... they're in these neighbourhoods. (Toronto business owner)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Stakeholders who believed that supervised consumption facilities are a solution only for communities experiencing a very severe crisis related to drug problems tended to reject the idea of supervised consumption facilities for Toronto or Ottawa.
- These stakeholders often compared their city with Vancouver where widespread and visible drug problems in the Downtown Eastside warranted a supervised consumption facility.
- These stakeholders believed that supervised consumption facility implementation might be worth considering if Toronto or Ottawa reaches a level of crisis related to drug use similar to that of Vancouver.
- Supervised consumption facilities were sometimes dismissed by residents in our study because they believed that their neighbourhoods do not have many drug-related problems.

Table 3.6.4 Understanding Supervised Consumption Facilities as Part of a Broader, Collaborative Health and Social Response to Drug Problems

Quotations

While SCSs help people avoid problems like HIV infection, SCSs don't help them get better and get off drugs. I wouldn't want to see like sort of a one-shot deal or somebody trying to do it all on their own. I'd like to see a collaborative effort, and it would include maybe tackling some of those more difficult issues. (Toronto city employee)

And I think the community would be more receptive, from our drug strategy work, as long as harm reduction was connected to treatment options and housing and all of those other things, people were much more supportive than if it's just kind of seen as giving up on people, and just warehousing them in this little place downtown, not that that's maybe the intent, but that's the perception often, I think. (Ottawa advisory group participant)

But I have a hard time just believing that it's good to have a site where there's no clear-cut [abstinence] goals and you're just, as I say, perpetuating a vicious cycle. (Toronto resident)

So there's got to be more of a point to this, I think, than just a clean place for these drugs, like, it's all for them, there's got to be something for us, right. The thing for us is that we might be able to convince half of these people to stop. (Ottawa EMS participant)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Stakeholders who believed that “the drug problem” in their community is complex said that the ideal solution is a comprehensive health and social response.
- These stakeholders believed that a supervised consumption facility that addresses only immediate drug consumption-related risks (for example, overdose, using contaminated needles) was too narrowly focused.
- Among people with mixed opinions about supervised consumption facilities, the definition of “comprehensive” included facilitating access to drug treatment and services to improve housing, mental health, and primary medical care.
- Stakeholders who were most focused on recovery from addiction believed that supervised consumption facilities, without an explicit abstinence focus, are a missed opportunity to help someone recover.

Table 3.6.5 Finding the “Right” Place for Supervised Consumption Facilities

Quotations

I’m in favour of it in theory. Now when it comes down to practice, so where would it be? And do you want it next door to you? ... So, I’m in favour of it in theory, but in practice, I don’t know.
(Ottawa resident)

We had swarms of drug dealers and drug users, and we don’t want to go back there again.
(Toronto resident)

Although I do support having a facility for safe injection, I have to ask where exactly it’s going to be located. I’m hoping it’s going to be in a hospital, a medical facility, somewhere where it’s not going to be across the street from a community centre, where there’s children, or a popular park where children may come for camps, what have you. So I’m all for the facility, it’s just a question of location. I’m not saying it can’t be in my neighbourhood, it’s just it’s got to be strategically done right. (Toronto city employee)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Many stakeholders in our study lived or worked in neighbourhoods where community health centres or public health programs deliver harm reduction services to people who use drugs.
- Finding the “right place” for a supervised consumption facility was the most important consideration for many stakeholders.
- Stakeholders believed that the “right places” for supervised consumption facilities are locations that minimize public congregation of people who use drugs and dealers and the negative impacts of such congregation.
- Some thought that supervised consumption facilities might be appropriate for their city, but did not always specify an exact location.
- Hospitals were viewed by some as “logical” locations for Supervised consumption facilities because they were believed to: 1) be generously funded and able to absorb the costs of supervised consumption facilities; 2) offer health and detoxification services; 3) have multiple entrances that provide anonymity and make it difficult for dealers to target potential clients; and, 4) have on-site security to discourage congregation of people who use drugs and dealers.

- Acceptance of a supervised consumption facility often hinged on the condition that a supervised consumption facility would not be located near their own homes, even among stakeholders who supported supervised consumption facilities.
- Concerns about the potential impacts on their residential neighbourhoods or local businesses were most important for some stakeholders.
- Concerns that a given neighbourhood already carries too much of the “burden” of drug-related problems were linked with concerns about “concentrating” drug-related problems and the response in one neighbourhood.
- Residents in neighbourhoods where drug-related problems, such as public drug use, had been reduced worried that a supervised consumption facility would bring back the very problems that they “worked hard” to get rid of.

Table 3.6.6 Implementation of a Pilot Supervised Consumption Facility Must not Concentrate Drug Problems or Divert Resources from Existing Services and Programs

Quotations

And I'm not convinced that one, just one location, one stand-alone entity is necessarily our answer. I mean, overall, basically, what I'm saying is that it needs to be more integrated in multiple locations. And it needs to be more integrated into the current harm reduction services, as opposed to stand-alone. (Ottawa city employee)

That's why I think multiple sites, spread across in multiple areas where it's normalized, instead of a big old spotlight on it, that it's, "Hey, go down to [neighbourhood PK]," or whatever. I know people in [neighbourhood PK] may have the same issues with us with drugs, and I think it needs to be spread out and normalized. (Toronto resident)

And as a matter of fact, if it in any way compromised the integrity of things like methadone clinics, and other types of treatment options that are out there, I wouldn't support it. (Toronto healthcare provider)

...if they take away resources from other things. So it does depend. (Ottawa city official)

I would support it under the conditions that it be brought in on a contract, with specific criteria around public safety and around success, under a variety of headings, that prevention of overdose, prevention of transmission of diseases, and bringing people into treatment, and if it didn't meet those, perhaps look at another strategy that would work better. (Toronto resident)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Stakeholders in support of implementing supervised consumption facilities would like decision makers to begin with a pilot project that includes a comprehensive evaluation plan.
- An implementation plan for a supervised consumption facility pilot project must address concerns about potential impacts on local residents and businesses and its location.
- Implementation of multiple facilities might alleviate concerns about possible congregation of people who use drugs and drug dealing, and reflect the dispersed nature of drug use, particularly in Toronto.
- Ottawa stakeholders often raised concerns that resources for drug treatment are insufficient. Consequently, an implementation plan for Ottawa needs to be linked to

obtaining new resources for supervised consumption facilities and not diverting any existing resources from prevention, treatment, or enforcement responses.

- Stakeholders indicated that accountability requires thorough and rigorous consultation about implementation plans. Accountability also demands public dissemination of evaluation results to ensure that community members can make informed decisions about the continuation or closure of a supervised consumption facility.
- Beyond health outcomes, stakeholders felt that specific short- and long-term outcomes to be evaluated should include levels of drug trafficking, assaults, and other drug-related crime in the local area.

Chapter 4

Supervised Consumption Facility Services, Models, and Rules

Background: In this chapter, we focus on three key questions for considering how a supervised consumption facility might be implemented: 1) What are the important design considerations when establishing a supervised consumption facility? 2) What are the possible models that a supervised consumption facility could consider? and 3) What rules might a supervised consumption facility implement? We discuss decisions about the number and location of potential facilities in Chapters 6 and 7.

Summary: Among supervised consumption facilities worldwide, the most frequently offered services address the health of people who use drugs (including education, distribution and disposal of equipment, and medical, nursing, and social work services) and their hygiene (including laundry, showers, and washrooms). Referrals to drug substitution treatment (such as methadone maintenance therapy), detoxification, rehabilitation, and health care were commonly available. Services considered important by people who use drugs included: nursing care; hygiene; counselling; detox beds; social workers; drug use information and education; overdose prevention and education; equipment distribution and disposal; referrals for drug treatment, other health concerns, and social services; peer support; mental health services; basic medical care; first aid; wound care; testing for blood-borne infections and pregnancy; and vaccinations. Internationally,

supervised consumption facilities are commonly open 6 or 7 days a week for 7 or 8 hours a day. The average number of injecting spaces within a supervised consumption facility was about 7; the number of smoking spaces varied widely.

Stakeholders in Toronto and Ottawa focus groups often said that a supervised consumption facility should be partnered with other agencies that serve people who use drugs. Existing harm reduction programs were often identified as appropriate partners. In focus groups with people who use drugs, most people preferred supervised consumption facilities that permit both supervised injection and supervised smoking within the same facility. However, most people added that within that facility there should be some sort of physical separation between the spaces in which people use different types of drugs being used or administer drugs through different routes. In surveys of people who use drugs in Toronto, the most popular supervised consumption facility models were a separate facility for people who inject or a single facility with separate rooms for injecting and for smoking. People who use drugs also favoured integrating a supervised consumption facility into an existing needle and syringe exchange program. In Ottawa, more people preferred locating a supervised consumption facility in a separate building rather than integrating the facility into an existing organization. Most stakeholders noted that both peer and

non-peer workers are essential within a supervised consumption facility.

Commonly reported rules among supervised consumption facilities worldwide included registration, time limits, residency requirements, minimum age rules, rules regarding first time injecting, restricted body sites, rules about sharing drugs and assisted injection, and prohibitions on drug dealing on-site. Among stakeholders in focus groups, a friendly and welcoming facility that is safe from violence and sets clear limits on the length of stay was commonly recommended.

Stakeholders in focus groups preferred service models that include policies to protect the anonymity of clients and privacy of the program. Opinions were mixed regarding a minimum age requirement to access a supervised consumption facility. Assisted injection was also debated.

Section 4.1

Supervised Consumption Facility Service Considerations

Background: People who use supervised consumption facilities often have multiple health and social problems, many of which are complicated. An important decision when establishing a supervised consumption facility is whether to focus on services that are related to drug use or to also include a variety of services that address a broader range of health and social needs. Decisions about which services to offer will also depend on the availability of services offered by other programs, whether a supervised consumption facility is integrated into another service or is affiliated with other health facilities, and local contexts.

Data: We used data from four sources: 1) A systematic review of the international literature about supervised consumption facilities, focusing on issues of design, services rules and referrals.

Details of the review and references are available in the Appendix; 2) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users (I-Track), a survey of 477 people who use drugs; 3) Interviews and focus group discussions with 95 people who use drugs and 141 various stakeholders in Ottawa and Toronto; and 4) Summary data from a previous needs assessment study for supervised consumption facilities in Ottawa published in 2008 by Leonard, DeRubeis, and Strike. The text in the table indicates the wording that was used for each question.


Findings

Supervised consumption facilities worldwide have offered a wide range of services. The most frequently offered services address the health of people who use drugs (including education, distribution and disposal of

needles, and medical, nursing, and social work services) and their hygiene (including laundry, showers, and washrooms.) Referrals to drug substitution treatment (such as methadone maintenance therapy), detoxification, rehabilitation and health care were also commonly available. Referrals for on-site addiction counselling were rarely available.

Focus group participants noted that there is a potential trade-off between the ability of a supervised consumption facility to maximize the number of clients receiving supervised consumption services and the ability of a supervised consumption facility to address other health and social issues.

Services considered important by people who use drugs for a potential supervised consumption facility included: nursing care; food; toilets; counselling;



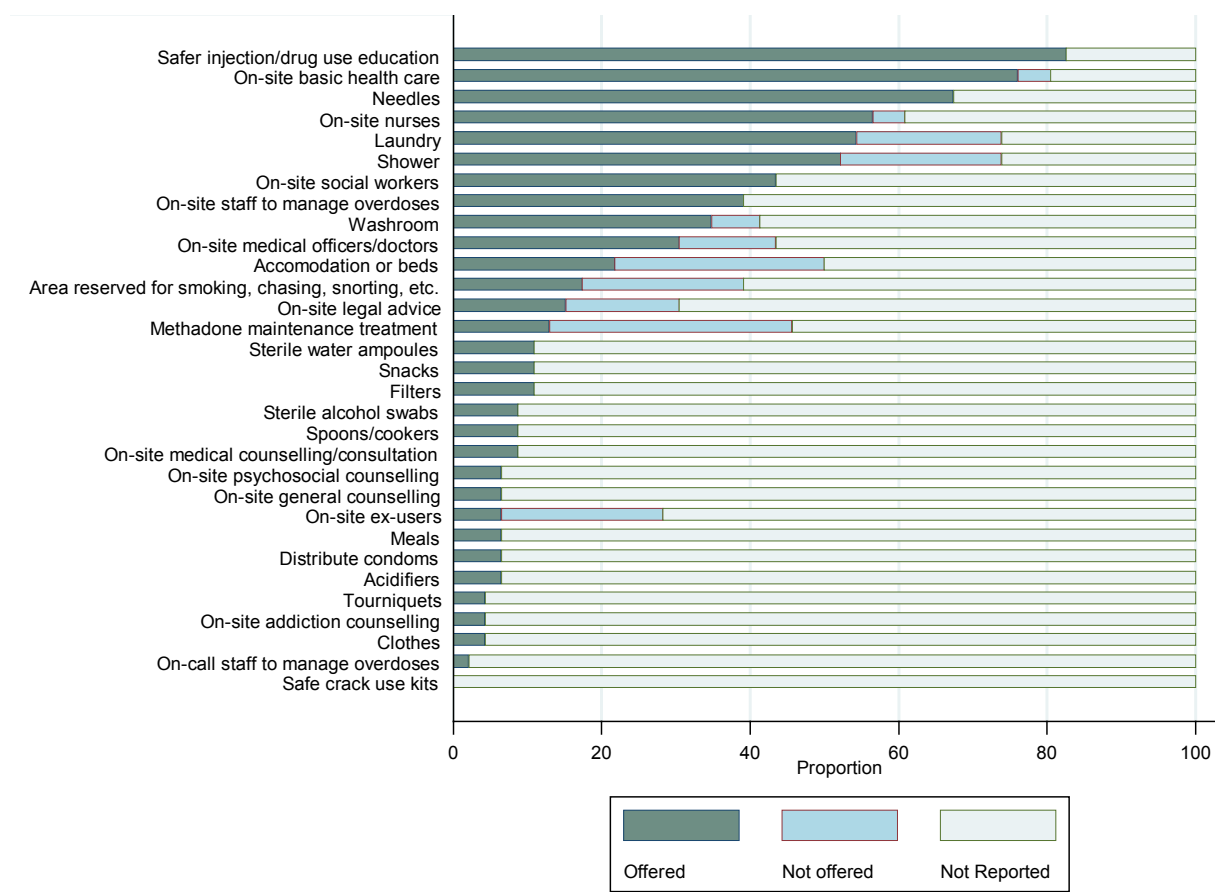
detox beds; showers; social workers; drug use information and education; overdose prevention services and education; equipment distribution and disposal; referrals for drug treatment, other health concerns, and social services; peer support; mental health services; basic medical care; first aid; wound care; testing for HIV; Hepatitis B and C; and pregnancy; and vaccination for Hepatitis B; influenza; and pneumonia.

Women were more supportive of multiple services being offered in supervised consumption facilities than men. Women in Toronto valued hygiene services more frequently than men; women in Ottawa valued nursing staff, drug counselling, access to prescribed morphine or methadone, peer support, social workers, showers, women-only operating times, and Aboriginal staff more frequently than men.

People who smoke drugs tended to put more importance on having access to toilets and showers than people who inject drugs.

Among stakeholders who use drugs, people who lived in Ottawa rated access to overdose prevention and access to sterile needle and injection equipment supplies as important more frequently than people who lived in Toronto.

Figure 4.1.1 Services Offered at Supervised Consumption Facilities



Source: Systematic Literature Review

Findings

- The figure illustrates the percentage of supervised consumption facilities that reported offering a specific type of service from a review of 46 supervised consumption facilities worldwide. These sites were in Germany, Switzerland, the Netherlands, Canada, Spain and Australia.
- Services are ranked from those that were reported most frequently to those that were reported least frequently. These data should be interpreted cautiously, since a report might not have described all services offered at a supervised consumption facility. For example, it is likely that more facilities offered washrooms than are reported here, although some specifically reported not having washroom facilities.
- The most commonly reported services that facilities reported offering addressed the health of people who use drugs (including education and new needles) and other basic health care (such as abscess drainage), and services performed by nursing, and social work staff.

- The next most commonly reported services that supervised consumption facilities reported offering addressed the hygiene of people who use drugs (including laundry, showers, and washrooms).
- Services related to drug equipment, such as needle and syringe exchange, were rarely reported. This might reflect an assumption that such services are essential and assumed to be available (such as tourniquets) or might reflect the pattern of drug use in specific cities (such as the lack of safer crack use kits).
- On-site counselling was rarely reported.
- Other services reported occasionally by individual supervised consumption facilities included:
 - Distribution of candles, towels, cotton pads, bandages, bins, distilled water for injection, citric acid (for cooking brown heroin), non-sterile paper, rubber strips, and scissors
 - On-site withdrawal management and treatment services
 - Methadone maintenance therapy
 - Beds for detoxification
 - Sexual and reproductive health education
 - Screening and treatment for sexually transmitted infections, including rapid point of care HIV testing
 - Adherence support for antiretrovirals and other medications
 - Immunizations
 - Transportation to medical care facilities
 - Acute and chronic wound care
 - Acupuncture
 - Safe storage for cash
 - Women-only sessions
 - Mail service, including postal contact with clients in prison
 - Recreational trips
 - Clothing
 - Parenting skills sessions
 - Pastoral care
 - Opportunities for employment in the supervised consumption facility kitchen and non-alcoholic bar
- Some facilities reported having additional staff, including social work students, case managers, lawyers, psychologists, drug and alcohol treatment liaison staff, and security guards.

Table 4.1.1 Should a Supervised Consumption Facility Include Multiple Services or Only Supervised Consumption?

Quotations

I see it as part of a very holistic service. (Toronto advisory group participant)

For a lot of these clients, it is really hard to track them down for follow-up, and screening and that kind of thing, so it would provide an opportunity. (Ottawa advisory group participant)

I know they're there to inject but at the same time you're there to sort of talk to them about their use. (Toronto city employee)

I think meals and showers are really basic things before you go looking for a job. You have to have a place to shower. (Toronto city employee)

When you ask to put in the showers, then you're saying okay, this is now a form of a hostel, you know what I mean, so you get people coming for the wrong reasons. (Toronto person who uses drugs)

No food, forget about food. That's not the purpose, right. You'll have people coming there [to the supervised consumption facility] for food. (Toronto person who uses drugs)

It [multi-service facility] might attract more of a shelter [crowd]. (Ottawa healthcare provider)

It depends on the location and what other partners are nearby, and what other things are happening... They may provide all of those services already and they wouldn't want to duplicate things. (Ottawa city official)

They shouldn't be re-inventing the wheel. If there are drug treatment programs available, they should be showing people how they can access those treatment facilities. (Toronto EMS participant)

If first aid is a band-aid, I don't have a problem with anyone giving that. If first aid is sewing up someone's cut, then no, they shouldn't be doing that [at a supervised consumption facility]. (Toronto EMS participant)

Overnight accommodations - That's taking on too much ... they're going to have enough problems. (Ottawa person who uses drugs)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Supervised consumption facility clients will have multiple health and social problems, many of which are complicated. Stakeholders were mixed in their opinions about which of these problems a supervised consumption facility should address.
- Stakeholders noted that there is a potential trade-off between the ability of a supervised consumption facility to maximize the number of clients receiving supervised consumption services and the ability of a supervised consumption facility to address other health and social problems.
- Reasons for focusing solely on supervised consumption included:
 - Avoiding duplicating services in the community
 - Not overburdening the staff working at a supervised consumption facility
 - Ensuring that the non-supervised consumption facility specific services did not attract other street-involved people who do not inject illicit drugs or smoke crack cocaine and thus direct resources away from the core purpose
- The police stated their general opposition to supervised consumption facilities and declined to offer opinions about possible on-site services.
- Other stakeholders agreed that the following services need to be offered:
 - Safer drug use information and education
 - Sterile drug equipment distribution and disposal
 - Voluntary counselling about drug use and other problems
 - Referrals for drug treatment
 - Hygiene services, such as toilets, showers, laundry, and feminine products
 - Food
 - A drop-in and “chill-out” space
- In addition, people who use drugs, health care providers, ambulance services, and residents also recommended additional services such as:
 - Peer support
 - Mental health services
 - Overdose prevention services and education
 - Nursing


- 
- Basic primary care
 - First aid
 - Wound care
 - Testing for HIV , Hepatitis B and C, and pregnancy
 - Vaccination for Hepatitis B, influenza, and pneumonia
 - Referrals to health and social services, including housing and employment
- Stakeholders noted that the advantages of offering multiple services in one setting included reduced barriers to health and social services and increased continuity of care for people who use drugs.
 - Multiple services at a supervised consumption facility might reduce the workload for Emergency Medical Services, but might duplicate services available elsewhere.
 - Stakeholders favoured an extensive referral system, provided that a system ensured access to services for people who use drugs.

Table 4.1.2 Supervised Consumption Facility Services Considered Important by People who use Drugs in Toronto

There are a number of services that might be considered for supervised injection sites or consumption rooms. How important are these to you?	Very Important	Somewhat Important	Not that Important
	N (%)	N (%)	N (%)
Nursing staff for medical care	305 (80)	56 (15)	19 (5)
Food	261 (69)	93 (25)	25 (7)
Toilets	254 (67)	107 (28)	19 (5)
Drug counsellors	214 (56)	93 (25)	72 (19)
Urgent detox beds	204 (54)	103 (27)	72 (19)
Showers	202 (53)	107 (28)	70 (18)
Social workers	193 (51)	115 (30)	71 (19)

Source: 2006 Toronto I-Track Survey

380 people answered this question. Missing responses are not shown.

Current injectors were asked about potential services for an injection sites and current smokers were asked about potential services for supervised consumption (smoking) rooms.

Findings

- All services listed were considered very important by a majority of people who answered the survey.
- The most common services considered important by people who use drugs in Toronto for a potential supervised consumption facility included nursing care, food, and toilets.

Table 4.1.3 Supervised Consumption Facility Services Considered Important by People who use Drugs in Toronto, by Gender

There are a number of services that might be considered for supervised injection sites or consumption rooms. How important are these to you?	Men (n=269)			Women (n=108)		
	Very Important	Somewhat Important	Not that Important	Very Important	Somewhat Important	Not that Important
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Nursing staff for medical care	210 (78)	59 (21) *		92 (85)	9 (8)	7 (6)
Food	171 (64)	78 (29)	19 (7)	87 (81)	15 (14)	6 (6)
Toilets	166 (62)	90 (33)	13 (5)	85 (79)	17 (16)	6 (6)
Drug counsellors	141 (52)	75 (28)	53 (20)	70 (65)	18 (17)	19 (18)
Urgent detox beds	135 (50)	80 (30)	53 (20)	67 (62)	22 (20)	19 (18)
Showers	132 (49)	81 (30)	55 (21)	67 (62)	26 (24)	15 (14)
Social workers	128 (48)	89 (33)	51 (19)	63 (58)	25 (23)	20 (19)

Source: 2006 Toronto I-Track Survey

Missing responses are not shown.

The analysis by gender excludes transgendered people due to small numbers.

Current injectors were asked about potential services for an injection sites and current smokers were asked about potential services for supervised consumption (smoking) rooms.

* "Somewhat important" and "Not that important" are merged due to small numbers

Findings

- Women who use drugs in Toronto were more likely than men who use drugs to say that food and toilets were very important.
- Compared to men, women rated more services as very important.
- Similar proportions of women and men thought that services were not important.

Table 4.1.4 Supervised Consumption Facility Services Considered Important by People who use Drugs in Toronto, by Type of Drug Use

There are a number of services that might be considered for supervised injection sites or consumption rooms. How important are these to you?	People Who Inject Drugs (n=202)			People Who Smoke Drugs (n=178)		
	Very Important	Somewhat Important	Not that Important	Very Important	Somewhat Important	Not that Important
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Nursing staff for medical care	170 (84)	32 (16)*		135 (76)	30 (17)	13 (7)
Food	127 (63)	59 (29)	16 (8)	134 (76)	34 (19)	9 (5)
Toilets	125 (62)	62 (31)	15 (7)	129 (72)	49 (27)*	
Drug counsellors	113 (56)	49 (24)	40 (20)	101 (57)	44 (25)	32 (18)
Urgent detox beds	99 (49)	63 (31)	40 (20)	105 (59)	40 (23)	32 (18)
Showers	92 (46)	62 (31)	47 (23)	110 (62)	45 (25)	23 (13)
Social workers	109 (54)	56 (28)	36 (18)	84 (47)	59 (33)	35 (20)

Source: 2006 Toronto I-Track Survey

202 people who inject drugs and 178 people who smoke drugs responded to this question. Missing responses are not shown.

Current injectors were asked about potential services for an injection sites and current smokers were asked about potential services for supervised consumption (smoking) rooms

* "Somewhat important" and "Not that important" are merged due to small numbers

Findings

- People who inject drugs and people who smoke drugs had different views about which services were important to offer at a supervised consumption facility.
- People who smoke drugs tended to put more importance on having access to toilets, showers and food than people who inject drugs.

Table 4.1.5 Supervised Consumption Facility Services Considered Important by People who use Drugs in Ottawa

Importance of services considered for SIFs*	Very Important	Important	Not that Important
	N (%)	N (%)	N (%)
Help and care from overdosing	186 (74)		64 (25) [†]
Needle exchange	175 (70)		75 (30) [†]
Injection equipment distribution	171 (68)		81 (32) [†]
HIV and Hepatitis C Virus testing	157 (63)		93 (37) [†]
Nursing staff (care and teaching)	124 (50)		126 (51) [†]
A “chill out” room after injecting	106 (42)	127 (51)	17 (7)
Referrals to drug treatment, rehab and other services when ready to use them	99 (40)	137 (55)	14 (6)
Washrooms	84 (34)	153 (61)	13 (5)
Drug counsellors	82 (33)	133 (53)	35 (14)
Access to morphine or methadone prescribed by doctor	76 (31)	115 (46)	57 (23)
Peer Support	59 (24)	129 (52)	61 (25)
Food	57 (23)	131 (52)	62 (25)
Social workers	56 (22)	136 (54)	58 (23)
Showers	46 (18)	137 (55)	67 (27)
Special times for women or women only SIF	41 (17)	90 (36)	118 (47)
Aboriginal Staff	38 (15)	147 (59)	64 (26)

Source: Leonard, DeRubeis, and Strike, 2008

250 people answered this question. Missing responses are not shown

*SIF denotes supervised injection facility

† “Important” and “and “Not that important” are merged due to small numbers

Findings

- The most common services considered important for a potential supervised consumption facility to offer by people who use drugs in Ottawa included overdose prevention, needle exchange, other injection equipment distribution, HIV and Hepatitis C testing, and nursing care.
- All services listed were considered very important or important by a majority of people who answered the survey.
- The service most often rated not that important was having special times for women or women-only times.
- Although this question included different responses than the question asked in Toronto, it suggests that people who use drugs in each city have distinct preferences for the services that would be offered.

Table 4.1.6 Supervised Consumption Facility Services Considered Important by People who use Drugs in Ottawa, By Gender

Importance of services considered for SIFs.... [†]	Men (n=180)			Women (n=70)		
	Very Important N (%)	Important N (%)	Not that Important N (%)	Very Important N (%)	Important N (%)	Not that Important N (%)
Help and care from overdosing	132 (73)	48 (27)*		54 (77)	16 (23)*	
Needle exchange	122 (68)	58 (32)*		53 (76)	17 (24)*	
Injection equipment distribution	121 (67)	59 (33)*		50 (71)	20 (28)*	
HIV and HCV testing	113 (63)	67 (37)*		44 (63)	26 (37)*	
Nursing staff (care and teaching)	84 (47)	96 (53)*		40 (57)	30 (43)*	
A “chill out” room after injecting	80 (44)	88 (49)	12 (7)	26 (37)	39 (56)	5 (7)
Referrals to drug treatment, rehab and other services when ready to use them	69 (38)	100 (56)	11 (6)	30 (43)	40 (57)*	
Washrooms	58 (32)	112 (62)	10 (6)	26 (37)	44 (63)	
Drug counsellors	55 (31)	98 (54)	27 (15)	27 (39)	35 (50)	8 (11)
Access to morphine or methadone prescribed by doctor	48 (27)	86 (48)	44 (25)	28 (40)	29 (41)	13 (19)
Peer Support	38 (21)	92 (51)	49 (27)	21 (30)	37 (53)	12 (17)
Food	39 (22)	94 (52)	47 (26)	18 (26)	37 (53)	15 (21)
Social workers	35 (19)	99 (55)	46 (26)	21 (30)	37 (53)	12 (17)
Showers	29 (16)	98 (54)	53 (29)	17 (24)	39 (56)	14 (20)
Special times for women or women only SIF	25 (14)	70 (39)	84 (47)	16 (23)	20 (29)	34 (49)
Aboriginal Staff	24 (13)	104 (58)	51 (29)	14 (20)	43 (61)	13 (19)

Source: Leonard, DeRubeis, and Strike, 2008

Missing responses are not shown

The analysis by gender excludes transgendered people due to small numbers

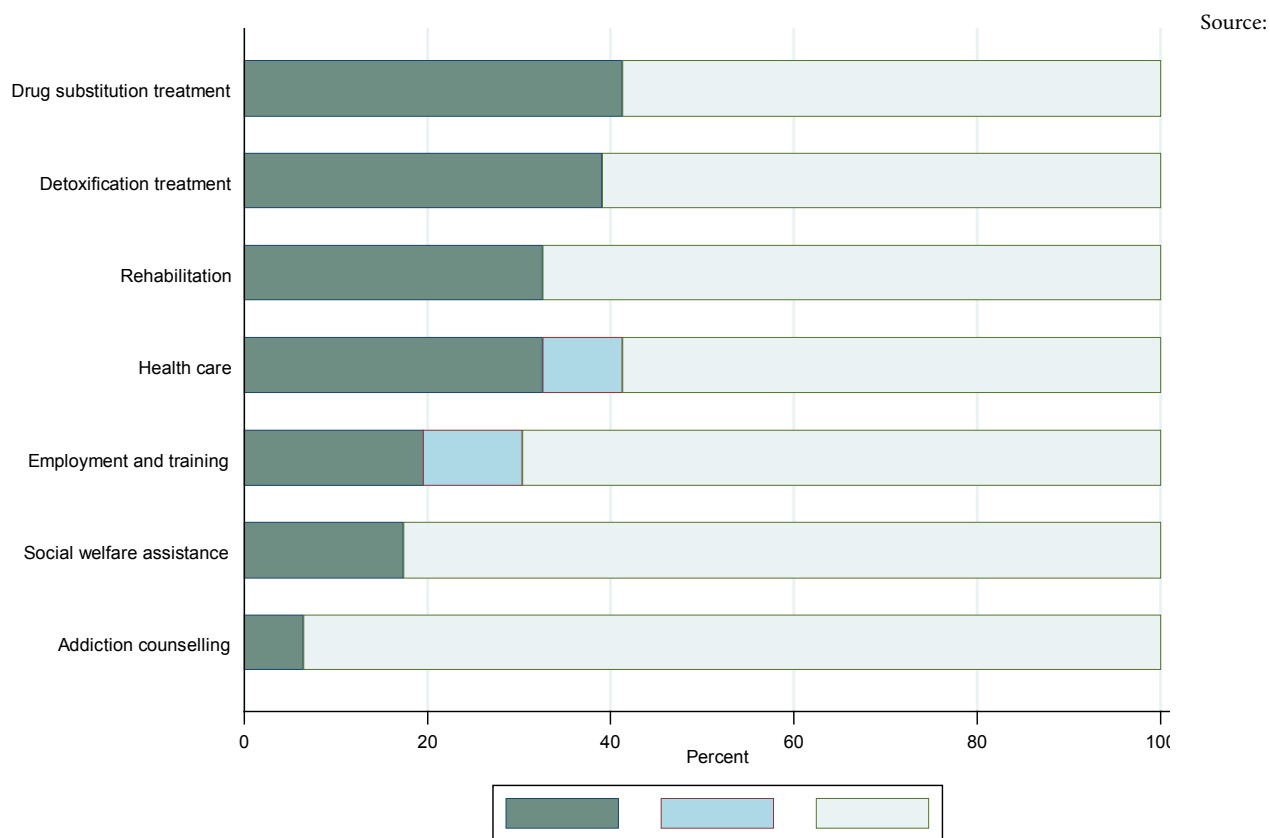
* “Somewhat important” and “Not that important” are merged due to small numbers

† SIF denotes supervised injection facility

Findings

- Men and women who use drugs in Ottawa generally gave similar responses when asked about which services they considered important.
- Women rated some services as very important more frequently than men, including nursing staff, drug counselling, access to prescribed morphine or methadone, peer support, social workers, showers, women-only times, and having access to Aboriginal staff.

Figure 4.1.2 Referrals Offered at Supervised Consumption Facilities



Systematic Literature Review

Findings

- The figure illustrates the proportion of supervised consumption facilities that reported offering a specific type of referral from a review of 46 supervised consumption facilities worldwide. Referrals are ranked from those that were reported most frequently to those that were reported least frequently. These data should be interpreted cautiously, since a report might not have described all referrals that are offered at a supervised consumption facility.
- The most common types of referrals offered were for drug substitution treatment (such as methadone maintenance therapy), detoxification, rehabilitation, and general health care.
- A few facilities offered referrals for employment and training or social welfare assistance.
- Referrals for addiction counselling were rarely reported as being offered.
- Other referrals sometimes offered included access to translator services, social services, and legal advice.

Section 4.2

Supervised Consumption Facility Design Considerations

Background: There are a variety of program models for supervised consumption facilities. Internationally, models include fixed or mobile supervised consumption facilities; independent or affiliated facilities; and stand-alone or integrated supervised consumption facilities. Other design considerations include days and hours of operation and the number of spaces for clients to inject drugs or for smoking or other non-inhalation routes of drug use. Another important consideration is whether a supervised consumption facility should accommodate both supervised injection and supervised smoking and, if so, whether and how these types of drug use should be separated.

Data: We used data from four sources: 1) A systematic review of the literature about supervised consumption facilities, focusing on issues

of design, services rules and referrals; 2) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users (I-Track), a survey of 477 people who use drugs; 3) Interviews and focus group discussions with 95 people who use drugs and 141 various stakeholders in Ottawa and Toronto; and 4) Summary data from a previous needs assessment study for supervised consumption facilities in Ottawa published in 2008 by Leonard, DeRubeis, and Strike. The text in the table indicates the wording that was used for each question.

Findings

Internationally, supervised consumption facilities are most commonly open 6 or 7 days a week for 7 or 8 hours a day. Within an injecting facility, there was an average of 7 spaces for clients to inject. The number of spaces

within a facility that allowed smoking varied widely.

Stakeholders in focus groups often said that a supervised consumption facility should be partnered with other agencies that serve people who use drugs. However, it was not always clear if stakeholders meant physical integration within those agencies. Existing harm reduction programs (such as needle and syringe exchange programs) were often identified as appropriate partners for a supervised consumption facility.

Other suggestions for supervised consumption facility partners included hospitals, community health centres, addictions services (including treatment and detox), public health departments, and shelters. Partnerships may allow supervised consumption facilities to offer on-site or be linked with a variety of

services beyond supervised drug consumption, including basic medical care and housing services.

In focus groups with people who use drugs, most people preferred supervised consumption facilities that permit both supervised injection and supervised smoking within the same facility. However, most people added that within that facility there should be a physical separation between the types of drugs being used and/or the method of drug administration.

Compared to people who use drugs, other stakeholders were more uncertain about the need for supervised smoking facilities (SSFs) and often questioned whether there was enough evidence to support SSF implementation.

Among other stakeholders who addressed supervised smoking of drugs, there was a preference for having supervised consumption facilities that allow both supervised injection and supervised smoking. However, these stakeholders did not discuss issues around internal separation with the same detail as people who use drugs.

Stakeholders from the police services were opposed to supervised consumption facility implementation and most often declined to discuss and/or offer comments on potential supervised consumption facility design issues.

In the survey of people who use drugs in Toronto, no single model was clearly preferred by all people who use drugs. The most popular models among people who smoke drugs were to have a separate facility for people who inject or to have a single facility with separate rooms for people who inject and for people who smoke drugs. The most popular models among people who inject drugs were to locate a supervised consumption facility at a needle and syringe exchange program, to have a separate facility for people who inject, or to have a single facility with separate rooms for people who inject and for people who smoke drugs.

The least popular choices were a mobile van and a facility located near outreach services to existing places where people use crack cocaine.

In the report about people who use drugs in Ottawa, more people preferred locating a supervised consumption facility in a separate building rather than integrating with an established facility such as a community health centre, hospital, clinic, or social service agency.

Many people who use drugs in Ottawa preferred that a supervised consumption facility be open 24 hours.

Most stakeholders noted that both peer and non-peer workers are essential for a supervised consumption facility.

Table 4.2.1 Reported Design Features of Supervised Consumption Facilities

Design Feature	N (%)
Type	
Injection	20 (43%)
Injection and Smoking	18 (39%)
Not Reported	8 (17%)
Fixed or Mobile	
Fixed	25 (54%)
Not Reported	21 (46%)
Number of hours/week	
Mean (SD)	55.4 (36)
Median (IQR)	42 (30,61.8)
Number of days open per week	
Not Reported	23 (50%)
7	13 (28%)
6	6 (13%)
5	3 (7%)
4	1 (2%)
Number of spaces for injection	
Mean (SD)	7.4 (3.4)
Median (IQR)	6 (5,8)
Waiting or post-injection room	
Yes	32 (70%)
No	2 (26%)
Not Reported	12 (4%)

Source: Systematic Literature Review

Findings

- This table summarizes design features of supervised consumption facilities from a review of 46 supervised consumption facilities worldwide. These data should be interpreted cautiously, since a report might not have described all features at a supervised consumption facility.
- Among facilities that reported whether they allowed injecting or both injecting and smoking, the proportions were roughly equal for each type.
- All facilities that reported their characteristics were fixed facilities.
- Most supervised consumption facilities were open 6 or 7 days per week. The average number of hours that a facility was open was 8.8 hours per day; the median was 7 hours per day. The range was 4 hours to 24 hours.


- 
- The average number of spaces for injecting drugs was 7.4; the median was 6. The range was 1 to 28.
 - Among the six facilities that allowed smoking or using drugs by routes other than injection and reported the number of spaces for drug use, one each reported having 1, 2, 3, 5, 6, and 28 spaces for these routes.

Table 4.2.2 Should Supervised Consumption Facilities be Independent Facilities or Integrated into Existing Health Facilities?

Quotations

I think a good place to have them [supervised consumption facilities] is at all these little community health centres that have harm reduction programs because the people already know the type of attitude that the staff has and you can make up your own judgement as to which one you like and which one you don't. And the infrastructure is already there. (Toronto person who uses drugs)

Yeah, I think it would be awesome as part of a community health centre because, once again, see [name of community health centre], this is perfect 'cause it's close to everything. I can come in here and nobody knows whether I'm going to the doctor's or whether I'm coming to pick up a whatever from the site...I think that would be really good because you're already in a building with medical professionals. (Ottawa person who uses drugs)

I mean, overall, basically what I'm saying is that it needs to be more integrated in multiple locations. And it needs to be more integrated into the current harm reduction services, as opposed to stand-alone. (Ottawa city employee)

If I were to hear that it's in partnership with other health organizations, then I am hearing that, okay, we're respecting the needs of folks, but we're also working towards increasing access to health services, and so ding, ding, ding, my taxpayer dollars are worth it. (Toronto advisory group participant)

And if they're going to be anywhere, that's where they should be, in a hospital...Why? Because number one, they're not in a retail area. So hospitals are hospitals, and they're going to be there come hell or high water, and people are going to go because they have to go. (Toronto business owner)

Participant: I think being part of another organization would be better. Then you get the collaborative effect, first of all. And you also get extra services attached to what you're doing.

Interviewer: So what types of organizations?

Participant: You could go with a healthcare type organization, a community health centre, something like that. You could piggyback it on to a shelter and already Ottawa has a relatively good collaborative effort between the shelters and inner-city health and community health centres already...So then you have options for housing are there, options to access CMHA workers, and that kind of thing, if you have a piggyback. Things that stand alone take a lot more time and, I think, a lot more cost to try and get everyone up to speed. (Ottawa healthcare provider)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa



Findings

- Stakeholders in Ottawa and Toronto gave similar responses to questions about whether supervised consumption facilities should be independent or integrated into existing health facilities.
- People who use drugs and other stakeholders said that it would be a good idea for supervised consumption facilities to be partnered with other agencies and organizations.
- Some stakeholders defined “partnership” to mean physical integration with other services.
- Many stakeholders thought that supervised consumption facilities could be integrated within existing harm reduction programs, such as needle and syringe exchange programs, because these programs already serve the needs of people who use drugs. For example, these programs have staff who are non-judgemental and are knowledgeable about drug use, reducing disease transmission and other drug-related risks such as overdose prevention. These program are also equipped with harm reduction supplies.
- Opinions were mixed about integrating supervised consumption facilities within hospitals.
- Hospitals have the staff and structure to deal with medical emergencies such as drug overdose.
- Some residents and business owners liked the idea of putting supervised consumption facilities in hospitals because they thought this would help keep supervised consumption facilities from being established in their communities.
- Partnerships with hospitals and other healthcare agencies may make a supervised consumption facility appear more credible and legitimate to community members.
- Hospitals and community health centres may offer more “discreet” settings for supervised consumption facilities.
- Some people who use drugs want to keep their drug use private and would not want other people seeing them enter a supervised consumption facility.
- However, some people who use drugs said that they would not feel comfortable going into a hospital and would not trust the doctors and nurses there. Some offered stories of experiencing discrimination in hospitals and other healthcare settings.
- A few stakeholders were concerned that a supervised consumption facility inside a hospital would lead to the congregation of people who use drugs and dealers around a hospital.
- A challenge to the physical integration of supervised consumption facilities into existing buildings is that other service users might not want to be around street-involved people who use illicit drugs.

- Nevertheless, stakeholders felt that even an independent or stand-alone supervised consumption facility should at least have partnerships with other agencies in the community to improve access to additional services and referrals.
- Other suggestions for supervised consumption facility partners included programs that offer addiction and mental health services and shelter and housing services.
- In the systematic review of supervised consumption facilities worldwide, of 31 facilities that reported their model, 28 were affiliated with and physically integrated into existing facilities and 3 were independent facilities exclusively for supervised consumption.

Table 4.2.3 Separate versus Combined Supervised Consumption Facilities that Permit Supervised Injection and Supervised Smoking

Quotations

That, I think, would be the best. Same site, but in separate rooms. (Ottawa person who uses drugs)

‘Cause it’s two totally different trips. You know, when you’re injecting there...when you say injecting I’m thinking of down. You’re injecting down, it’s a totally different trip. After you do your hit, you usually just sit back, enjoying your rush, you know. (Ottawa person who uses drugs)

Maybe for the ones that are shooting they could have like, you know, how they have curtained off, little sort of like cubicles where it would be curtained off. (Toronto person who uses drugs)

A lot of people who do use crack don’t like to see needles. They don’t want them [needles] around them; do you understand what I mean? Like I’m an ex-needle user from years ago, I don’t want to see them around me. (Toronto person who uses drugs)

The feedback I’ve gotten from users is that it wouldn’t mix well. So there needs to be either separate rooms or separate floors because up and down are different and the way you react is different. (Ottawa advisory group participant)

[I]n order for other people not to feel overwhelmed by smoke or whatever maybe it should be separate, but obviously whatever separate rooms they’re smoking in should be very well ventilated. (Toronto healthcare provider)

I’m just wondering if you’re talking about two different populations of people. Do they mix? And if they do mix, are they going to be encouraging each other to use their substance? I don’t know the answers. Those are just questions I raise. Certainly from my experience, the needle people, they’re a different crowd. (Toronto resident)

They are allowed to smoke inside? You can’t even smoke a cigarette inside. Why do they need a safe site to smoke drugs? You’re not getting, you know, AIDS, or any other communicable disease from smoking, you’re getting it from the needles, so why would you need a safe smoking site? (Toronto fire service participant)

Actually most of...the people I work with would do both. So it seems kind of stupid, “Okay, I’m going to go inject my morphine here. Then I’m going to go walk somewhere else to smoke my crack.” That’s never going to work. (Ottawa healthcare provider)

You know, it’s funny, the one thing that’s been going through my mind about a place where people can smoke, is the, I mean it has to have really good ventilation! So if there’s really good ventilation then, yes, probably one place would be fine. (Provincial government official)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Very few people who use drugs and other stakeholders thought that there should be entirely separate facilities for supervised injection and supervised smoking. Stakeholders in Ottawa and Toronto gave similar responses.
- Some stakeholders said combining supervised injection and supervised smoking into the same facility would require fewer resources than establishing separate facilities for each.
- Most people who use drugs said they would prefer to see supervised consumption facilities designed to allow both supervised injection and supervised smoking within the same facility. In general, people preferred some form of physical separation between areas where people used different types of drug or between areas where people injected or smoked drugs.
- Examples of physical separation include curtains, cubicles, or booths between supervised consumption facility clients or different rooms or floors.
- Many people who inject drugs also smoke drugs like crack cocaine. Having supervised injection and supervised smoking in the same facility would be convenient for these people as they would not have to travel between different facilities and could obtain all of their supplies, such as sterile injecting or smoking supplies, from one place.
- Keeping injection and smoking separate within the same facility may be a good idea based on the types of drugs that are typically injected (“downers” like opiates) and typically smoked (stimulants like crack cocaine). These drugs produce different highs. People who use drugs were concerned about mixing people in the same room who are experiencing the different highs.
- Some people do not want to see other people inject drugs because they do not like the sight of needles or blood.
- People who inject drugs and people who smoke drugs sometimes have negative perceptions of each other. For example, some people said that people who smoke crack cocaine behave in paranoid ways and are looked down upon by other people who use drugs. These attitudes also support separate rooms for different routes of administering drugs.
- Compared to people who use drugs, other stakeholders offered few remarks concerning separate areas for supervised injection and supervised smoking within a supervised consumption facility.
- Other stakeholders often questioned the need for establishing SSFs.
- Some stakeholders, including public health personnel, said that there is currently little research on SSFs and whether such facilities reduce disease transmission and other drug-related problems.


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- Healthcare providers, in particular, emphasized that supervised consumption facilities which permit smoking would need high-quality ventilation systems to reduce staff and client exposure to second-hand smoke.
 - A few stakeholders asked how supervised smoking of illicit drugs could be permitted under current legislation that prohibits tobacco smoking within public indoor places.
 - Stakeholders in Ottawa and Toronto gave similar responses.

Table 4.2.4 Preferences for Supervised Injection Facilities among People who Inject drugs in Ottawa

Best set-up for injecting spaces in SIFs*	All (n=250)	Men (n=180)	Women (n=70)
	N (%)	N (%)	N (%)
Private cubicles	166 (66)	123 (68)	43 (61)
Open place with tables and chairs	19 (8)	--	--
Open plan with benches at one large table or counter	11 (4)	--	--
Combination of the above	48 (19)	31 (17)	17 (24)
Unsure/don't know	6 (2)	3 (2)	3 (4)

Source: Leonard, DeRubeis, and Strike, 2008

Missing responses are not shown

* SIF denotes supervised injection facility

Cells with a dash indicate that numbers are too small to report.

Findings

- About 2 of every 3 of people who use drugs in Ottawa preferred private cubicles for injecting spaces in supervised injection facilities.
- Few respondents wanted to have only open places for injecting.
- Men and women gave similar responses.

Table 4.2.5 Should Supervised Consumption Facilities be Fixed or Mobile?

Quotations

I think that a fixed site would be better because I know that the vans serve like, they can only serve a certain number of clients a night. So there's only like so many clients you can reach in an evening. (Ottawa advisory group participant)

A combination of both [fixed and mobile supervised consumption facilities] because you're not going to have all the places in the right spot for people who can make it there or whatever. Have it like the Health Bus, as it comes around. (Toronto person who uses drugs)

[P]eople would be paranoid that the cops would jack them up after they left because I know people that are paranoid to go to exchange in the van. (Ottawa person who uses drugs)

I think it should be based on what the needs are, but if you look at other harm reduction programs in Toronto, which are reaching some of the same population, we do have a mixed model of both mobile and fixed sites...So that tells you something that that's been the model which has been decided over a number of years as the most effective for reaching illicit drug-using populations. (Toronto city official)

And then the advantage of having a mobile site is that where you're seeing perhaps a rise in drug-related instances...you have the ability to actually go to that area of town, set up your mobile van for a period of time to provide the services at that point, and then move it on to the next area. (Ottawa EMS participant)

It might be worthwhile having one central location and then having a mobile unit or mobile units that go out, like on an outreach basis to outlying areas, because that will be more cost-effective than setting up buildings in various locations. (Toronto business owner)

But the mobile one would be good for transient people...and it would reach different people because the mobile van can meet different needs, can reach different people in different places, like go under bridges. (Toronto person who uses drugs)

[A] mobile consumption site...I guess it would take care of the not-in-my-backyard, because it would be in everybody's backyard. (Ottawa healthcare provider)

So I don't know about the mobile van, per se. I think that would be a lot more problematic than fixed sites where I think there'd be a little bit more control just 'cause of the physical building...I think fixed sites may be a little bit easier to monitor. I think the vans would become problematic. (Ottawa police participant)

Participant :I think too, it depends on the type of drug, right. For injectable drugs, that [a mobile facility] might work, but for crack cocaine use and for smoking, it might not work.

Participant: I mean, the concern would probably be people's perception of safety. So a bus is a confined space...

Participant: And certainly you couldn't have other services, really, available on the bus. (Toronto city employees)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Stakeholders had mixed opinions on implementing supervised consumption facilities as fixed, mobile, or a combination of types. Stakeholders in Ottawa and Toronto gave similar responses.
- Most stakeholders preferred fixed supervised consumption facilities, but many people said that mobile supervised consumption facilities could be useful if implemented in conjunction with fixed facilities.
- For a few stakeholders, a mixed model of service delivery was endorsed and linked with the current model of delivering needle and syringe exchange programs.
- Some stakeholders noted that fixed supervised consumption facilities would have more predictable schedules and hours of operation than mobile supervised consumption facilities. Furthermore, stakeholder thought that fixed supervised consumption facilities were able to offer more basic medical care and other services than mobile supervised consumption facilities.
- Although the police were opposed to any form of supervised consumption facility implementation, one police officer said that a fixed supervised consumption facility would be easier for the police to control and monitor than mobile supervised consumption facilities.
- Fixed supervised consumption facilities may be less desirable for communities and more subject to “Not in My Backyard” concerns.
- Mobile supervised consumption facilities could more readily reach transient people, people who feel uncomfortable attending a fixed supervised consumption facility, and people who do not want to travel to a fixed supervised consumption facility.
- It would be harder for people who use drugs and dealers to regularly congregate around a mobile supervised consumption facility.
- Mobile supervised consumption facilities may be less expensive to implement compared to fixed supervised consumption facilities.
- People who use drugs were worried that police would follow a mobile supervised consumption facility.
- People who use drugs were concerned that mobile supervised consumption facilities would have long line-ups and would not be able to provide clients with enough time to prepare and use their drugs.


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- Some people who smoke drugs like crack cocaine said that they would not want to smoke inside a van because they would feel paranoid in a confined space and worried about the police.
 - Some stakeholders thought that dealers would still find ways to follow a mobile supervised consumption facility in order to recruit customers.

Table 4.2.6 Supervised Consumption Facility Models Preferred by People who use Drugs in Toronto, By Gender

Would you use the following...where you could use your own drugs, with trained staff and safe equipment?	All Drug Users (n=451) N (%)	Men (n=322) N (%)	Women (n=126) N (%)
A place at a Toronto needle exchange site	375 (83)	264 (82)	109 (87)
Outreach services to existing shooting galleries and crack using places to provide sterile equipment and educate dealers and users about safety, including how to respond to overdoses?	343 (77)	241 (76)	99 (80)
One room for injectors and one room crack smokers	325 (74)	227 (73)	95 (77)
A mobile site (for example: a van) which would visit particular neighbourhoods and provide people with a safe place to inject along with safe equipment	279 (63)	189 (60)	87 (69)
A separate place for smoking crack or other drugs	272 (61)	200 (63)	71 (57)
A separate place for injectors only	264 (60)	194 (61)	69 (56)

Source: 2006 Toronto I-Track Survey

The percent responses reflect the number endorsing divided by the number answering the question, which varied for each question and group (missing responses are not shown).

The analysis by gender excludes transgendered people due to small numbers

Findings

- Among people who use drugs in Toronto, the most popular models for a supervised consumption facility were integration within an existing needle and syringe exchange site or within a program that offers outreach services to existing places where people use crack cocaine.
- A mobile facility was less popular among respondents than models with a fixed facility.
- About three-quarters of respondents favoured separate rooms for people who inject drugs and for people who smoke crack cocaine.
- About 60% of respondents favoured separate facilities for people who inject drugs and for people who smoke drugs.
- Men and women gave similar responses, although women were somewhat more likely to say that they would use a mobile service.

Table 4.2.7 Supervised Consumption Facility Models Preferred by People who use Drugs in Toronto, By Type of Drug Use

Would you use the following...where you could use your own drugs, with trained staff and safe equipment?	People who Inject Drugs (n=245) N (%)	People who Smoke Drugs (n=206) N (%)
A place at a Toronto needle exchange site	208 (85)	167 (81)
Outreach services to existing shooting galleries and crack using places to provide sterile equipment and educate dealers and about users about safety, including how to respond to overdoses?	186 (78)	157 (76)
One room for injectors and one room crack smokers	179 (74)	146 (74)
A mobile site (for example: a van) which would visit particular neighbourhoods and provide people with a safe place to inject along with safe equipment	154 (64)	125 (61)
A separate place for smoking crack or other drugs	129 (54)	143 (69)
A separate place for injectors only	172 (71)	92 (46)

Source: 2006 Toronto I-Track Survey

The percent responses reflect the number endorsing divided by the number answering the question, which varied for each question and group (missing responses are not shown).

Findings

- People who inject drugs and people who smoke drugs in Toronto were equally likely to say that they would use a supervised consumption facility integrated into a needle and syringe exchange site or into a program that offers outreach services places where people use crack cocaine.
- People who smoke drugs were more likely to favour a model which had a separate place for smoking crack or other drugs.
- People who injected drugs were much more likely to say they would use a facility which had a separate place for injecting drugs only.

Table 4.2.8 Most Favoured Supervised Consumption Facility Model among People who use Drugs in Toronto, By Gender

Which of these types would you most favour?	All Drug Users (n=437)	Men (n=313)	Women (n=121)
	N (%)	N (%)	N (%)
A separate place for people who inject drugs only	108 (25)	78 (25)	30 (25)
A needle exchange site	98 (22)	63 (20)	33 (20)
One room for people who inject drugs and one room for people who smoke crack	75 (17)	56 (18)	19 (18)
A separate place for smoking crack or other drugs	60 (14)	45 (14)	15 (14)
Would not use an SCS*	47 (11)	37 (12)	10 (12)
A mobile site (for example: a van) which would visit a particular neighbourhood	31 (7)	20 (6)	10 (6)

Source: 2006 Toronto I-Track Survey

Missing responses are not shown

The analysis by gender excludes transgendered people due to small numbers

*SCS denotes a supervised consumption site

Findings

- No single model was clearly preferred by people who use drugs in Toronto.
- A separate facility for injection only and a supervised consumption facility integrated into an existing needle and syringe exchange site were the two most popular models, but each was favoured by only 20 to 25% of respondents.
- Only 7% of respondents preferred a mobile facility.
- Fewer than 5% of respondents preferred a facility located near existing outreach services to locations where people use crack cocaine.
- Men and women gave similar responses to this question.

Table 4.2.9 Most Favoured Supervised Consumption Facility Model among People who use Drugs in Toronto, By Type of Drug Use

Which of these types would you most favour?	People Who Inject Drugs (n=240)	People Who Smoke Crack (n=197)
	N (%)	N (%)
A separate place for injectors	48 (20)	60 (30)
A needle exchange site	76 (32)	22 (11)
One room for people who inject drugs and one room for people who smoke crack	68 (28)	7 (4)
A separate place for smoking crack or other drugs	12 (5)	48 (24)
Would not use an SCS*	1 (0.4)	46 (23)
A mobile site (for example: a van) which would visit a particular neighbourhood	20 (8)	11 (6)

Source: 2006 Toronto I-Track Survey

Missing responses are not shown

*SCS denotes a supervised consumption site

Findings

- No single model was clearly preferred by either people who inject drugs or smoke crack cocaine in Toronto.
- Among people who inject drugs, the most popular models were to locate a supervised consumption facility at a needle and syringe exchange site, to have a single facility with separate rooms for people who inject and for people who smoke drugs, and to have a separate facility for people who inject.
- Among people who smoke crack, the most popular models were to have a separate facility for people who inject and to have a single facility with separate rooms for people who inject and for people who smoke drugs.
- About a quarter of people who smoke crack said that they would not use any type of supervised consumption facility.
- Fewer than 5% of respondents preferred a facility located near existing outreach services to locations where people use crack cocaine.

Table 4.2.10 Supervised Consumption Facility Models Preferred by People who use Drugs in Ottawa, By Gender

Would you use a SIF* if it was in a:	All (n=250) N (%)	Men (n=180) N (%)	Women (n=70) N (%)
Separate building	213 (85)	148 (82)	65 (93)
Community health centre, hospital, clinical or social service agency	146 (58)	105 (58)	41 (59)

Source: Leonard, DeRubeis, and Strike, 2008

Missing responses are not shown

The analysis by gender excludes transgendered people due to small numbers

*SIF denotes supervised injection facility

Findings

- Among people who use drugs in Ottawa, more people preferred locating a supervised consumption facility in a separate building rather than in an established facility such as a community health centre, hospital, clinic, or social service agency.
- Women expressed this preference more frequently than men.

Table 4.2.11 Preferred time to use a Supervised Injection Facility among People who Inject Drugs in Ottawa, By Gender

Preferred time to use a SIF* (first choice)	All (n=219) N (%)	Men (n=155) N (%)	Women (n=64) N (%)
What is your first choice of preferred time to use a SIF?			
Day time (8am to 4pm)	93 (43)	65 (42)	28 (44)
Evening (4pm to midnight)	85 (39)	58 (37)	27 (42)
Overnight (midnight to 8am)	41 (19)	32 (21)	9 (14)
What is your second choice of preferred time to use a SIF?			
Day time (8am to 4pm)	36 (17)	23 (16)	13 (20)
Evening (4pm to midnight)	97 (46)	69 (48)	28 (44)
Overnight (midnight to 8am)	76 (36)	53 (37)	23 (36)
Preferred time to use a SIF- '24 hours'	228 (91)	163 (91)	65 (93)

Source: Leonard, DeRubeis, and Strike, 2008

Missing responses are not shown

The analysis by gender excludes transgendered people due to small numbers

*SIF denotes supervised injection facility

Findings

- Over 90 percent of people who inject drugs in Ottawa would prefer that a supervised injection facility was open for 24 hours a day.
- There was no single time period for using a supervised injection facility that was most popular among people who inject drugs in Ottawa.
- Substantial proportions of individuals indicated that they would use the supervised injection facility in each time period included in the survey.
- Men and women gave similar responses.
- Similar data is not available for people who use drugs in Toronto.

Table 4.2.12 Peer Involvement**Quotations**

Usually what we do is we hire people who have never used drugs in their life, have no real understanding of living in poverty. So the kind of support you get isn't actually the kind of support that's necessarily needed. (Ottawa advisory group participant)

I think [i.e., peer workers] they could be involved in all stages, whether it's planning, delivery, follow-up... Absolutely. So whether it's counselling, greeting, being on committees to actually oversee or assist with the planning. (Ottawa city employee)

Like here, we know everybody that works here. We trust them, we talk to them about private things... it took us time to be able to open up to them, so you'd have to meet them and find out where they are coming from. (Toronto person who uses drugs)

*Stakeholder: Would you prefer to go to a straight Joe, or someone that you know is a drug user?
Stakeholder: A straight Joe, because I always think somebody who's using has something...an agenda. (Ottawa person who uses drugs)*

'I did it [recover], why can't you?' Even though they don't say it, they have it under their breath. (Toronto person who uses drugs)

You know, if you wanted to talk to somebody about like, 'Hey listen, you did it for twenty years, how did you just stop?' It's nice to be able to talk to somebody that's used for twenty years and just, bang, shut her down. (Ottawa person who uses drugs)


It would be nice to have a coherent peer around here. (Toronto person who uses drugs)

For the peer work, that's a positive experience for them as well, and may assist them in moving forward in their life. (Ottawa healthcare provider)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Most stakeholders noted that both peer (someone who uses or used to use drugs) and non-peer workers are essential for a supervised consumption facility.
- Stakeholders noted that many existing harm reduction programs currently employ peer workers as paid workers or volunteers.

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- The particular value of peers is believed to be their ability to relate to clients because of shared experiences and their ability to make clients feel comfortable and welcome.
 - Amongst people who use drugs, some worried that peer workers with a past history of drug use (but who were not current drug users) might be too directive or act in a “preachy” manner.
 - Many people who use drugs also noted that, when considering recovery, they would value an opportunity to speak with someone who had stopped using drugs.
 - Stakeholders raised concerns about hiring non-abstinent peer workers, noting the need for training and about setting boundaries. Amongst people who use drugs, there was a belief based on personal experience that it would be possible and essential to be “sober” while on shift.
 - While not mentioned frequently, some people were concerned that peers might only be offered “token jobs” and might be underpaid in relation to their expertise.
 - The Ottawa study by Leonard, DeRubeis, and Strike indicated that 50% of survey respondents agreed that peers should be involved in running a supervised injection facility. More women agreed with this comment (59%) than men (46%).

Section 4.3

Supervised Consumption Facility Rules

Background: The implementation of a supervised consumption facility would require clear definition of operating rules. These rules can have multiple objectives: to ensure that the supervised consumption facility runs efficiently and without disruption; to ensure the safety of supervised consumption facility clients from harms related to drug use, from police, and other users; to protect supervised consumption facility staff from violence and from legal liabilities; and to build support for supervised consumption facilities.

Data: We used data from three sources: 1) A systematic review of the international literature about supervised consumption facilities, focusing on issues of design, services rules and referrals; 2) Interviews and focus group discussions with 95 people who use drugs and 141 various stakeholders in Ottawa and Toronto;

3) summary data from a previous needs assessment study for supervised consumption facilities in Ottawa published in 2008 by Leonard, DeRubeis, and Strike. The text in the tables indicates the wording that was used for each question.

Findings: Internationally, most supervised consumption facilities require registration. Many track clients at subsequent visits.

Other commonly reported rules related to time limits, residency requirements, minimum age rules, rules regarding first time injecting, restricted body sites, rules about sharing drugs and assisted injection, and prohibitions on drug dealing on-site.

Among stakeholders in focus groups, a friendly and welcoming facility that is safe from violence and sets clear limits on the length of stay was commonly


recommended. Stakeholders recommended a zero-tolerance policy related to violence, weapons, selling drugs and debt collection.

Preferred service rules include policies to protect the anonymity of clients and privacy of the program.

While most stakeholders supported the idea of providing counselling services at a supervised consumption facility, opinions were mixed regarding whether or not counselling should be voluntary or mandatory. More stakeholders supported voluntary rather than mandatory counselling.

Opinions were mixed regarding the implementation of a minimum age requirement to access a supervised consumption facility.

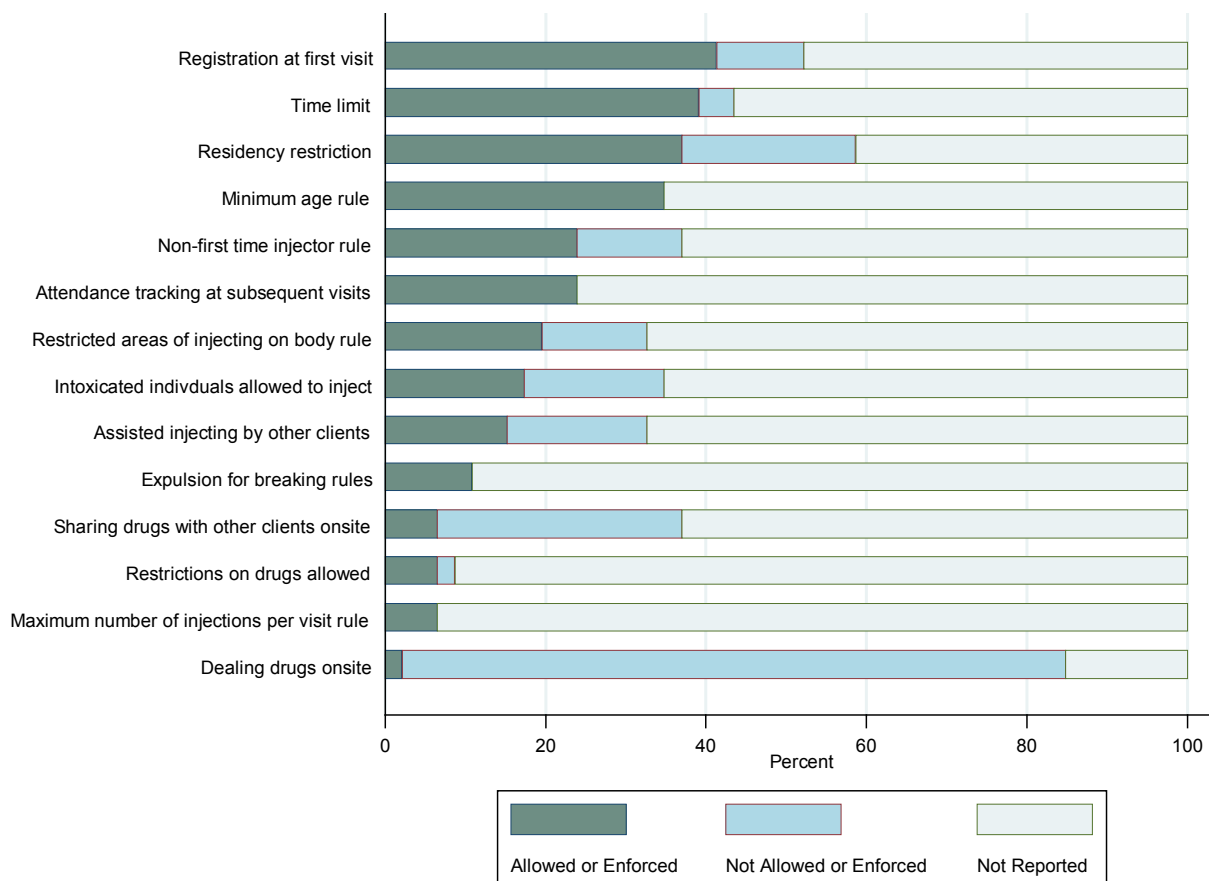
Opinions about assisted injection were very mixed during discussion groups.



Opponents of assisted injection stressed the need for safer injection education to avoid common problems associated with poor injection technique. Advocates of assisted injection stressed the opportunity to teach proper technique and reduce dependence on others.

Stakeholders from the police services were opposed to supervised consumption facility implementation and most often declined to discuss or offer comments on potential operational issues.

Figure 4.3.1 Rules at Supervised Consumption Facilities



Source: Systematic Literature Review

Findings

- The figure illustrates the proportion of supervised consumption facilities that reported a specific type of rule from a review of 46 supervised consumption facilities worldwide. Rules were ranked from those that were reported most frequently to those that were reported least frequently. These data should be interpreted cautiously, since a report might not have described all rules at a supervised consumption facility.
- Of reports that indicated a supervised consumption facilities had a rule regarding registration, most facilities required registration at the first visit and many subsequently tracked who used the facilities.
- The most common time limit reported was 30 minutes. The range was 15 to 60 minutes.
- Several supervised consumption facilities required people who used the facility to demonstrate residency in the jurisdiction.

- Sixteen supervised consumption facilities reported a minimum age: for fourteen supervised consumption facilities this was 18 years and for two it was 16 years.
- Several supervised consumption facilities had a rule to prohibit people from injecting for the first time in the supervised consumption facility.
- Of supervised consumption facilities that reported having rules about injecting in body sites, 60% had such restrictions. Areas where injection was not allowed included the face, neck, groin, genitals, chest, and into wounds.
- Of supervised consumption facilities that reported having rules about whether intoxicated individuals could use drugs on-site, 50% allowed this although the determination was often made on a case-by-case basis.
- Of supervised consumption facilities that reported having rules about assisted injecting, 47% allowed this.
- A few sites reported rules regarding expulsions. Expulsions were typically of short duration (1 to “several” days) or determined on a case-by-case basis.
- Some facilities had restrictions on smoking, particularly tobacco.
- Some facilities required people who had used drugs to leave the premises immediately afterwards; others had separate rooms where clients could wait.
- Most facilities prohibited drug dealing on-site. Only one facility permitted selling drugs on-site in order to regulate the quality and price of drugs for clients through the use of approved “house dealers.”
- Other rules in some facilities included:
 - Clients must report which drug they intend on injecting
 - No verbal or physical abuse
 - No walking through the injecting room with uncapped syringes
 - People receiving drug substitution treatment (such as methadone maintenance therapy) are not allowed to use the facility

Table 4.3.1 Time Limits**Quotations**

People would start treating it like a shelter, and then you couldn't get the people coming through... Come in, stay for an hour and get out...(Ottawa EMS participant)

If I walked in with an ounce, I'd sit there for three days, if I felt comfortable in the place. (Toronto person who uses drugs)

I couldn't handle that... going in there and using my drug and then having someone tell me, 'Your time is up, you have to go.' (Toronto person who uses drugs)

Well, the next person's got to come in and get high, right. You can't sit there all day. (Toronto person who uses drugs)

You know, some people may smoke a piece and they want to tell you their life story. Well, that's not for a safe place. You know, take a walk, go sit in a park or something if you want to yack like that. Do your drugs and get out and make room for the next guy. (Ottawa person who uses drugs)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings:

- Many stakeholders recommend that a supervised consumption facility should be friendly and welcoming but should also set clear limits on the length of stay.
- Time limits allow a facility to be used the maximum number of possible clients and prevent use of the facility as a substitute shelter.
- These views are consistent with a belief that a supervised consumption facility should focus on its core objectives of providing a supervised place to use drugs.
- A minority of people who use drugs were opposed to any time restrictions and did not want to be rushed.

Table 4.3.2 Behavioural Expectations

Quotations

But in there, you're there to do drugs, you're not there to deal, you're not there to make friends, you're not there to exchange pieces, you're there to do your drugs. (Ottawa person who uses drugs)

You have to instil that there has to be respect, not only to the staff and from staff, but also between participants. There is just no other way to operate. (Toronto healthcare provider)

Respect the staff, don't be verbally abusive. (Toronto person who uses drugs)

If your behaviour becomes uncontrollable by staff, the police will be called in. And make it visible. That way people know. (Ottawa person who uses drugs)

It is a consumption site, not a distribution site. (Toronto EMS participant)

People start dealing there, then it becomes a legal matter. Then the police do have the right to come in, and we don't want that ... it is supposed to be safe to use. (Toronto person who uses drugs)

You don't want to have to worry about somebody trying to get a piece off you and score. You're not a dealer, you're a user. You don't want that pressure. (Toronto person who uses drugs)

You can't go grinding on other people for their drugs. You go in with your own drugs, or you don't come. Once your drugs are gone, you've got to go. (Ottawa person who uses drugs)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Stakeholders' views about behavioural expectations in a supervised consumption facility focused on issues of respect, violence and weapons, selling drugs, and the sharing of drugs.
- Across stakeholder groups, displaying respect for staff and other service users was recommended as the most important rule. Forbidding abusive or aggressive behaviour was important to create a safe environment for all.
- People who use drugs worried that the disrespect, violence, and hassles to buy or share drugs they experience from other people who use drugs on the street or at community agencies might be replicated within a supervised consumption facility. They recommended rules to prevent these behaviours on site.
- Stakeholders recommended a zero-tolerance policy for violence and weapons to ensure the physical safety of supervised consumption facility staff and clients.

- Stakeholders recommended rules to forbid drug dealing and drug-related debt collection inside a supervised consumption facility.
- Stakeholders felt that the selling or drugs at a supervised consumption facility could provoke police interference.
- Amongst people who use drugs there were mixed opinions about sharing drugs at a supervised consumption facility. Most acknowledged that a no-sharing rule was likely to be necessary.
- Stakeholders who did not use drugs agreed that drug sharing should not be allowed on site.

Table 4.3.3 Voluntary versus Mandatory Counselling

Quotations

I always needed someone to talk to. And, it was hard for me to build trust with people where I could show myself real. I portrayed an image and I think I need more peers, people that walk the talk. I think that's very important. (Ottawa advisory group participant)

I think professional counsellors need to be able to understand what people are talking about, even if they haven't experienced that themselves. But there is that value of peers that can't be underestimated. (Provincial government official)

I can guarantee you can't force them [to attend counselling] right. (Ottawa business owner)
Participant: Nobody wants a counsellor standing over you.

Participant: That's right, saying, 'This is what you should be doing.'

Participant: But it should be available if people want it.

Participant: If they want it, they have to ask. Some people have a hard time asking. (Toronto people who use drugs)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Across stakeholder groups, counselling was widely recommended as an essential service at a supervised consumption facility to help clients address day-to-day problems.
- Some stakeholders recommended a professional model while others recommended a peer support model. Support for a peer support model was voiced by some, but not all people who use drugs.
- Stakeholders who were initially hesitant about supervised consumption facilities said that they would be more supportive if the facility provided counselling to help people stop using drugs.
- Stakeholders had mixed opinions about whether counselling should be voluntary or mandatory. Most believed that it should be voluntary.

Table 4.3.4 Anonymity and Privacy

Quotations

You come in anonymously, you leave anonymously. (Toronto person who uses drugs)

If I'm using, I don't want anybody to use my name or whatever. I want to walk, use and say thank you, goodbye. (Toronto person who uses drugs)

Say I'm number nineteen, this way you've got it for your statistics... It's [the program] been frequented, number nineteen comes twenty times a week. (Toronto person who uses drugs)

I'd also be reluctant to have a really large, big building, you know, that was newly built for this specific purpose, you're drawing attention to the problem very much, but rather, because you don't want to create an uproar, 'not in my backyard, I don't want this here,' rather, as opposed to it being just a smaller place, less visible that people don't feel uncomfortable going to. (Toronto healthcare provider)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Stakeholders endorsed policies that protect the anonymity and privacy of supervised consumption facility clients.
- Amongst people who use drugs, many indicated that they would not use a supervised consumption facility if they would be required to provide identification prior to entry.
- People who use drugs had mixed opinions about using a confidential service user identification code. While such codes were more readily supported than showing identification, many people who use drugs would prefer to enter and leave a supervised consumption facility anonymously.
- Stakeholders often discussed the need for people entering and exiting the facility to be anonymous. Many stakeholders favoured a nondescript building which would avoid attracting attention and fit well into the surrounding community.

Table 4.3.5 Minimum Age Policies

Quotations

Maybe age sixteen. You can quit school at sixteen, you can drive a car at sixteen. (Toronto person who uses drugs)

Drinking age, the legal age to smoke cigarettes ... nineteen. (Ottawa person who uses drugs)

Kids twelve, thirteen, grab them, put them into the system, force whatever rehabilitation on them. (Toronto fire service participant)

They're going in at fourteen and they're hitting [injecting] themselves, they already know how exactly. They're not learning there [at a supervised consumption facility] because they already know. (Ottawa person who uses drugs)

We have to decide, are we in the business of harm reduction or not. If these people need help regardless of age, they're users and they need a place to go. ... So why would we say no? (Toronto city employee)

I was on the street when I was fourteen. (Ottawa person who uses drugs)

I don't want to sit there and smoke in front of a fourteen-year-old kid. But I also don't want that fourteen-year-old kid to be going out and getting high... robbed, to get stabbed, to get molested or anything like that. (Toronto person who uses drugs)

Everybody says why would you, if they're fourteen why would you want to encourage that? But we're not encouraging it because they're already sticking needles in their arms. So, why not have them instead of staying, okay, so you fourteen-year-olds, you go get busted on the street using instead, while we older people get to go to use somewhere safe. (Ottawa person who uses drugs)

There's legal implications too, when there's a child. (Ottawa EMS participant)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Stakeholders had mixed opinions regarding a minimum age requirement to access a supervised consumption facility.
- Among advocates of a minimum age policy, the recommended minimum age varied from 14 to 21. Many felt that young people who use drugs should instead be referred to a drug treatment program.
- A stakeholder from the police service noted that a minimum age policy was only good if it was strictly enforced. This stakeholder expressed doubt about its implementation.
- Opponents of age limits stated that young people who use drugs also need services. Restricting access might expose youth to more risky behaviours than they would face inside a supervised consumption facility. However, stakeholders noted that if young people were allowed inside, a facility might need to report these clients to child protection services.
- A minority of stakeholders thought that implementing minimum age policies might pose equity barriers for youth wanting access to needed health services.

Table 4.3.6 Views Regarding Age Limits among People who Use Drugs in Ottawa

	All (n=249)	Men (n=180)	Women (n=70)
	N (%)	N (%)	N (%)
SIFs* limited to users of a certain age			
Agree with an age limit	154 (62)	119 (66)	35 (51)
If yes, minimum age (years)			
Mean (standard deviation)	18 (3)	18.3 (3)	17.7 (1)
Median (range)	18 (10 to 30)	18 (10 to 30)	18 (15 to 21)

Source: Leonard, DeRubeis, and Strike, 2008

Missing responses are not shown

*SIF denotes supervised injection facility

Findings

- The majority of people who use drugs in Ottawa agreed that there should be a minimum age limit regarding who would be allowed to use a facility.
- More men than women agreed with having age limits.
- The average suggested age limit was 18 years.

Table 4.3.7 Assisted Injection and Safer Injection Education

Quotations

So you're not trying to help them anymore, now you're getting them high. (Toronto EMS participant)

If you can't hit yourself, don't do the drug. (Ottawa person who uses drugs)

It is not like, 'Let me help you, let me inject you.' It is more, 'Let me help you find a vein. This is how you do it.' (Toronto city employee)

Say you're sick, terribly sick or you're in a lot of pain and can't hit yourself anymore, you should be able to have a registered nurse who can help you. (Toronto person who uses drugs)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Assisted injection refers to one person helping another person to inject drugs.
- Opinions on assisted injection were mixed in the Toronto and Ottawa focus groups.
- Generally, EMS workers, municipal workers, and some people who use drugs stated that assisted injection should be forbidden because this is beyond the mandate of a supervised consumption facility.
- Most opponents of assisted injection stressed the need for safer injection education to prevent common problems associated with poor injection technique such as vein and skin damage.
- Proponents of assisted injection noted that not all people who inject drugs are able to inject themselves. Lack of skill, sickness, or fear can prompt people who inject drugs to seek out others to give them an injection.
- Proponents viewed assisted injection as an important service for the most vulnerable among people who inject drugs and as an opportunity to teach proper technique and reduce dependence on others.
- Most proponents recommended that only a nurse should be allowed to provide the assistance rather than a peer worker. These stakeholders believed a peer might have a conflict of interest if he or she was required to provide assisted injection. Allowing peers to provide assisted injection could also provide an opportunity for unwanted behaviours such as covert drug dealing or offers of other favours.

Chapter 5

Potential Use of Supervised Consumption Facilities

Background: In this chapter, we focus on three key questions for determining whether supervised consumption facilities are feasible: 1) Are people who use drugs willing to use a supervised consumption facility?; 2) How frequently would people who use drugs use a supervised consumption facility?; and 3) What makes a supervised consumption facility attractive or unattractive as a place to use drugs? We analyzed these questions for each city, by sex, and – when available – by type of drug used.

Summary: Up to 75% of people who use drugs said they would use a supervised injection facility and up to 65% of people who use drugs said they would use a supervised smoking facility. Projected use of a facility was similar in both Toronto and Ottawa; it was also similar between men and women. Statistical models suggested that the people most likely to report that they would use a supervised consumption facility included individuals who are unstably housed or live on the street, individuals who are unaware of how to access sterile equipment, people who inject in public, and people who lent or sold a crack cocaine pipe after using it. Together, these findings suggest that supervised consumption facilities would attract people who use drugs who are especially vulnerable. These findings are important since these groups might be at particularly high risk for blood-borne infections and other adverse health consequences associated with drug use and social marginalization.

Among people who reported that they would use a supervised injection facility, over half

said that they would use the facility always (30 to 36%) or usually (22 to 23%). These rates were similar in Toronto and Ottawa. Relatively few people – 14 to 20% – reported that they would only use a facility occasionally. Data about how often people would use supervised smoking facilities were not available. Projected rates were generally similar among men and women, although women in Ottawa were somewhat more likely than men to say that they would use a facility always or usually. Overall, the demand for supervised injection facilities is high among people who inject drugs in Toronto and Ottawa.

The main reasons for using a supervised consumption facility were related to concerns about safety (from arrest, from street crime, and from overdose), privacy and shelter (compared to using drugs on the street), and cleanliness (to get sterile equipment). Accessing services or referrals were of lesser importance. The main reasons for not using a supervised consumption facility were similar: safety (fear of arrest and surveillance, paranoia, and concern about other people who use drugs), privacy (compared to using drugs at home), and confidentiality. Proximity is an important consideration; people who use drugs indicated that they would like facilities to be located close to where they actually use drugs. This has implications for both Toronto and Ottawa, where drug use is dispersed across each city. Overall, these findings indicate that supervised consumption facility use rates are likely to be high provided that predictions about use are accurate and facilities are conveniently located.

Section 5.1

Are people who use drugs willing to use a supervised consumption facility?

Background: For a supervised consumption facility to be effective, it has to be visited at a relatively frequent rate by people who use drugs, particularly those people who are at high risk for overdose and acquiring infections or those who are likely to benefit from assistance, education, referrals and health care. The actual usage rate is hard to predict, but surveys can be informative. Projected use can be estimated by asking people whether they would be willing to use a facility. Such estimates are helpful for indicating whether there is likely to be sufficient demand for a supervised consumption facility to make it feasible and cost-effective. However, predicted use might not match actual use once facilities are established.

Data: We used data from three sources: 1) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users

(1 -Track), a survey of 477 people who use drugs; 2) the 2008 Shout Clinic Street Youth Harm Reduction Survey, a survey of 92 youth who use drugs; and 3) summary data from a previous needs assessment study for supervised consumption facilities in Ottawa published in 2008 by Leonard and DeRubeis. The text in the table indicates the wording that was used for each question.

Findings:

A large majority of people who use drugs said that they would be willing to use a supervised consumption facility.

The projected use was approximately 65 to 75%. Projected use was similar among men and women and in Toronto and Ottawa.

People most likely to use a supervised injection facility in Toronto were people who inject drugs in public and

people who had experienced homelessness; in Ottawa, projected use was highest among people who did not know where they could access sterile needles.

About 60 to 65% of people who smoke drugs said that they would use a supervised smoking facility. Projected rates are similar among men and women and in Toronto and Ottawa.

People most likely to use a supervised smoking facility in Toronto are people who have experienced homelessness or lent or sold a crack cocaine pipe after using it; in Ottawa, projected use was highest among people who lived in unstable housing and those who smoked crack cocaine in the month prior to the interview.

Projected use was similar among youth and adults in Toronto.

Table 5.1.1 Use of a supervised injection facility in Toronto

Would you use a supervised injection facility?	N (%)
All (n=361)	273 (76)
People who injected drugs (n=257)	202 (79)
People who smoked crack cocaine* (n=104)	71 (68)
Men (n=256)	192 (75)
Women (n=103)	79 (77)

Source: 2006 Toronto I-Track Survey

*People who smoke crack cocaine and had a history of previous injecting but were not doing so at the time of the interview.

The analysis by gender excludes transgendered people.

Findings

- Approximately 3 out of every 4 people (76%) who use drugs reported that they would use a supervised injection facility.
- Projected use was higher by 11% among people who inject drugs than among those who smoke crack cocaine. This question was asked of people who smoke crack cocaine and did not currently inject drugs but had a history of injection drug use.
- Men and women were equally likely to say that they would use a supervised injection facility.

Table 5.1.2 Use of a supervised injection facility in Ottawa

Would you use a supervised injection facility?	N (%)
All (n=215)	160 (74)
Men (n=158)	115 (73)
Women (n=57)	45 (79)

Source: Leonard, DeRubeis and Strike, 2008

Excludes women and men who injected drugs who indicated that they might use a supervised injection facility

Findings

- Overall, 74% of people who inject and smoke drugs reported that they would use a supervised injection facility, 14% said they might use a facility, and 22% said they would not use a facility.
- Men and women were equally likely to say that they would use a supervised injection facility.

Table 5.1.3 Characteristics of people who are likely to use a supervised injection facility in Toronto

Characteristics	Odds Ratio (95 % CI)
Age (per decade)	0.96 (0.93, 1.00)
Male sex	0.99 (0.49, 1.99)
Completed high school or higher education	1.11 (0.60, 2.06)
Aboriginal ethnicity	1.11 (0.37, 3.30)
Knowledge of HIV positive status	0.62 (0.12, 3.18)
Knowledge of HCV positive status	1.70 (0.90, 3.24)
Public injection drug use	2.28 (1.09, 4.79)
Overdose	0.71 (0.34, 1.48)
Housing status	
Stable	1.00 Reference
Marginal	0.53 (0.25, 1.11)
Homeless	3.94 (1.73, 8.98)
Exchanged sex for drugs	1.87 (0.91, 3.85)
Engaged in unsafe sex at last sex	1.27 (0.67, 2.40)
Lent or passed a dirty needle	1.38 (0.48, 3.96)
Used a dirty needle	0.61 (0.18, 2.08)
Injected opiates	1.54 (0.75, 3.19)
Used opiates through a non-injection route	1.44 (0.67, 3.11)
Started injecting in the past 2 years	0.51 (0.17, 1.52)

Source: 2006 Toronto I-Track Survey

Questions asked about activities in the past 6 months, except where noted.

Participants with missing data were excluded from this analysis. 302 participants were included in the final model.

Findings

- We used statistical modelling to identify characteristics that were independently associated with being likely to use a supervised injection facility.
- This model included:
 - people who injected drugs in the 6 months prior to the interview
 - people who smoked crack cocaine at the time of the interview and had also injected drugs more than 6 months prior to the interview


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- According to the model, people who inject drugs in public and had experienced homelessness were more likely to say that they would use a supervised injection facility.
 - There was considerable uncertainty in the model about whether the other characteristics were associated with likelihood of using a supervised injection facility. For example although people who knew they were hepatitis C-positive were more likely to say that they would use a supervised injection facility (odds ratio of 1.7), this estimate is imprecise as indicated by the range of the associated 95% confidence interval (0.90 to 3.24). As such, we can not be certain from these data whether this finding is due to chance alone or whether it is real. The most likely reason for the wide confidence interval is the survey had too few people with hepatitis C (a small sample size) to make strong conclusions.

Table 5.1.4 Characteristics of people who are likely to use a supervised injection facility in Ottawa

Characteristics	Odds Ratio (95 % CI)
Injected in public place	1.92 (0.97, 3.80)
Did not know where to get sterile needles	3.60 (1.32, 9.82)
Injected with unclean water	1.85 (0.73, 4.70)

Source: Leonard, DeRubeis and Strike, 2008

Questions asked about activities in the past 6 months, except where noted.

Excludes participants with missing data, and women and men who injected drugs who indicated that they might use a supervised injection facility.

Findings

- Leonard and DeRubeis used statistical modelling to identify characteristics that were independently associated with being likely to use a supervised injection facility.
- This model did not include people who said that they might use a supervised injection facility.
- According to the model, people who did not know where to get sterile needles were most likely to say that they would use a supervised injection facility.
- The Ottawa report presented results for only the three variables noted in the table.
- There was considerable uncertainty in the model about whether other characteristics were associated with likelihood of using a supervised injection facility, likely because the sample size was relatively small.

Table 5.1.5 Use of a supervised smoking facility in Toronto

Would you use a supervised room for safer crack smoking?	N (%)
All (n=450)	288 (64)
People who inject drugs (n=238)	139 (58)
People who smoke crack cocaine (n=212)	149 (70)
Men (n=316)	201 (64)
Women (n=131)	85 (65)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people.

Findings

- Approximately 6 out of every 10 people (64%) who smoke drugs reported that they would use a supervised smoking facility.
- Projected use was higher by 12% (95% CI: 3% to 21%) among people who only smoke drugs than among those who both inject and smoke drugs.
- Men and women were equally likely to say that they would use a supervised smoking facility.

Table 5.1.6 Use of a supervised smoking facility in Ottawa

Would you use a supervised room for safer crack smoking?	N (%)
All (n=245)	154 (63)
Men (n=177)	112 (63)
Women (n=68)	42 (62)

Source: Leonard, DeRubeis and Strike, 2008

Findings

- Approximately 6 out of every 10 people (63%) who smoke drugs reported that they would use a supervised smoking facility in Ottawa.
- Men and women were equally likely to say that they would use a supervised smoking facility.

Table 5.1.7 Characteristics of people who smoke drugs and were likely to use a supervised smoking facility in Toronto

Characteristics	Odds Ratio (95 % CI)
Age (per decade)	1.02 (0.97, 1.07)
Male sex	0.77 (0.29, 2.01)
Completed high school or higher education	1.61 (0.70, 3.72)
Aboriginal ethnicity	1.06 (0.36, 3.16)
Knowledge of HIV positive status	Omitted*
Knowledge of HCV positive status	1.35 (0.50, 3.69)
Duration of crack cocaine smoking (years)	1.01 (0.95, 1.07)
Public injection drug use	1.54 (0.57, 4.13)
Overdose	0.62 (0.18, 2.14)
Housing status	
Stable	1.00 Reference
Marginal	1.69 (0.59, 4.86)
Homeless	3.62 (1.33, 9.84)
Exchanged sex for drugs	1.26 (0.44, 3.65)
Engaged in unsafe sex at last sex	1.11 (0.47, 2.66)
Lent or sold a crack cocaine pipe after using it	4.54 (1.75, 11.82)
Borrowed or bought a crack cocaine pipe that others had already used	1.11 (0.39, 3.16)
Used opiates by non-injection method	2.59 (1.07, 6.22)

Source: 2006 Toronto I-Track Survey

Questions asked about activities in the past 6 months, except where noted.

Participants with missing data were excluded from this analysis. 154 participants were included in the final model. None of the participants included in the model were known to be HIV-positive.

Findings

- We used statistical modelling to identify characteristics that were independently associated with being likely to use a supervised smoking facility.
- This model included people who smoked drugs at the time of the interview, but had not injected drugs in the 6 months prior to the interview.
- According to the model, people who had experienced homelessness, lent or sold a crack cocaine pipe after using it, and used opiates through non-injection methods (for example, smoking or snorting) were more likely to say that they would use a supervised smoking facility.

- There was considerable uncertainty in the model about whether the other characteristics were associated with likelihood of using a supervised smoking facility, likely because the sample size was relatively small for some characteristics (Aboriginal ethnicity, knowledge of HIV status, knowledge of HCV status, overdoses, exchanged sex for drugs).

Table 5.1.8 Characteristics of people who inject drugs and were likely to use a supervised smoking facility in Toronto

Characteristics	Odds Ratio (95 % CI)
Age (per decade)	1.02 (0.98, 1.06)
Male sex	0.62 (0.30, 1.31)
Completed high school or higher education	0.38 (0.19, 0.76)
Aboriginal ethnicity	2.01 (0.60, 6.68)
Knowledge of HIV positive status	1.05 (0.16, 7.07)
Knowledge of HCV positive status	0.67 (0.33, 1.34)
Overdose	1.08 (0.49, 2.40)
Housing status	
Stable	1 Reference
Marginal	0.70 (0.29, 1.71)
Homeless	2.35 (1.10, 5.00)
Exchanged sex for drugs	2.87 (1.30, 6.35)
Engaged in unsafe sex at last sex	0.60 (0.30, 1.19)
Lent or sold a crack cocaine pipe after using it	3.65 (1.50, 8.90)
Borrowed or bought a crack cocaine pipe that others had already used	1.06 (0.45, 2.49)
Used opiates through a non-injection route	1.27 (0.50, 3.23)

Source: 2006 Toronto I-Track Survey

Questions asked about activities in the past 6 months, except where noted.

Participants with missing data were excluded from this analysis. 181 participants were included in the final model.

Findings

- We used statistical modelling to identify characteristics that were independently associated with being likely to use a supervised smoking facility.
- This model included people who injected drugs in the 6 months prior to the interview.
- 93% of people also smoked drugs in the 6 months prior to the interview.
- According to the model, people without a high school education, people who had experienced homelessness, people who had exchanged sex for drugs, or lent or sold a crack cocaine pipe after using it were more likely to say that they would use a supervised smoking facility.

Table 5.1.9 Characteristics of people who were likely to use a supervised smoking facility in Ottawa

Characteristics	Odds Ratio (95 % CI)
Lived in unstable housing	4.02 (2.08, 7.77)
Smoked crack cocaine in the month prior to the interview	6.66 (2.26, 19.61)

Source: Leonard, DeRubeis and Strike, 2008

Questions asked about activities in the past 6 months, except where noted.

Excludes participants with missing data, and women and men who injected drugs who indicated that they might use a supervised injection facility.

Findings

- Leonard and DeRubeis used statistical modelling to identify characteristics that were independently associated with being likely to use a supervised smoking facility.
- According to the model, people who lived in unstable housing and those who smoked crack cocaine were most likely to say that they would use a supervised smoking facility.
- The Ottawa report presented results for only the two variables noted in the table.
- There was considerable uncertainty in the model about whether other characteristics were associated with likelihood of using a supervised smoking facility because the sample size was relatively small.

Table 5.1.10 Use of a combined smoking and injection facility by youth in Toronto

Would you use a supervised injection and/or consumption (smoking) site?	N (%)
All (n=87)	63 (72)
People who inject drugs (n=32)	27 (84)
People who smoke drugs (n=55)	36 (65)
Men (n=62)	46 (74)
<u>Women (n=19)</u>	<u>14 (74)</u>

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey
The analysis by gender excludes transgendered people.

Findings

- This question about use of a combined smoking and injection facility was asked of youth who reported that they smoked crack cocaine, crystal methamphetamine, or both.
- Approximately 7 out of every 10 youth (72%) who use drugs reported that they would use a combined smoking and injection site.
- Projected use is higher by 15% among youth who inject and smoke drugs than among those who only smoke drugs (crack cocaine or crystal methamphetamine).
- Male and female youth were equally like to say that they would use a combined smoking and injection facility.

Section 5.2

How frequently would people who use drugs use a supervised consumption facility?

Background: Not only is it important to know whether people who use drugs would use a supervised consumption facility, it is also important to know how frequently they would use a facility. A facility that is infrequently used is likely to have less of a health impact than one that is frequently used. We explored how often people who use drugs said that they would be likely to use supervised consumption facilities.

Data: We used data from three sources: 1) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users (I-Track), a survey of 477 people who used drugs; 2) the 2008 Shout Clinic Street Youth Harm Reduction Survey, a survey of 92 youth who use drugs; and 3) summary data from a previous needs assessment study for a supervised injection facility in Ottawa published in 2008 by Leonard and DeRubeis.

Findings: Over 50% of people who use drugs who said that they would use a facility reported that they would use it always or usually; 17 to 20% reported that they would use a facility occasionally.

Men and women in Toronto gave similar responses.

In Ottawa, more women than men reported that they would use a facility always or usually.

Table 5.2.1 Frequency of use of a supervised injection facility in Toronto

If a supervised injection site was established close by, how often would you use it to inject?	All (n=198)	Men (n=135)	Women (n=61)
	N (%)	N (%)	N (%)
Always	59 (30)	37 (28)	21 (34)
Usually	45 (23)	34 (25)	10 (16)
Sometimes	66 (33)	44 (33)	22 (36)
Occasionally	28 (14)	20 (15)	8 (13)

Source: 2006 Toronto I-Track Survey

Findings

- Among people who inject drugs and said that they would use a supervised injection facility, over half reported that they would use a supervised injection facility always or usually.
- Only about 1 in 7 people (14%) reported that they would use a facility occasionally.
- Men and women gave similar responses.

Table 5.2.2 Frequency of use of a supervised injection facility in Ottawa

If a supervised injection facility were established at a convenient location in Ottawa, how often would you use it?	All (n=214)	Men (n=152)	Women (n=62)
	N (%)	N (%)	N (%)
Always	77 (36)	49 (32)	28 (45)
Usually	47 (22)	36 (24)	11 (18)
Sometimes	43 (20)	33 (22)	10 (16)
Occasionally	47 (22)	34 (22)	13 (21)

Source: Leonard, DeRubeis and Strike, 2008

Findings

- Among people who inject drugs and said that they would use a supervised injection facility over half reported that they would use a supervised injection facility always or usually.
- About 1 in 5 (22%) people who inject drugs reported that they would use a facility occasionally.
- More women than men reported that they would use a facility always or usually.

Section 5.3

What makes a supervised consumption facility attractive or unattractive as a place to use drugs?

Background: Understanding the reasons why people would want to use a supervised consumption facility is important. To attract and retain clients, a supervised consumption facility must engage people who use drugs and offer services that they view as useful. Conversely, understanding the reasons why people would not use a supervised consumption facility can provide important guidance regarding what to avoid when establishing a facility.

Data: We used data from four sources: 1) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users (I-Track), a survey of 477 people who use drugs; 2) the 2008 Shout Clinic Street Youth Harm Reduction Survey, a survey of 92 youth

who use drugs; 3) summary data from a previous needs assessment study for a supervised injection facility in Ottawa published in 2008 by Leonard and DeRubeis; and 4) our focus groups and interviews with people who use drugs in Toronto and Ottawa.

Findings:


The main reasons people said that they would use a supervised consumption facility were:

- to be safe from police and safe from crime on the street
- to prevent and treat overdoses
- to use drugs in private
- to get sterile equipment and safely dispose of equipment
- they do not have a place to use drugs

- to receive temporary shelter from the elements
- to be able to speak with health professionals or other supervised consumption facility clients

The main reasons why people said they would not use a supervised consumption facility were:

- fear of police and surveillance of a facility
- feelings of paranoia inside a facility
- they already have a place where they can use drugs
- they prefer to use drugs alone or cannot “fix” in public
- concern about the behaviour of other clients
- concern about people seeing them enter a facility



People who use drugs also indicated that the location and proximity of the facility influenced the attractiveness of a supervised consumption facility as a place to use. The intensity of drug withdrawal symptoms would influence whether they had time to travel to a facility. Other important factors included housing status and the wait time to access a facility. People who use drugs in Toronto and Ottawa gave similar responses; people who inject drugs and people who only smoke drugs also gave similar responses.

Table 5.3.1 Reasons for using a supervised injection facility among people who inject drugs in Toronto

Reason	All (n=202)	Men (n=138)	Women (n=62)
	N (%)	N (%)	N (%)
Be safe from being seen by police	172 (85)	119 (86)	51 (82)
Be safe from crime	164 (81)	113 (82)	49 (79)
Get sterile equipment	148 (73)	104 (75)	43 (69)
Be able to use in private, not in a public place	147 (73)	109 (79)	37 (60)
Prevent overdoses	143 (71)	103 (75)	39 (63)
Get overdose treatment	143 (71)	101 (73)	41 (66)
See health professionals	133 (66)	94 (68)	37 (60)
Get a referral to other services (including detox, treatment, and other services)	105 (52)	78 (57)	26 (42)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people.

Findings

- The most commonly reported reasons to use a supervised injection facility among people who inject drugs were to be safe from police and to be safe from crime.
- The least commonly reported reasons to use a supervised injection facility were to see health professionals or to get referrals to other services.
- Men and women reported similar reasons, but more men than women selected the following reasons: to be able to use drugs in a private place; prevent overdoses; see health professionals; and to get a referral.

Table 5.3.2 Reasons for using a supervised injection facility among people who inject drugs in Ottawa

Reason	All (n=195)		Men (n=137)		Women (n=58)	
	N	(%)	N	(%)	N	(%)
Ability to get , sterile injection equipment	88	(45)	61	(45)	27	(47)
Inject in private not in public space	84	(43)	64	(47)	20	(34)
Safe from being seen by police	68	(35)	51	(37)	17	(29)
Safer from crime	55	(28)	43	(31)	12	(21)
Ability to see health professionals	51	(26)	36	(26)	15	(26)
Overdoses can be prevented	32	(16)	20	(15)	12	(21)
Overdoses can be treated	25	(13)	14	(10)	11	(19)
Ability to get a referral for services	19	(10)	13	(9)	6	(10)
Injecting responsibly	19	(10)	14	(10)	5	(9)

Source: Leonard, DeRubeis and Strike, 2008

Findings

- The most common reasons why people who inject drugs reported that they would use a supervised injection facility were to be able to get sterile injection equipment and to inject in private.
- The least important reasons were to get referrals to other services or to inject responsibly (the study did not define what was meant by responsible injection).
- Men and women gave similar reasons, although more men than women said that it was important to be able to use drugs in a private place and that they wanted to be safe from being seen by police. More women than men said they would use a supervised injection facility so that overdoses could be prevented or treated.

Table 5.3.3 Reasons people who smoke crack cocaine would use a supervised smoking facility in Toronto

Reason	All (n=218)	Men (n=160)	Women (n=57)
	N (%)	N (%)	N (%)
Be safe from being seen by police	149 (68)	107 (67)	41 (72)
Be safe from crime	137 (63)	99 (62)	37 (65)
Get sterile, sterile equipment	113 (52)	79 (49)	33 (58)
Be able to use in private, not in a public place	106 (49)	79 (49)	26 (46)
Prevent overdoses	96 (44)	66 (41)	30 (53)
Get overdose treatment	96 (44)	68 (43)	28 (49)
See health professionals	91 (42)	63 (39)	27 (47)
Get a referral to other services (including detox, treatment, and other services)	80 (37)	55 (34)	25 (44)

Source: 2006 Toronto I-Track Survey

Findings

- The most common reasons why people who smoke crack cocaine said that they would use a supervised smoking facility were the same as the reasons given by people who inject drugs – to be away from police and to be safe from crime.
- The least important reasons were also similar to reasons given by people who inject drugs – to see health professionals or to get referrals to other services.
- Men and women gave similar reasons for using a supervised smoking facility.
- This question was not asked of people who smoke drugs in the Ottawa needs assessment study.

Table 5.3.4 Reasons for using a combined smoking and injection facility among youth in Toronto

Would you use a supervised injection or consumption site for any of the following reasons?	All (n=92)		Men (n=67)		Women (n=19)	
	N	(%)	N	(%)	N	(%)
Prevent or treat overdoses	61	(66)	44	(66)	14	(74)
Be able to use in private, not in a public place	61	(66)	44	(66)	14	(74)
Get sterile equipment	59	(64)	44	(66)	12	(63)
Safely dispose of used drug-use equipment	58	(63)	41	(61)	14	(74)
Be safe from crime	56	(61)	40	(60)	13	(68)
Be safe from being seen by police	55	(60)	41	(61)	12	(63)
Get a referral to other services (including detox, treatment, and other services)	54	(59)	41	(62)	12	(63)
See health professionals	51	(55)	38	(57)	11	(58)

Source: 2008 Shout Clinic Street Youth Harm Reduction Survey

Findings

- The most common reasons why youth who use drugs would use a combined supervised injection and smoking facility were to use their drugs in private and to prevent or treat overdoses.
- The least important reasons were to see health professionals or to get referrals to other services.
- Male and female youth gave similar reasons for using a supervised consumption facility.

Table 5.3.5 Reasons for using a supervised consumption facility among people who use drugs in Toronto and Ottawa

Quotations

Well, we're always hiding in alleys, or hiding in washrooms or hiding here and there, you know. Where safe consumption sites, you don't have to worry about the cops arresting you or taking your drugs, or go into crack houses where it's unsafe, sometimes. (Toronto person who uses drugs)

Better than being in an alley and halfway through a shot, and then look up and there's a cop in front of you. Or walking up George Street, lighting your pipe, you look up, three bike cops, that's how I got arrested. (Toronto person who uses drugs)

I'd feel a lot better about doing it in a safe injection site than at home, because, you know, you could wind up dead at home. (Toronto person who uses drugs)

Sometimes I go a little overboard. I do a big smash or a big toke whatever and I've went down a few times. I'd use the place for a safe place and a place where I could go and know where, okay, I'm welcome here to do drugs. And the staff here will pick me up off the floor if I'm done. It's a safe setting. (Toronto person who uses drugs)

Like everyone's [at the SCS] with one motivation. Nobody's like, "Oh I'm going to rip this person over," or, "I'm going to sneak into that person's stash," or something. (Ottawa person who uses drugs)

Then we become homeless, and you realize you can only use this bathroom for so long, and this bathroom for so long and this...so eventually you run out of places, you run out of options, and you're out in public, so. (Ottawa person who uses drugs)

Sometimes it's just hard to find a place. (Ottawa person who uses drugs)

Source: Focus groups with people who use drugs in Toronto and Ottawa

Findings

- People who use drugs in Toronto and Ottawa gave similar responses.
- People who inject drugs and people who smoke drugs also gave similar responses.
- An important reason for using a supervised consumption facility was to prevent potential police harassment and arrest. Some elaborated with their personal stories of being harassed by police on the street.
- People said that using drugs outside or in public places greatly increases their chances of getting caught by the police and that it would be beneficial to have a place where they could use drugs safely without having to constantly worry about police intervention.

- A few people in Ottawa reported that police in their city have been excessively strict when dealing with street-involved people who use drugs.
- Overdose prevention was the most commonly mentioned health-related reason to use a supervised consumption facility.
- Safety was also a major concern. People said that the public places where they use drugs typically pose risks of getting assaulted by others and having their belongings, money, or drugs stolen, and that they felt that going to a supervised consumption facility would reduce those risks.
- Not having a home or a reliable place to use drugs in private would be important reasons to access a supervised consumption facility. Many people had experienced homelessness or unstable housing situations. Some shared their stories about using drugs in alleyways and public washrooms and how their experiences often involved getting kicked out of such places which limited their ability to practice safer drug use.
- A supervised consumption facility would provide a less visible, more discreet, and safer alternative to using drugs in public spaces, as well as offer temporary shelter, comfort, and relief from the elements, especially during inclement weather.
- A supervised consumption facility would be a place where clients could engage with counsellors and other health and social service providers.

Table 5.3.6 Reasons for not using a supervised injection facility among people who use drugs in Toronto

Would Not Use a supervised injection facility because:	All (n=74) N (%)
I do not inject anymore	25 (34)
I can't fix in public	21 (28)
I use my drugs at home	14 (19)
I am not safe/fear of police/paranoid	10 (14)

Source: 2006 Toronto I-Track Survey

Findings

- This question was asked only of people who injected in the 6 months prior to the interview date and people who smoked crack cocaine and had injected drugs more than past 6 months prior to the interview date.
- Many people who smoke crack cocaine (70%) said they would not use a supervised injection facility because they no longer inject drugs.
- Many people who inject drugs (70%) said that they would not use a supervised injection facility because they were uncomfortable injecting in public.
- Detailed results by type of drug use are not shown due to small numbers.
- Men and women gave similar reasons for not using a supervised injection facility (data not shown).

Table 5.3.7 Reasons for not using a supervised consumption facility among people who use drugs in Toronto and Ottawa

Quotations

Participant: I think the cops would be the biggest thing for me.

Participant: Yeah, that's what I'd be worried about too. (Toronto people who use drugs)

People will not show up if there's a cop that shows up near this place. (Ottawa person who uses drugs)

The only thing I think about that is that people would be paranoid that the cops would jack them up after they left. Because I know people that are paranoid to go to exchange in the van. (Ottawa person who uses drugs)

Interviewer: So you have your own place. What about some other reasons why you might not want to use a supervised consumption site?

Participant: It's not that I would not want to, just home is home. (Toronto person who uses drugs)

I have a roof over my head, I'll stay at home. (Toronto person who uses drugs)

People watching me smoke, yeah that would bother me. (Toronto person who uses drugs)

I wouldn't use it because if people, let's say they're done, but they still want some more, especially in the crack or cocaine, whatever. Then you come in with yours, well, "Come on, come on, you have enough, just give me a little, give me a little." (Ottawa person who uses drugs)

When I have my stuff, I want to go do it. I don't want to have to talk to somebody and fill out paperwork. (Toronto person who uses drugs)

I don't know if I'd want everybody knowing my business, like people seeing me, you know. (Toronto person who uses drugs)

Interviewer: So talking about those kinds of sites, would you be willing to use a supervised consumption site?

Participant: I wouldn't.

Participant: No. Just because nobody needs to know that I'm a crackhead. Nobody needs to know, like go home or go somewhere else to do it. (Ottawa people who use drugs)

Participant: Then again, smoking in a thing is a different thing.

Interviewer: Can you explain what you mean by that?

Participant: Well, like smoking's a lot easier.

Participant: Really, I can run behind a building and can do a quick puff. But then if I'm sick and I wanted some heroin, I've got to hide, you know what I mean, it takes time. (Toronto people who use drugs)

Source: Focus groups with people who use drugs in Toronto and Ottawa



Findings:

- Major reasons why people who use drugs said that they would not use a supervised consumption facility were connected to concerns about the police. In contrast to people who said that a supervised consumption facility would keep them safe from arrest and police harassment, others doubted this benefit. These people who use drugs expressed worry that police would closely monitor a supervised consumption facility and stop clients as they entered or exited the facility. These worries would be enhanced by feelings of paranoia brought on by the effects of drugs.
- People who reported smoking crack cocaine were more likely to mention concerns about feeling paranoid inside a supervised consumption facility than people who reported injecting drugs like opiates.
- Some people added that having cameras around a supervised consumption facility would give the impression that the facility is under surveillance and, thus, would deter people from using it.
- People who use drugs who said that they have housing or a reliable place where they can use drugs in private commonly reported that they would not need or would not frequently access a supervised consumption facility. Some people said that they feel more comfortable using drugs in their own home.
- A few people stated that they prefer to use drugs alone, particularly people who inject drugs who noted that it sometimes takes them a long time to prepare for injection (such as finding a vein).
- Some people who use drugs said they would not like to be in the company of strangers in a supervised consumption facility or would be worried about the behaviours of strangers. They also reported that they would be bothered if other supervised consumption facility clients started asking them for their drugs.
- People who use drugs said that they often want to use their drugs right away and they would be deterred from going to a place where they might have to wait.
- Several people who use drugs mentioned that they would worry about other people who know them (such as co-workers) seeing them go into a supervised consumption facility.
- Some people who smoke drugs like crack cocaine said that they might not need or use a supervised smoking facility because smoking is easier to do and conceal on the street compared to injecting.

Table 5.3.8 Conditions under which supervised consumption facilities would be used

Quotations

But if it was close, like if it was close around here, because this is the area I'm in, I'd probably go to it. But if it was too far, say a couple miles away, I'm not going to walk a couple miles in the cold when I can just go in a public washroom. (Toronto person who uses drugs)

I'll go a thousand miles to get my dope, but I won't go fuckin' two feet for anything else. (Toronto person who uses drugs)

If I'm dope-sick and I am downtown and there's a safe injection site's there, I'm not waiting on a bus to go home. (Ottawa person who uses drugs)

Right now I'm housed, thank you very much. No, I'm serious. I don't know if I'd use it. Depends who I'm with, where it is, if I'm out on the street at that certain time, and the thing's right there, well sure I might go in just to see what it's all about, you know. See what goes on. (Toronto person who uses drugs)

I would use it, but it depends on how many people are going to be there. (Toronto person who uses drugs)

Depending where the site is, you know. Depending where the location is, yeah, it would be convenient. But if you live in Scarborough, and if the site's central, you're not going to, you know, realistic, you're not going to travel by TTC just to do a smash, right. (Toronto person who uses drugs)

Interviewer: [I]f there was a site here, would you use it?


Participant: Um, not particularly because I have a room of my own. But if I needed to get to use a nurse or something, if ever I ended up with an abscess or something, yeah, then I would walk there. (Toronto person who uses drugs)

It depends on how far, like I'm saying. If you're coming out of the pharmacy and you're getting your drugs, and the site is before my place, I'd be getting off the bus there to do it. (Ottawa person who uses drugs)

Source: Focus groups with people who use drugs in Toronto and Ottawa

Findings

- The responses of people who use drugs in Toronto and Ottawa were similar.
- Location emerged as a key deciding factor regarding whether or not people would go to a supervised consumption facility, although we did not ask about specific distances that people might travel. Generally, people indicated that they would not travel far to get to a



supervised consumption facility because they typically want to use their drugs right away.

- Some people said that if a supervised consumption facility were close by, they would use the facility as much as they needed.
- Many people said that if a supervised consumption facility was located far from where they live or purchase their drugs, they would likely not use the facility.
- A few people said that they would travel as far as it took to get to a supervised consumption facility in order to access the facility's health and safety benefits.
- Many people would not be willing to walk for more than five or ten minutes to get to a supervised consumption facility once they have obtained their drugs.
- Some people said that travelling would present extra hassles and transportation costs that they cannot afford.
- Some people who inject drugs such as heroin said that their willingness to travel to a supervised consumption facility would depend on how "dope-sick" they felt (that is, experiencing withdrawal symptoms). These people said they would rather use their drugs immediately if they were feeling "sick" and the supervised consumption facility was far away, but in the same state they might travel to the supervised consumption facility for its safety benefits if it was located nearby.
- Even people who seemed hesitant or unsure about supervised consumption facilities said that they would at least try a facility if one were implemented in their city. Their first supervised consumption facility experience (and whether they liked the setting and trusted the staff) would likely shape their decision to use the facility again in the future.

Chapter 6

Deciding Where to Establish Supervised Consumption Facilities


Background: In this chapter, we focus on three questions that are important to answer when deciding where to establish a supervised consumption facility: 1) Where does drug use occur in Toronto and Ottawa? Is it concentrated or spread out? 2) What are the relative advantages of one or multiple supervised consumption facilities? and 3) What community concerns are important when considering where to establish supervised consumption facilities?

Summary: As with supervised consumption facilities internationally, we found broad support for locating supervised consumption facilities close to where people use drugs, particularly where drug use is visible or where people who use drugs are homeless or unstably housed. Using health administrative data, we confirmed perceptions that drug use in Toronto is widely distributed throughout the city with a few foci but no single area of concentration. In Ottawa, drug use is concentrated in a few distinct neighbourhoods. The patterns of cocaine and opioid use also appear similar across neighbourhoods in both cities.

In Toronto survey, about half of all people who inject or smoke drugs said that they would travel 10 blocks or less to use a supervised injection facility and 28% of respondents said that they would travel more than a kilometre to a supervised injection facility. In Ottawa, about 40% of people who inject drugs said

that they would walk 10 minutes or less to use a supervised injection facility and 36% of respondents said that they would walk more 20 minutes to a supervised injection facility. People who use drugs and other stakeholders expressed preferences for implementing multiple smaller supervised consumption facilities over one large, centralized supervised consumption facility, since one supervised consumption facility, even if “centrally located”, would be inconvenient for people who use drugs in other areas. Multiple supervised consumption facilities, especially if integrated into existing programs for people who use drugs, may also reduce community opposition. In an analysis of possible facilities in Toronto based on the geographic dispersion of people who use drugs and their willingness to travel, we estimated the first facility would be used by about 11% of people who use drugs. Each additional facility would be used by 10%, 9%, 6%, and 4% of people who use drugs. In Ottawa, the first facility would be used by about 36% of people who use drugs. Each additional facility would be used by 22%, 10%, 1%, and 1% of people who use drugs.

Community opposition was a major theme in discussions about locating a supervised consumption facility. Even residents and business owners who were supportive of supervised consumption facility implementation did not necessarily want to see a supervised consumption facility



in their own residential neighbourhoods or near their businesses. Many residents and business owners supported locating a supervised consumption facility in a hospital or other places away from residential or business locations. While these locations may generate fewer community concerns they may be less desirable or accessible for people who use drugs. Community members, especially residents and business owners, would like to be consulted in advance and be given the opportunity to express their concerns regarding decisions about supervised consumption facility location. Community consultation needs to be extensive and part of the decision-making process but recommendations for how that consultation should proceed were often vague. Multiple, small community meetings across the cities may be preferable to large public forums to give community members ample opportunities to participate.

Section 6.1

Where does Drug Use Occur?

Background: To make decisions about supervised consumption facility design and location, understanding patterns of drug use is important. Internationally, supervised consumption facilities are typically located in neighbourhoods where many people who use drugs live and use drugs. In Toronto and Ottawa, there is no comparable single location. In this section, we first focus on stakeholder views about the importance of proximity to a drug zone as a decision criterion in locating a supervised consumption facility. Next, we use administrative health data to infer where drug use occurs in both cities. Because each type of data has its own set of limitations, it is important to examine this question from multiple perspectives.

Data: We used data from four sources: 1) Interviews and focus group discussions with 95 people who use drugs and 141 various stakeholders in Ottawa and

Toronto; 2) Overdose records from Toronto Emergency Medical Services; and 3) Administrative health data from the Institute for Clinical Evaluative Sciences; 4) A systematic review of the international literature about supervised consumption facilities, focusing on issues of design, services rules and referrals. Details of the review and references are available in the Appendix. We used physician billings where a code for “Drug Addiction or Dependence” was included; however, this code is not specific to cocaine or opioid addiction. The Discharge Abstract Database records discharge diagnoses for inpatient hospitalizations. We focused on discharges with a code for cocaine or opioid overdose. The National Ambulatory Care Reporting System contains information related to emergency department visits and outpatient visits. We focused on overdoses for cocaine, opioids, and

methadone. We also assessed which individuals received methadone through the Ontario Public Drug Benefits Program. We examined use by home address of individuals. As well, we examined use by methadone prescribing pharmacy. For sources 2 and 3, neighbourhood was defined by the forward sortation area (the first three digits of the postal code). Darker shading indicates a higher number of people who use drugs per square kilometre. Shading is by decile (10 equally sized groups) for each graph rather than by absolute number of people who use drugs.

Findings

Supervised consumption facilities are typically located in areas with high volume drug use. There is broad support for such an approach, particularly where drug use is visible or highly concentrated. There is particular support for locating a supervised consumption facility where people who use drugs are



homeless or unstably housed.

Objections from the surrounding community will likely still occur even if a supervised consumption facility is implemented in a location with a problematic drug scene.

High volume drug use occurs within Ottawa's major tourist area. Police and other stakeholders were concerned about potential negative impacts that a supervised consumption facility could have on the city's tourism industry.

Drug use is widely distributed throughout Toronto. Although there is a focus of drug use in some neighbourhoods, people who use drugs live in neighbourhoods found throughout the city. The patterns of cocaine and opioid use appear similar across neighbourhoods.

Drug use in Ottawa is focused in a few distinct neighbourhoods. The

patterns of cocaine and opioid use appear similar across neighbourhoods.

Table 6.1.1 Should a supervised consumption facility be Located Close to where Drug Use Occurs?

Quotations

I think you would put them [supervised consumption facilities] where the highest incidence of drug use is because that's where your target audience is. So I would say that where not to put them would be where there's little or no evidence that there's a lot of drug activity happening there, drug use. (Toronto EMS participant)

Why is that a good location? Because there's a lot of drug use in that location. In the jungle, there's like tons of drug use, and if you're up in that neighbourhood you're not going to come trek downtown to use a safe injection site. (Toronto person who uses drugs)

I think if you went too far away from where people are using – so if you look at far east and far west of the city, where people would have to take buses and major transportation to be able to use it – I don't think that would be a good idea. And generally, people who are using in those areas are not homeless. So they can use in their own homes. So I think you need to look at who needs this service the most – and I think it's the homeless or the marginally housed – and make it somewhere that's convenient to them. (Ottawa healthcare provider)

I think a natural fit would be in the market, where the rest of the social agencies are, where basically the drug-addicted population accesses other services that they would utilize. So it would make the most sense there. But, as I said, it would have a devastating impact on the area because it is also the primary tourist destination of Ottawa. (Ottawa police participant)

Participant: I think you should put them [supervised consumption facilities] in the high risk, high-use areas. That makes the most sense...


Participant: It makes sense.

Participant: It's their [people who use drugs] backyard...That's where they are. (Toronto fire service participants)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

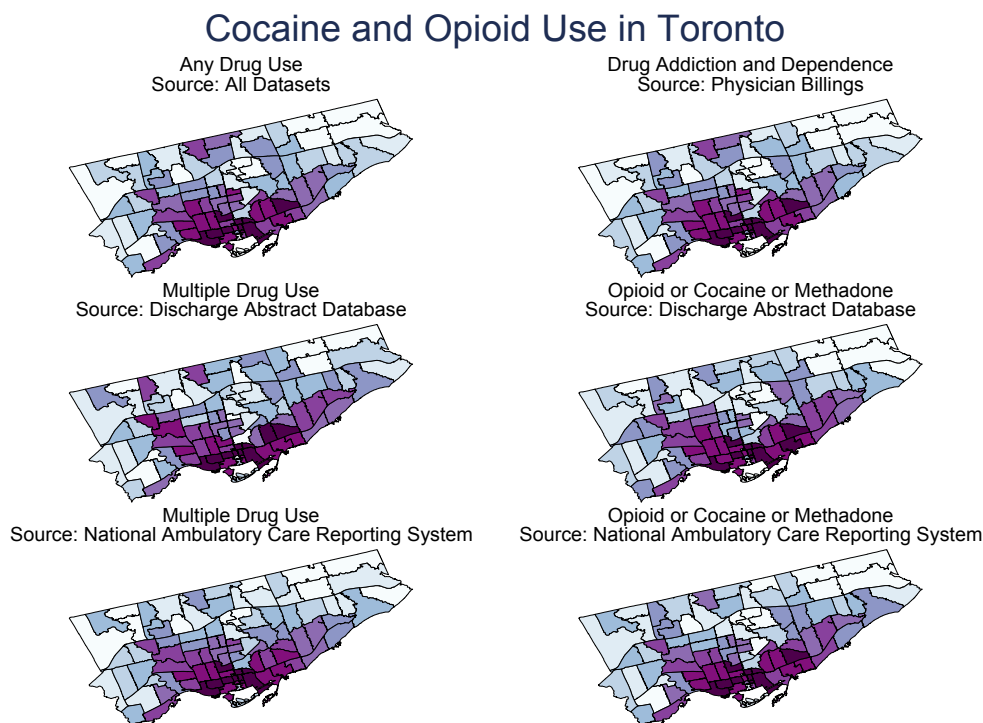
- In the systematic literature review, all 39 reports that reported the location of a supervised consumption facility indicated that they were close to a neighbourhood with a high volume of drug use.
- Most people who use drugs and many other stakeholders said that the most appropriate location for a supervised consumption facility is an area where drug use – especially visible



or public drug use – is highly concentrated.

- Supervised consumption facilities “make sense” in areas where people are buying and using drugs because facilities need to be accessible to the target population.
- Facilities should be located where people who use drugs and who are also homeless or unstably housed are concentrated, because they would especially benefit from a supervised consumption facility.
- The neighbourhoods and intersections identified by stakeholders were usually places that they perceived as known “hot spots” for drug use.
- Stakeholders cautioned that objections from the surrounding community will still occur even if a supervised consumption facility is implemented in a location with a problematic drug scene.
- In Ottawa, some police officers noted that the area of the city with the highest concentration of social services and where drug use is heavily concentrated is the city’s major tourist area. Police and other stakeholders were concerned about potential negative impacts that a supervised consumption facility could have on the city’s tourism industry.
- Healthcare providers, in particular, emphasized that decisions about supervised consumption facility location ought to be based on evidence.
- Data that shows the geographic dispersal of drug use is needed to show where actual “hot spots” of drug use are located.
- People who use drugs in both cities, but especially in Toronto, said that there are multiple areas where drug use is concentrated.

Figure 6.1.1 Where do People who use Drugs Live in Toronto?



Source: Institute for Clinical Evaluative Sciences 2004 to 2009

Findings

- We mapped combined cocaine and opioid data to neighbourhoods in Toronto using multiple sources. These graphs indicate where people who use drugs live in the city. Darker shading indicates a higher number of people per square kilometre.
- Overall, the graphs indicate that drug use is widely distributed throughout Toronto. Although there is a focus of drug use in some neighbourhoods, people who use drugs live in neighbourhoods throughout the city.
- Each graph has some limitations:
 - The graph based on physician billings is not specific to injection opioids or cocaine. Similarly, the graphs based on multiple drugs are based on a code for patients that have taken multiple drugs simultaneously and are not specific to injection opioids or cocaine.
 - No graph differentiates injection opioids from other methods to consume drugs (e.g., smoking or swallowing).


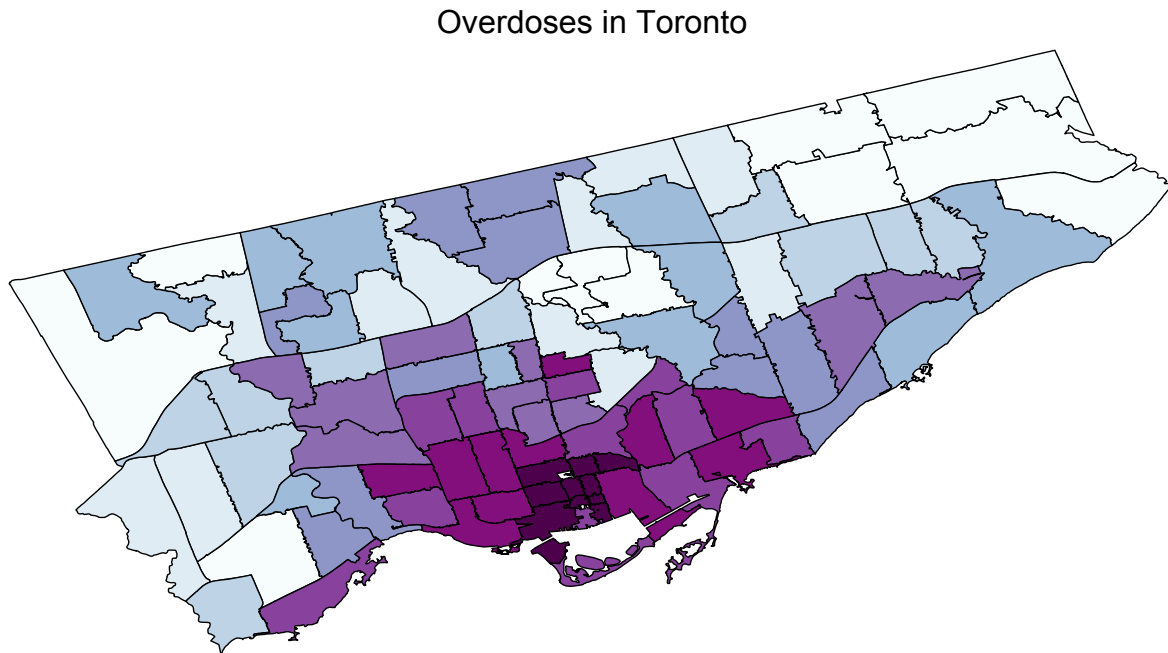
- 
- The graphs based on opioid or cocaine or methadone focuses on use of any of these drugs.
 - The summary graph (top left; Any Drug Use, Source: All Datasets) focuses on any diagnosis of drug use from any source. It is not specific for injection opioids and cocaine.
 - Location is based on individuals' addresses, but might not be accurate for individuals who have moved and not updated their health card information or for homeless individuals. We have not accounted for parks or other areas where people do not live in this analysis.

Figure 6.1.2 Where do People Overdose on Drugs in Toronto?



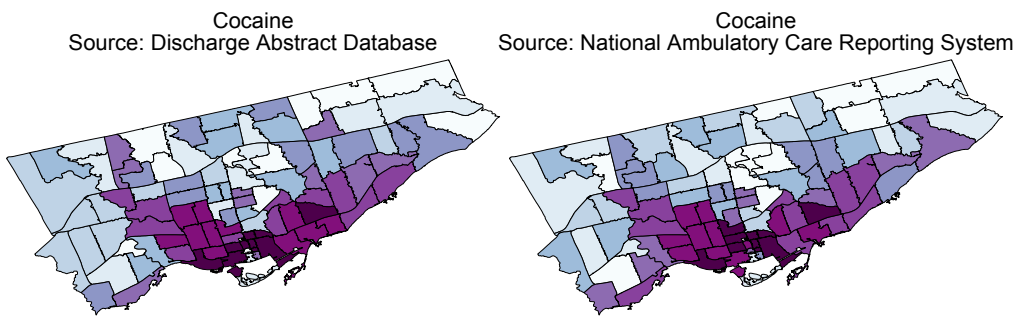
Source: Emergency Medical Services, 2002 to 2008

Findings

- We mapped overdose by neighbourhood in Toronto using calls to Emergency Medical Services (EMS). These graphs indicate where EMS staff picked up people who had overdosed on drugs. Darker shading indicates a higher number of people per square kilometre.
- This graph supports the finding that drug use is widely distributed throughout Toronto, with a concentration in some central neighbourhoods.
- Each graph has some limitations:
 - These graphs do not distinguish between
 - Overdose for prescription or illicit drugs
 - Intentional or unintentional overdose
 - Opioids, cocaine, or other drugs.
 - People who overdose might differ from people who do not overdose when using drugs, including where they use drugs.

Figure 6.1.3 Where do People who use Cocaine Live in Toronto?

Cocaine Use in Toronto

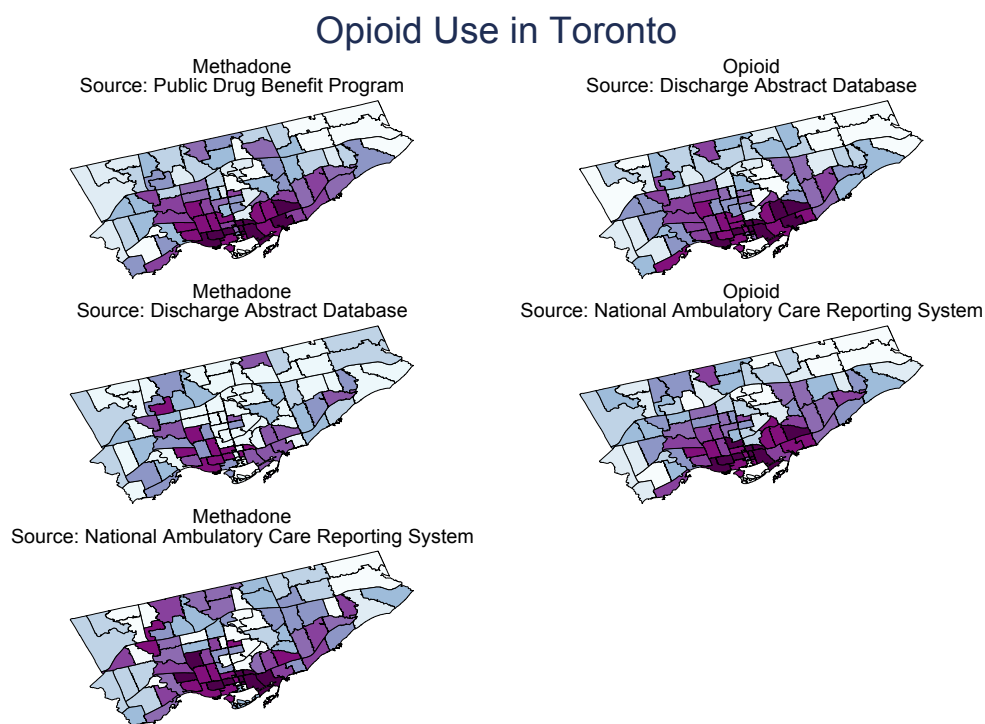


Source: Institute for Clinical Evaluative Sciences 2004 to 2009

Findings

- We mapped combined cocaine overdose by neighbourhood in Toronto using two data sources. These graphs indicate where people who use cocaine live in the city. Darker shading indicates a higher number of people per square kilometre.
- Each graph has some limitations:
 - The codes are only for cocaine-related hospital visits.
 - The administrative codes do not indicate if the patient injected cocaine or used by another method (e.g., smoked).
- These graphs support the finding that cocaine use is widely distributed throughout Toronto, with a concentration in some central neighbourhoods.

Figure 6.1.4 Where do People who use Opioids Live in Toronto?

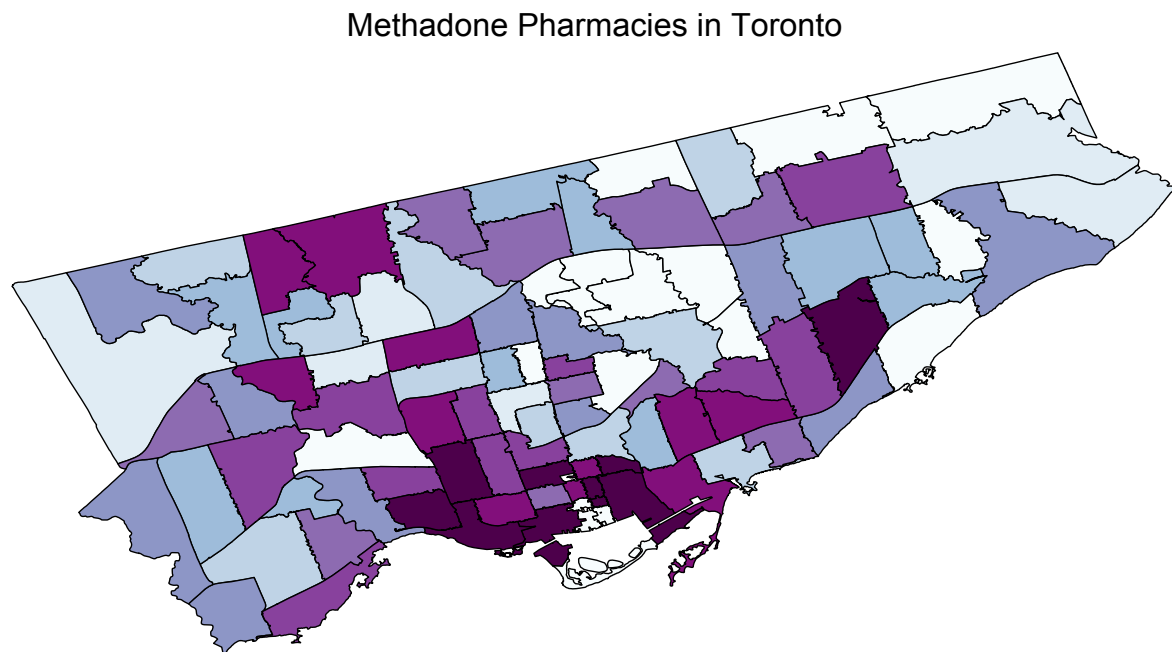


Source: Institute for Clinical Evaluative Sciences 2004 to 2009

Findings

- We mapped combined opioid and methadone overdose by neighbourhood in Toronto using multiple data sources. We also graphed home addresses of people who were prescribed methadone through the public drug program (top left). These graphs indicate where people who use opioids or methadone live in the city. Darker shading indicates a higher number of people per square kilometre.
- These graphs support the finding that opioid use is widely distributed throughout Toronto, with a concentration in some central neighbourhoods. Overall, the patterns of cocaine and opioid use appear similar across neighbourhoods.
- Each graph has some limitations:
 - The codes are only for opioid or methadone related hospital visits. There are relatively few methadone related visits.
- The administrative codes do not indicate the method of consuming opioids (for example, injection, smoking or swallowing). They also do not indicate whether methadone is being used for maintenance therapy for people who inject drugs, for maintenance therapy for people who use oral opioids, for chronic pain, or for illicit reasons.

Figure 6.1.5 Where do People who receive Methadone Maintenance Therapy Pick up their Prescriptions in Toronto?



Source: Institute for Clinical Evaluative Sciences 2004 to 2009

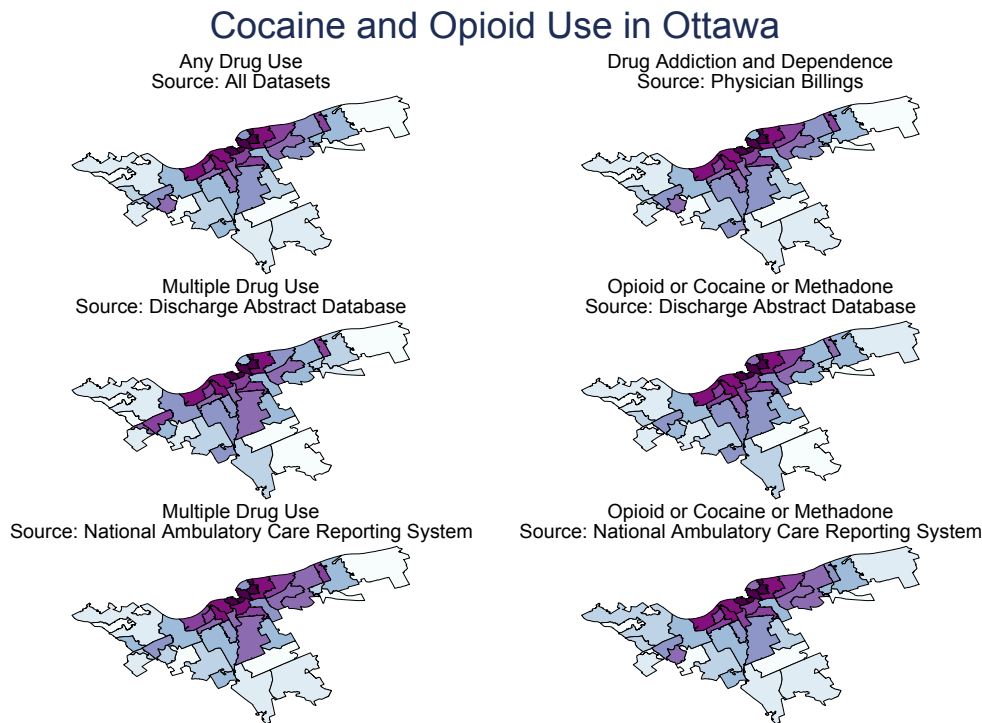
Findings

- We mapped where methadone is dispensed through pharmacies by neighbourhood in Toronto. These graphs indicate where people who are prescribed methadone pick up their prescriptions. Thus, these data will include people with invalid home addresses or people who have moved to Toronto but have outdated (out of Toronto) addresses on file. Darker shading indicates a higher number of people per square kilometre.
- These estimates yielded a considerably higher estimate of the number of people prescribed methadone in Toronto than by using home address data.
- These graphs support the finding that opioid use is widely distributed throughout Toronto. Overall, the patterns of cocaine and opioid use appear similar across neighbourhoods.
- This graph has some limitations:
 - The administrative codes do not indicate whether methadone is being used for maintenance therapy for people who inject drugs or for maintenance therapy for people who use oral opioids.
 - We have focused on the unique formulation used for methadone maintenance

therapy, but some individuals might be prescribed methadone tablets and will not be captured in this analysis.

- We have not captured individuals who received methadone through private insurance or out-of-pocket payments.

Figure 6.1.6 Where do People who use Drugs Live in Ottawa?



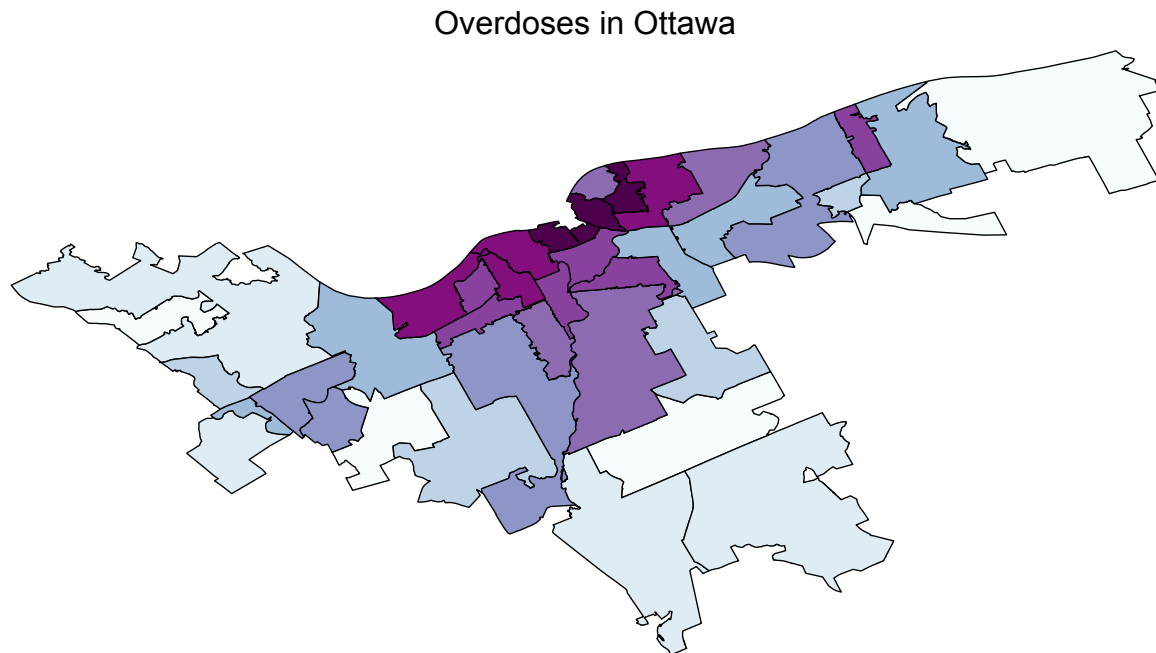
Source: Institute for Clinical Evaluative Sciences 2004 to 2009.

Findings

- We mapped combined cocaine and opioid use to neighbourhoods in Ottawa using multiple data sources. These graphs indicate where people who use drugs live in the city. Darker shading indicates a higher number of people per square kilometre.
- Overall, the graphs indicate that drug use is found in many areas of Ottawa but high concentrations are focused in a few neighbourhoods.
- Each graph has some limitations:
 - The graph based on physician billings is not specific to injection opioids or cocaine. Similarly, the graphs based on multiple drugs are based on a code for patients that have taken multiple drugs simultaneously and are not specific to injection opioids or cocaine.
 - No graph differentiates injection opioids from other routes of administration.

- The graphs based on opioid or cocaine or methadone focuses on use of any of these drugs.
- The summary graph (top left; Any Drug Use, Source: All Datasets) focuses on any diagnosis of drug use from any source. It is not specific for injection opioids and cocaine.
- Location is based on individuals' addresses, but might not be accurate for individuals who have moved and not updated their health card information or for homeless individuals. We have not accounted for parks or other non-residential areas in this analysis.

Figure 6.1.7 Where do People Overdose on Drugs in Ottawa?



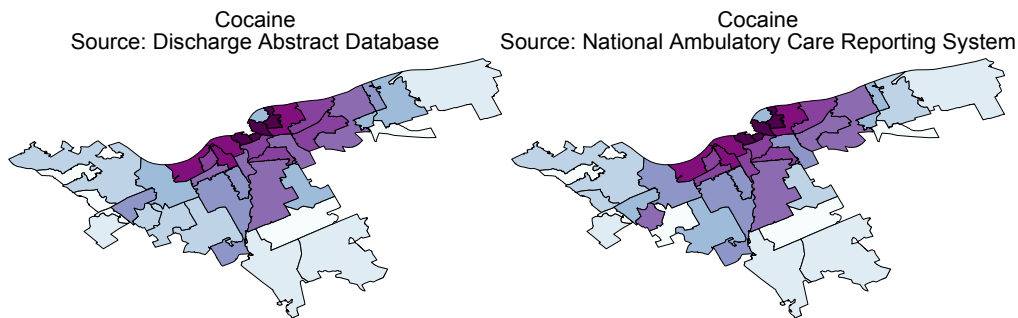
Source: Emergency Medical Services 2004 to 2009.

Findings

- We mapped overdose by neighbourhood in Ottawa using calls to Emergency Medical Services (EMS). These graphs indicate where EMS staff picked up people who had overdosed on drugs. Darker shading indicates a higher number of people per square kilometre.
- This graph supports the finding that drug use is found in many areas of Ottawa but high concentrations are focused in a few neighbourhoods.
- Each graph has some limitations:
 - These graphs do not distinguish between
 - Overdose for prescription or illicit drugs
 - Intentional or unintentional overdose
 - Opioids, cocaine, or other drugs.
 - People who overdose might differ from people who do not overdose when using drugs, including where they use drugs.

Figure 6.1.8 Where do People who use Cocaine Live in Ottawa?

Cocaine Use in Ottawa

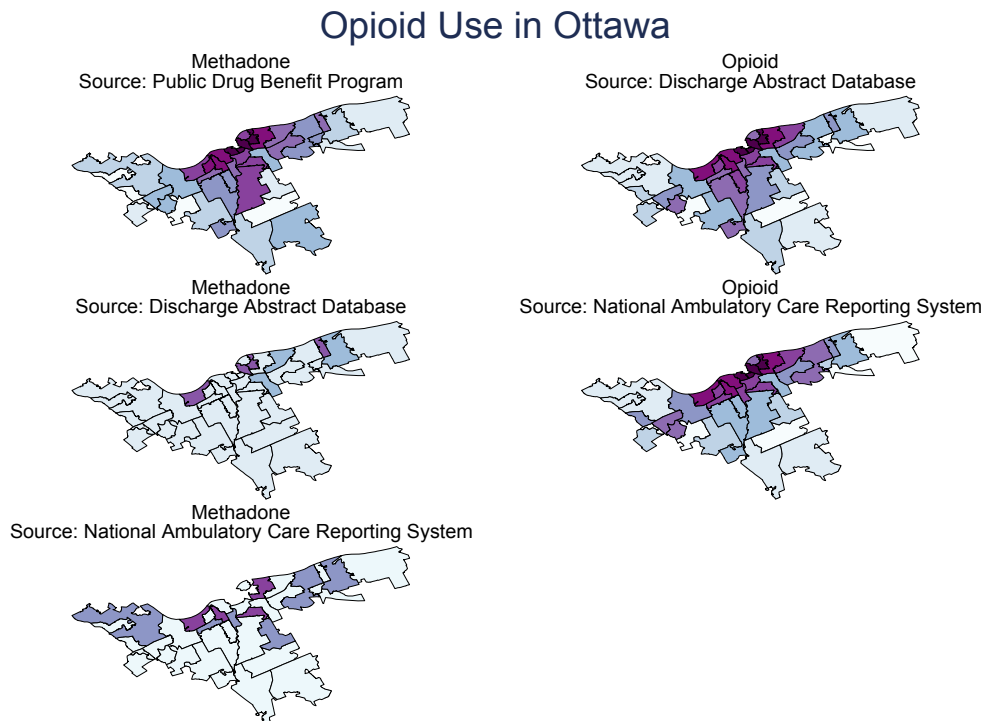


Source: Institute for Clinical Evaluative Sciences 2004 to 2009

Findings

- We mapped combined cocaine use by neighbourhood in Ottawa using two data sources. These graphs indicate where people who use cocaine live in the city. Darker shading indicates a higher number of people per square kilometre.
- This graph supports the finding that drug use is found in many areas of Ottawa but high concentrations are focused in a few neighbourhoods.
- Each graph has some limitations:
 - The codes are only for cocaine related hospital visits.
 - The administrative codes do not indicate the route of cocaine administration.
 - The summary graph (top left) focuses on any diagnosis of drug use from any source. It is not specific for injection opioids and cocaine.

Figure 6.1.9 Where do People who use Opioids Live in Ottawa?



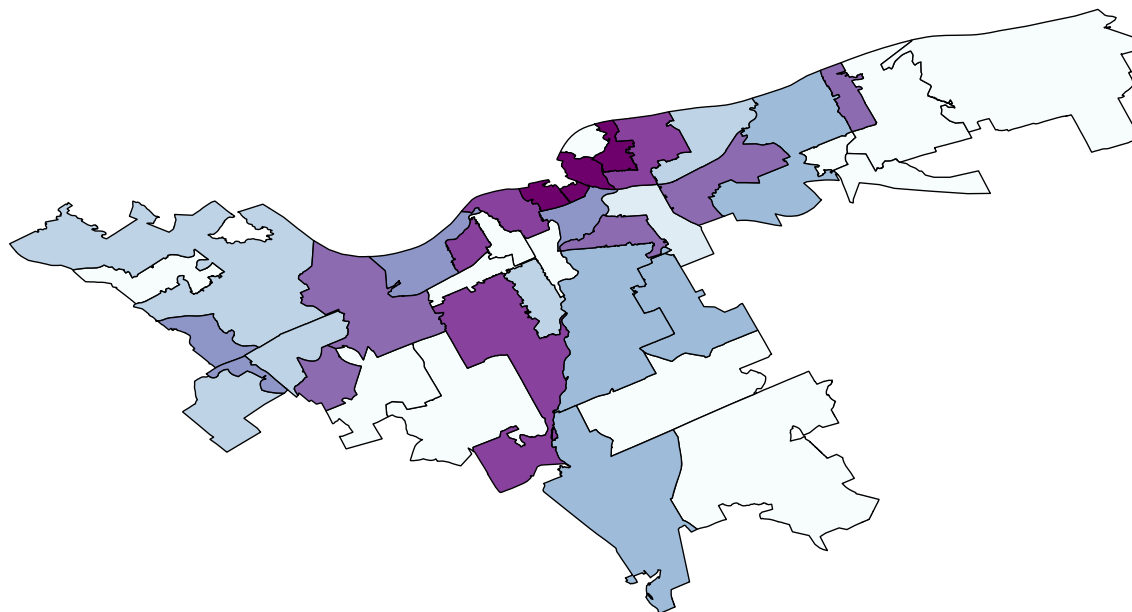
Source: Institute for Clinical Evaluative Sciences 2004 to 2009

Findings

- We mapped combined opioid and methadone overdose by neighbourhood in Ottawa using multiple data sources. These graphs indicate where people who use opioids or methadone live in the city. Darker shading indicates a higher number of people per square kilometre.
- These graphs support the finding that opioid use is found in neighbourhoods throughout Ottawa but high concentrations are focused in a few neighbourhoods. Overall, the patterns of cocaine and opioid use appear similar across neighbourhoods.
- Each graph has some limitations:
 - The codes are only for opioid- or methadone-related hospital visits. There are relatively few methadone related visits.
 - The administrative codes do not indicate the route of opioid administration. They also do not indicate whether methadone is being used for maintenance therapy for people who inject drugs, for maintenance therapy for people who use oral opioids, for chronic pain, or diverted methadone (taken illicitly).

Figure 6.1.10 Where do People who receive Methadone Maintenance Therapy Pick up their Prescriptions in Ottawa?

Methadone Pharmacies in Ottawa



Source: Institute for Clinical Evaluative Sciences 2004 to 2009

Findings

- We mapped where methadone is dispensed through pharmacies by neighbourhood in Ottawa. These graphs indicate where people who are prescribed methadone pick up their prescriptions. Thus, these data will include people with invalid home addresses or people who have moved to Ottawa but have outdated (out of Ottawa) addresses on file. Darker shading indicates a higher number of people per square kilometre.
- This graph supports the finding that drug use is found in many areas of Ottawa but high concentrations are focused in a few neighbourhoods.
- This graph has some limitations:
 - The administrative codes do not indicate whether methadone is being used for maintenance therapy for people who inject drugs or for maintenance therapy for people who use oral opioids.
 - We have focused on the unique formulation used for methadone maintenance therapy, but some individuals might be prescribed methadone tablets and will not be captured in this analysis.

- 
- We have not captured individuals who received methadone through private insurance or out-of-pocket payments.

Section 6.2

What are the Advantages of One or Multiple Supervised Consumption Facilities?

Background: The dispersed nature of drug use in Toronto and Ottawa raises the question of whether it is preferable to have a single facility or multiple facilities throughout the city. Cities in Europe have used both approaches. In Vancouver, Insite is a large central facility while the Dr. Peter Centre is a much smaller facility. We explored whether people would be willing to travel to a central facility in Toronto and Ottawa or whether they preferred multiple facilities and the relative advantages and drawbacks of each option

Data: We used data from four sources: 1) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users (I-Track), a survey of 477 people who use drugs; 2) Administrative health data from the Institute for Clinical Evaluative Sciences; 3) Interviews and focus group discussions with 95

people who use drugs and 141 various stakeholders in Ottawa and Toronto; and 4) Summary data from a previous needs assessment study for supervised consumption facilities in Ottawa published in 2008 by Leonard, DeRubeis, and Strike. The text in the table indicates the wording that was used for each question.

Findings

About half of all people who inject or smoke drugs in Toronto said that they would travel 10 blocks or less to use a supervised injection facility. About 40% of people who inject drugs in Ottawa said that they would walk 10 minutes or less to use a supervised injection facility.


In Toronto, 28% of respondents said that they would travel more than a kilometre to a supervised injection facility. In Ottawa, 36% of respondents said that they would walk more

20 minutes to a supervised injection facility.

A higher proportion of people who smoke drugs in Toronto (40%) said that they would travel more than a kilometre to a supervised smoking facility.

People who use drugs and other stakeholders expressed preferences for implementing multiple supervised consumption facilities over one large centralized facility.

Ottawa and Toronto have “pockets” of drug use in different areas. One supervised consumption facility, even if “centrally located”, would be inconvenient for people who use drugs in other areas. Multiple supervised consumption facilities, especially if integrated into existing health services for people who use drugs, may reduce “Not in My Backyard” concerns.



Some people who use drugs were concerned that a single supervised consumption facility may become overcrowded. Other stakeholders were concerned that one centralized supervised consumption facility would act as a “magnet” that would bring more people who use drugs to the area. One supervised consumption facility may be also a more visible target for opponents of supervised consumption sites than multiple supervised consumption facilities.

In an analysis of possible facilities in Toronto based on the geographic dispersion of people who use drugs and their willingness to travel, the first facility would be used by about 11% of people who use drugs. Each additional facility would be used by 10%, 9%, 6%, and 4% of people who use drugs.

In a similar analysis for Ottawa, the first facility

would be used by about 36% of people who use drugs. Each additional facility would be used by 22%, 10%, 1%, and 1% of people who use drugs.

These findings indicate that drug use in Ottawa is considerably more geographically concentrated than in Toronto.

Table 6.2.1 How Far Would People who use Drugs Travel to a Supervised Injection Facility in Toronto?

Distance	To an Injection Facility (n=202)	To a Smoking Facility (n=176)
	N (%)	N (%)
One block or less	7 (3)	6 (3)
2 to 5 blocks	59 (29)	57 (32)
6 to 10 blocks or less	39 (19)	23 (13)
A kilometre or less	41 (20)	19 (11)
More than a kilometre	56 (28)	71 (40)

Source: 2006 Toronto I-Track Survey

People who currently inject drugs were asked about travel to a supervised injection facility and people who currently smoke drugs were asked about travel to a supervised consumption (smoking) room.

Findings

- About half of all people who inject or drugs in Toronto said that they would travel 10 blocks or less to use a supervised injection facility.
- Only 28% of individuals said that they would travel more than a kilometre to a supervised injection facility.
- A higher proportion, 40%, said that they would travel more than a kilometre to a supervised smoking facility.

Table 6.2.2 How Far Would People who use Drugs Travel to a Supervised Injection Facility in Ottawa, by Gender?

Longest time willing to walk to a supervised injection facility	Total (n=249)	Men (n=179)	Women (n=70)
	N (%)	N (%)	N (%)
Not willing	30 (12)	24 (13)	6 (9)
10 minutes	74 (30)	42 (23)	32 (46)
20 minutes	54 (22)	40 (22)	14 (20)
30 minutes	36 (14)	28 (16)	8 (11)
40 minutes	55 (22)	45 (25)	10 (14)

Source: Leonard, DeRubeis and Strike, 2008

The analysis by gender excludes transgendered people due to small numbers.

Findings

- About 40% of all people who inject drugs in Ottawa said that they would walk 10 minutes or less to use a supervised injection facility.
- 36% of individuals said that they would walk 30 minutes or more to a supervised injection facility.
- More men than women were willing to walk more than 20 minutes.

Table 6.2.3 Would People who use Drugs take Public Transit to use a Supervised Consumption Facility?

Would you take the TTC to use a supervised injection site or supervised consumption room?	People who inject drugs (n=200)	People who smoke crack cocaine (n=174)
	N (%)	N (%)
Would be willing to take the TTC	93 (47)	77 (44)
Would be willing to take the TTC but cannot afford it	51 (26)	45 (26)
Would not be willing to take the TTC even if could afford to	56 (28)	52 (30)

Source: 2006 Toronto I-Track Survey

People who currently inject drugs were asked about travel to a supervised injection facility and people who currently smoke drugs were asked about travel to a supervised consumption (smoking) room

Findings

- Over half of all people who inject drugs (72%) and people who smoke crack cocaine (70%) reported they would be willing to take the TTC to use a supervised consumption facility.
- Approximately 35% of the people who inject drugs and 37% of people who smoke crack cocaine who are willing to take TTC cannot afford to do so.
- About 30% of people who use drugs were not willing to use the TTC to access a supervised injection facility.

Table 6.2.4 Should there be One or Multiple Supervised Consumption Facilities?

Quotations

That's a really good idea, have one central maybe midtown, downtown, and have branches in your surrounding neighbourhoods. (Toronto person who uses drugs)

Whereas here in Ottawa...you have separate areas that are still high drug-use areas, but they're spread out, right. So if you had one in sort of each area, it would really clean up the city more. (Ottawa person who uses drugs)

And also, this whole centralization idea scares people, I think. And this, what comes out first is "not in my back yard." So the centralization versus de-centralization has to be addressed. (Ottawa city employee)

So I would say, probably if you wanted to make it work, one site might serve one area well, but I don't think it would serve the entire city well. (Toronto EMS participant)

I think, unlike Insite in Vancouver, we wouldn't do well to have one big site...We don't have a big scene like they do. (Toronto advisory group participant)

I think the multiple site thing would probably go over more in Ottawa. Like, just with all the politics. And I think there's something about when something's really huge and concentrated, that I think it gets a lot more negative visibility, versus if it's spread out. (Ottawa advisory group participant)

I think multiple sites would be required, but obviously, clearly picking a pilot site would be important in terms of the right location. You'd probably want to start a project that is more of a pilot project, and easily accessible, but also well-controlled, as opposed to operating multiple sites right off the bat, I think that would be probably more challenging. (Toronto healthcare provider)

But I really don't like the large, one-stop dispensary approach because I think we'll end up with the same problem...It becomes a blight on the adjacent neighbourhood. (Ottawa resident)

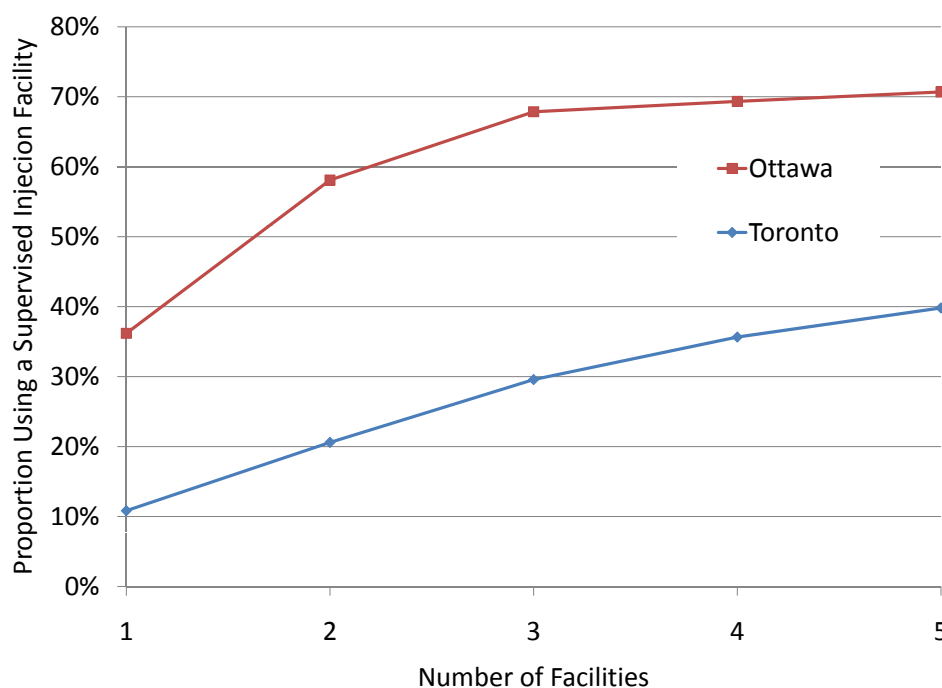
Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Overall, people who use drugs and other stakeholders expressed preferences for implementing multiple, smaller supervised consumption facilities over one large, centralized supervised consumption facility.
- Stakeholders indicated a need for enough supervised consumption facilities so that people who use drugs across the cities could access the facilities.

- Ottawa and Toronto have “pockets” of drug use in different areas.
- One supervised consumption facility, even if “centrally located”, might not be visited by people who use drugs in other areas.
- Many people who use drugs do not want, or cannot afford, to travel to a facility that is far away from where they typically use.
- Some people who use drugs were concerned that a single supervised consumption facility may become overcrowded.
- Other stakeholders were concerned that one centralized supervised consumption facility would lead to a concentration of people who use drugs around the facility and act as a “magnet” that would bring more people who use drugs to the area. One supervised consumption facility may also be more “visible” than multiple supervised consumption facilities.
- Multiple supervised consumption facilities, especially if integrated into existing programs for people who use drugs, may reduce “Not in My Backyard” concerns.
- Multiple supervised consumption facilities could also address concerns about potential congregation of people who use drugs and dealers around the facility.
- One large supervised consumption facility may be able to offer more services than smaller decentralized supervised consumption facilities.
- One large supervised consumption facility may be less costly to implement than multiple small supervised consumption facilities.
- Stakeholders said that implementation should start with one carefully located pilot facility. This view was expressed even by stakeholders who preferred multiple facilities.
- People who use drugs in Ottawa tended to recommend a smaller number of potential supervised consumption facilities (ranging from 2 to 5) than those in Toronto (ranging from 3 to 10 or more).
- Stakeholders in Ottawa and Toronto otherwise gave similar responses.

Figure 6.2.1 What Proportion of People would use a Supervised Injection Facility if there were One or Multiple Facilities?



Source: Institute for Clinical Evaluative Sciences 2004 to 2009

Findings

- We used data from our mapping analysis to estimate the proportion of people who use drugs who would use a supervised injection facility in Toronto and Ottawa, according to the number of available facilities.
- We made the following assumptions in our analysis:
 - We assumed that the facility would be located at the centre of the forward sortation area (FSA) (the first three digits of the postal code).
 - We calculated travel distance by calculating distances between centres.
 - We assumed maximal use (excluding the proportion of people who would never use a supervised injection facility) within 1 kilometre of the facility.
 - We assumed that a proportion of individuals would travel from 1 to 5 kilometres based on the proportion who would travel more than 1 kilometre in the Toronto survey or more than 20 minutes in the Ottawa survey.

- We assumed that individuals were equally distributed across the FSA.
- We used methadone prescribing data to determine locations of potential supervised injection facilities.
- Facilities were located first where the potential uptake was the highest.
- We found that in Toronto, the first facility would be used by about 11% of people who use drugs. Each additional facility would be used by 10%, 9%, 6%, and 4% of people who use drugs.
- In Ottawa, the first facility would be used by about 36% of people who use drugs. Each additional facility would be used by 22%, 10%, 1%, and 1% of people who use drugs.
- These findings indicate that drug use in Ottawa is considerably more geographically concentrated than it is in Toronto.

Section 6.3

What community issues should be considered when locating a supervised consumption site?

Background: An important consideration about where to locate a supervised consumption facility is whether a community would be supportive. Possible residents' and business owners' concerns include whether a facility would make drug use more or less visible in a community, whether a supervised consumption facility would stigmatize the community where it was located, and whether a supervised consumption facility would draw more people who use drugs to a community, thus contributing to public nuisance and disorder.

Data: We used data from interviews and focus group discussions with 95 people who use drugs and 141 various stakeholders in Toronto and Ottawa.

Findings

"Not in my backyard" (NIMBY) opposition from

community members was a major theme in discussions about locating a supervised consumption facility. NIMBYism stems from concerns about the negative consequences that a supervised consumption facility could bring to a neighbourhood.

Even residents and business owners who were supportive of supervised consumption facility implementation in their city generally did not necessarily want to see a supervised consumption facility in their own residential neighbourhoods or near their businesses.

Locating a supervised consumption facility in a hospital or in areas far removed from where many people live and work may generate less community concerns about location, but may be less desirable or accessible for people who use drugs.

Community members, especially residents and business owners, would like to be consulted in advance and be given the opportunity to express their input and concerns regarding decisions about supervised consumption facility location. Community consultation needs to be extensive and part of the decision-making process.

Recommendations for how consultation should proceed were often vague. Holding multiple, small community meetings across the city may be preferable to large public forums to give community members ample opportunities to participate.

Table 6.3.1 What are the community's concerns about implementation of supervised consumption sites?

Quotations

Now wherever you're going to want to put it, it's going to be 'not in my backyard' type of idea, right. So the most ideal place to put it people aren't going to want it... (Toronto person who uses drugs)

Then you ask where to put them [supervised consumption facilities], but the question may be where not to put it. Like if you're asking me personally do I want one, well in principal yes, but not anywhere near my house! (Toronto resident)

It [a supervised consumption site] would not be tolerated, is a better way to say it. In suburbs... people there wouldn't, it wouldn't be tolerated. (Ottawa EMS participant)

[W]herever they [supervised consumption facilities] go, there are going to be people who are going to be upset...So it's not going to be popular in any place...I think that whole community development, engaging with the community would be really fundamental to making sure that it's a smoother opening than if it just sort of appeared. (Provincial government official)

Not in my back yard. We don't want a safe injection site. I don't care what the rules are. We can't afford any more social benefits in our area... and basically, safe injection sites do not belong in a business community. Again, this is my personal view, if they belong anywhere they belong in a hospital environment. (Toronto business owner)

The other places I think might be challenging to put them is an affluent neighbourhood. You would probably have a bigger backlash. (Toronto EMS participant)

Because there's not one community in this city that wants a supervised injection site in their city. And I don't blame them, I wouldn't either. So from a community perspective, absolutely not. (Ottawa police participant)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- 'Not in my backyard' (NIMBY) opposition from community members emerged as a major theme from our qualitative data on decisions about location.
- NIMBYism stems from concerns about the perceived negative consequences that a supervised consumption facility might bring to a neighbourhood, such as increased crime.


- 
- Many stakeholders said that NIMBYism would pose the greatest challenge when it comes to deciding where to locate supervised consumption facilities.
 - Stakeholders expressed their own NIMBY sentiments (for example, not wanting a supervised consumption facility near their home) or believed that others would have NIMBY sentiments (for example, the belief that business owners will resist a supervised consumption facility in their business neighbourhood).
 - Even residents and business owners who were supportive of supervised consumption facility implementation in their city generally did not want to see a supervised consumption facility in their own residential neighbourhoods or near their businesses.
 - Locating a supervised consumption facility in a hospital or in areas far removed from where many people live and work may generate less community concerns about location. However, these locations may not be as desirable or accessible for people who use drugs.
 - Various stakeholders perceived that affluent neighbourhoods will not be chosen as potential supervised consumption facility locations because such neighbourhoods would be better equipped politically to resist implementation.
 - Some stakeholders worried that supervised consumption facilities would ‘overburden’ neighbourhoods where drug-related and other social services are already located.
 - People who use drugs were aware that many other community members do not want supervised consumption facilities or other harm reduction services in their neighbourhoods.
 - Police often stated that there would be no appropriate location for a supervised consumption facility.

Table 6.3.2 What is the Role of Community Consultation in Locating a Supervised Consumption Site?

Quotations

I think community input's important. I think it would get rid of a lot of the fear and anger. And that's one thing our community lacks, is consultation. And I think we said we see change in our community. I think if something down the road is decided, then I think community consultation and input is very important for the process. (Toronto resident)

[A]supervised consumption site next to a day nursery is probably inviting more difficulty than you need and so there are other kinds of community uses that the public and decision-makers would see as being incompatible. And, you know, I think that has to be part of the decision-making in siting because this is going to have to be, if we were to introduce supervised consumption sites in Toronto, we're going to have to get agreement to it, through a number of different decision-makers and, wherever possible, a degree of public acceptance of the program would be desirable. So siting decisions can either make that easier or more difficult... (Toronto city official)

Interviewer: So let's imagine a supervised consumption site were to be opened in Ottawa, what would be the best location?


Participant: I think it's really premature for me to answer that. I mean it's, that's part of what the evidence-based approach and the community collaboration and consultation needs to be about, deciding where that should be. So I feel funny giving an answer without having gone through that process that would be supported by all the stakeholders. (Ottawa city official)

[T]he people that live around the safe injection site should be able to have a say. Businesses should be able to have a say. You know, the parents should be able to have a say. The working poor should be able to have a say. (Ottawa police participant)

My neighbourhood is very, very strong. What about that neighbourhood that doesn't speak up for itself? And guess where it goes, it goes there. (Ottawa business owner)

I've been to many of these meetings with councillors, have called meetings saying, 'Let's meet, let's chat, let's talk,' and before you know it, it's shoved down our throat, in saying, 'Well, we met, we chat, we pacified you, thank you very much. And this is what's happening.' ... it gets people's backs up right away, because they weren't given the choice. (Toronto business owner)

But I'd like to have more town halls, and smaller ones... I've gone to some other town halls, where ... they've only had two or three for the entire city and you get multiple neighbourhoods there with competing interests. And people are just shouting over top of each other and sometimes the smaller neighbourhoods' interests don't get heard the same way that others do. So I think that they would have to...meet with a lot of groups, on a small basis. (Ottawa resident)



You've got good expertise at Toronto Public Health...and there's just so many organizations that partner with Toronto Public Health... And, you know, utilize that expertise that you have already available to you to make some judgements around where you think it should be piloted. (Toronto healthcare provider)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Toronto and Ottawa

Findings

- Community members, especially residents and business owners, would like to be consulted in advance and be given the opportunity to express their input and concerns regarding decisions about supervised consumption facility location.
- Community consultation is vital to help identify ways to mitigate potential NIMBY opposition and concerns about supervised consumption facility location. The consultation process is also helpful in educating people about the evidence of the benefits of supervised consumption facilities.
- Some residents and business owners expressed frustration that in the past they were not consulted about implementation of services (e.g., methadone maintenance programs) for drug users in their communities..
- Some stakeholders believed that certain communities (for example, affluent communities) are more likely than others to be consulted and to be heard when they raise concerns.
- Recommendations for how community consultation should proceed were often vague.
- Some stakeholders said that consultation could take the form of town hall meetings and public forums.
- A few stakeholders suggested that community meetings should be more than “one-off” information sessions; they should be ongoing discussions that result in some accommodations based on community concerns.
- Holding multiple, small community meetings across the city may be preferable to large public forums which sometimes dissolve into heated arguments and make it harder for some community members to get a chance to speak.
- Some stakeholders said that they or others should be consulted because they could potentially help determine an appropriate location for a supervised consumption facility (for example, public health departments already have a lot of knowledge about where people are using drugs).
- EMS workers and firefighters did not voice strong interest in being consulted about supervised consumption facility location because, in part, their occupational duties would

stay the same regardless of where a supervised consumption facility is located. However, several EMS workers said that their organization could provide drug-related call data that may help determine which areas of the city experience the most drug use.

- A healthcare provider suggested that if a supervised consumption facility was planned to be located near a hospital discussions should take place in advance with hospital staff because they may see increased volume in their emergency department once the supervised consumption facility is operational.

Chapter 7

Potential Health Benefits and Costs of Supervised Consumption Facilities in Toronto and Ottawa

Background: In this chapter, we explore the potential health benefits and costs associated with establishing supervised consumption facilities in Toronto and Ottawa. We first review the sexual risk behaviours associated with drug use, since sexual transmission of HIV might be important among people who use drugs if they are particularly likely to engage in risky sexual behaviours (such as anal sex), have low rates of condom use, or have multiple sexual partners. Next, we characterized the number of people who use drugs who are living with HIV and hepatitis C virus infection in Toronto and Ottawa by both self-reported status as well as by laboratory testing. We also describe other health harms related to drug use which might be minimized if a supervised injection facility or supervised consumption facility were established: overdose rates and harms related to smoking crack cocaine. We used these data, as well as inputs from the scientific literature, to construct mathematical models of the populations of Toronto and Ottawa, focusing on drug use HIV infection, hepatitis C infection, and HIV-hepatitis C virus co-infection. We estimated the potential benefits and cost-effectiveness of one to five supervised injection facilities in each city.

Summary: A majority of people who use drugs were sexually active in the month prior to being interviewed. More women were sexually active than men. About 40 to 50% of people who reported being sexually

active reported that their last sexual activity included using a condom. About 30 to 40% of men and 30 to 50% of women reported having multiple sex partners in the 6 months prior to being interviewed. About 20% of women in Toronto reported having more than 20 male sex partners in the 6 months prior to being interviewed, perhaps reflecting sex work.

HIV prevalence was 4% among people who use drugs in Toronto and 11% in Ottawa. In Toronto, HIV prevalence was higher among people who smoke drugs (6%) than among people who inject drugs (3%) when measured by laboratory testing. Hepatitis C prevalence was 52% among people who use drugs in Toronto and 60% in Ottawa. In Toronto, hepatitis C virus prevalence was considerably higher among people who inject drugs (70%) than among people who smoke drugs (29%) when measured by laboratory testing. About 1 in 5 people who use drugs in Toronto and in Ottawa reported that they had overdosed in the last 6 months. The percentage overdosing was higher among people who inject drugs (29%) than among people who smoke drugs (12%). Almost half the people who reported smoking crack cocaine in Ottawa reported symptoms related to tooth and gum sores and about 1 in 4 reported skin problems.

We used mathematical modeling to project potential health benefits related to establishment of supervised injection facilities in Toronto and Ottawa. We modeled only

the effects of supervised injection facilities since the effectiveness of supervised smoking facilities are unknown. We projected that the number of HIV infections averted by the first three facilities in Toronto was about 2 to 3 per facility per year and that the number of hepatitis C virus infections averted was about 15 to 20 per facility over 20 years. The number of additional HIV and hepatitis C virus infections averted by the 4th and 5th facilities was considerably less. We projected that the number of HIV infections averted by the first two facilities in Ottawa was 6 to 10 per facility per year and the number of hepatitis C virus infections averted was 20 to 35 per facility per year. In Ottawa, the number of additional HIV and hepatitis C virus infections averted by the 3rd, 4th and 5th facilities was considerably less.

The cost per HIV infection averted with the first supervised injection facility in Toronto is \$323,496 and with the first supervised injection facility in Ottawa is \$66,358. The cost per hepatitis C infection averted with the first supervised injection facility in Toronto is \$47,489 and with the first supervised injection facility in Ottawa is \$18,591. The greatest cost savings in the Toronto and Ottawa models come from averting hepatitis C virus infections.

Economists often measure health outcomes in quality adjusted life years (QALYs), a measure that incorporates both quality of life and survival. A QALY is calculated by assuming that each year in full health is given a weight of 1 and each year in suboptimal health is given a weight less than 1, the specific weight depending on the quality of life of patients in that health state. The incremental cost-effectiveness of an intervention is expressed as the extra

cost of the intervention divided by the extra health gain, yielding a ratio expressed in dollars per QALY. An intervention with a low incremental cost effectiveness ratio represents good value for money while an intervention with a high incremental cost effectiveness ratio is economically unattractive. Although debate exists about the threshold at which an intervention stops being considered “good value for money”, commonly used thresholds include \$50,000 / QALY and \$100,000 / QALY.

At a cost-effectiveness threshold of \$50,000 / QALY, the optimal number of facilities in Toronto is three. At a cost-effectiveness threshold of \$100,000 / QALY, the optimal number of facilities is four. At a cost-effectiveness threshold of \$50,000 / QALY, the optimal number of facilities in Ottawa is two. At a cost-effectiveness threshold of \$100,000 / QALY, the optimal number of facilities is three. These estimates are sensitive to estimates of the number of people who use drugs in each city, the projected reduction in needle sharing among users of supervised injection facilities, and the fixed costs associated with running a supervised injection facility.

The differences between Ottawa and Toronto in potential infections averted and cost effectiveness estimates reflect the differences in HIV and hepatitis C prevalence rates as well as differences in the number and geographic distribution of people who use drugs in each city.

Section 7

Sexual Risk Behaviours among People who use Drugs in Toronto and Ottawa

Background: People who use drugs are at high risk of acquiring HIV infection. HIV can be acquired through blood-borne transmission, such as through sharing of needles or other injection equipment, or through sexual transmission. Sexual transmission might be important among people who use drugs if they are particularly likely to engage in risky sexual behaviours (such as anal sex), have low rates of condom use, or have multiple sexual partners. Possible interventions include distribution of condoms, sexual health education, treatment of concomitant sexually transmitted infections, and avoidance of sexual intercourse when intoxicated (when high risk behaviour might be particularly common). We characterized sexual risk behaviours among people who use drugs in Toronto and Ottawa.

Data: We used data from two sources: 1) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users (I-Track), a survey of 477 people who use drugs; and 2) the 2006 Ottawa I-Track study, a survey of 292 people who use drugs. The text in the table indicates that wording that was used for each question.

Findings:

A majority of people who use drugs were sexually active in the month prior to being interviewed. Women were more sexually active than men.

About 40 to 50% of people who reported being sexually active reported that their last sexual activity included using a condom.

In Toronto, condom use was about equally common among people who inject

drugs and people who smoke crack cocaine.

About 30 to 40% of men reported having multiple female sex partners in the 6 months prior to being interviewed.

About 30 to 50% of women reported having multiple male sex partners in the 6 months prior to being interviewed and about 20% of women in Toronto reported having more than 20 male sex partners, perhaps reflecting sex work.

Table 7.1.1 Sexual Activity among People who use Drugs in Toronto

Have you had sexual intercourse in the last month?	N (%)
All (n=474)	309 (65)
People who inject drugs (n=255)	169 (66)
People who smoke crack cocaine (n=219)	140 (64)
Men (n=336)	196 (58)
Women (n=135)	110 (81)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people.

Findings

- Almost two-thirds of people who use drugs in Toronto reported having had sexual intercourse in the month prior to being surveyed.
- People who inject drugs and people who smoke crack cocaine were equally likely to report being sexually active.
- Women who use drugs were considerably more sexually active (85%) than men (58%).

Table 7.1.2 Sexual Activity among People who use Drugs in Ottawa

Have you had sexual intercourse in the last month?	N (%)
All (n=292)	158 (54)
Men (n=220)	108 (49)
Women (n=71)	49 (69)

Source: 2006 Ottawa I-Track Survey

Findings

- About half the people who use drugs in Ottawa reported having had sexual intercourse in the month prior to being surveyed.
- Women who use drugs were considerably more sexually active (69%) than men (49%).

Table 7.1.3 Condom Use among Sexually Active People who use Drugs in Toronto

Did you (or your partner) use a condom when you last had sex?	N (%)
All (n=369)	198 (54)
People who inject drugs (n=168)	85 (51)
People who smoke crack cocaine (n=201)	113 (56)
Men (n=251)	134 (53)
Women (n=115)	62 (54)

Source: 2006 Toronto I-Track Survey. Missing responses are not shown.
The analysis by gender excludes transgendered people.

Findings

- Among people who use drugs in Toronto who reported being sexually active, about half reported that their last sexual activity included using a condom.
- Condom use was about equally common among people who inject drugs and people who smoke crack cocaine.
- Condom use was equally common among men and women.

Table 7.1.4 Condom Use among Sexually Active People who use Drugs in Ottawa

Did you (or your partner) use a condom when you last had sex?	N (%)
All (n=157)	65 (41)
Men (n=107)	47 (44)
Women (n=49)	17 (35)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people.

Findings

- Among people who use drugs in Ottawa who reported being sexually active, about 2 in 5 reported that their last sexual activity included using a condom.
- Condom use was somewhat more common among men than among women.

Table 7.1.5 Number of Female Sex Partners among People who use Drugs in Toronto, by Gender

In the past six months, how many women did you have sex with? (This includes getting and giving oral sex, vaginal and anal sex)	Men (n=337)		Women (n=128)	
	N	(%)	N	(%)
None	83	(25)	108	(84)
1	93	(28)	11	(9)
2 to 5	110	(33)		
6 to 20	33	(10)	9	(7)*
21 or more	18	(5)		

Source: 2006 Toronto I-Track Survey. Missing responses are not shown.

The analysis by sex excludes transgendered people.

*These categories are merged due to small numbers

Findings

About 1 in 4 men who use drugs in Toronto reported that they had not had any sexual activity with a female partner in the six months prior to being interviewed.

- About 1 in 4 men reported having one female sex partner and 1 in 2 reported multiple female sex partners in the six months prior to being interviewed.
- About 1 in 6 women reported having 1 or more female sex partners.
- The number of female sex partners was similar among people who inject drugs and people who smoke drugs (data not shown).

Table 7.1.6 Number of Female Sex Partners among People who use Drugs in Ottawa, by Gender

	Men (n=220)	Women (n=71)
In the past six months, how many women did you have sex with? (This means oral, vaginal and anal sexual contact)	N (%)	N (%)
None	68 (31)	59 (83)
1	72 (33)	
2 to 5	64 (29)	12 (17)*
6 or more	16 (7)	

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people.

*These categories are merged due to small numbers

Findings

- About 1 in 3 men who use drugs in Ottawa reported that they had not had any sexual activity with a female partner in the six months prior to being interviewed.
- About 1 in 3 reported having one female sex partner and 1 in 3 reported multiple female sex partners in the six months prior to being interviewed.
- About 7% of men who use drugs reported having more than 6 female sex partners in the six months prior to being interviewed.
- About 1 in 6 women reported having 1 or more female sex partners in the six months prior to being interviewed.

Table 7.1.7 Number of Male Sex Partners among People who use Drugs in Toronto, by Gender

In the past six months, how many men have you had sex with? (This includes getting and giving oral sex, vaginal and anal sex)	Men (n=335)	Women (n=130)
	N (%)	N (%)
None	308 (92)	17 (13)
1		41 (32)
2 to 5	27 (8)*	25 (19)
6 to 20		19 (15)
21 or more		28 (22)

Source: 2006 Toronto I-Track Survey

The analysis by gender excludes transgendered people due to small numbers.

*These categories are merged due to small numbers

Findings

- About 1 in 7 women who use drugs in Toronto reported that they had not had any sexual activity with a male partner in the six months prior to being interviewed.
- About 1 in 3 women reported having one male sex partner and 1 in 2 reported multiple male sex partners.
- About 1 in 5 women who use drugs reported having more than 20 male sex partners.
- About 9 in 10 men who use drugs in Toronto reported that they had not had any sexual activity with a male partner in the six months prior to being interviewed.
- The number of male sex partners was similar among people who inject drugs and people who smoke drugs (data not shown).

Table 7.1.8 Number of Male Sex Partners among Women who use Drugs in Ottawa

In the past six months, how many men did you have sex with? (This includes oral, vaginal and anal sexual contact)	Women (n=71)	
	N	(%)
None	13	(18)
1	33	(46)
2 to 5	16	(23)
6 or more	9	(13)

Source: 2006 Ottawa I-Track Survey

The analysis by gender excludes transgendered people.

Findings

- About 1 in 6 women who use drugs in Ottawa reported that they had not had any sexual activity with a male partner in the six months prior to being interviewed.
- Fewer than 5% of men in Ottawa reported having sex with a man in the six months prior to being interviewed. Accordingly, data for men are not shown.
- About 1 in 2 women reported having one male sex partner and 1 in 3 reported multiple male sex partners.
- About 1 in 7 women who use drugs reported having more than 6 male sex partners.

Section 7.2

HIV, hepatitis C, and Health Problems Related to Smoking Drugs

Background: Baseline prevalence of HIV, hepatitis C virus and other blood-borne infections is an important consideration when establishing a supervised consumption facility. If prevalence rates are low, the number of cases prevented by reductions in injection-related risk behaviours will be relatively small. We characterized the number of people who use drugs who are living with HIV and hepatitis C virus infection in Toronto and Ottawa by both self-reported status as well as by data from laboratory tests. We also describe other health harms related to drug use which might be minimized if a supervised injection facility or supervised consumption facility were established: overdose rates and harms related to crack cocaine smoking.

Data: We used data from two sources: 1) The Toronto 2006 Enhanced Surveillance of Risk Behaviours among

Injecting Drug Users (I-Track), a survey of 477 people who use drugs; and 2) the 2006 Ottawa I-Track study, a survey of 292 people who use drugs. The text in the table indicates that wording that was used for each question.

Findings:

HIV prevalence was 4% among people who use drugs in Toronto and was 11% in Ottawa.

HIV prevalence was higher among people in Toronto who smoke drugs (6%) than among people who inject drugs (3%) when measured by laboratory testing.

HIV prevalence rates were similar for men and women.

Hepatitis C prevalence was 52% among people who use drugs in Toronto and 60% in Ottawa.

Hepatitis C virus prevalence was considerably higher among people who inject

drugs in Toronto (70%) than among people who smoke drugs in Toronto (29%) when measured by laboratory testing.

Hepatitis C prevalence was slightly higher by laboratory test than by self-report in both Toronto and Ottawa, indicating that a few people who were hepatitis C-positive were unaware of their status.

About 1 in 5 people who use drugs in Toronto and in Ottawa reported that they had overdosed in the last 6 months. Self-reported overdose was similar among men and women.

The percentage overdosing was higher among people who inject drugs (29%) than among people who smoke drugs (12%).

Almost half the people who reported smoking crack cocaine in Ottawa reported symptoms related to tooth and gum sores and about 1 in 4 reported skin problems.

Table 7.2.1 HIV Prevalence among People who use Drugs in Toronto

Proportion HIV-Positive	All	People who Inject Drugs (n=254 [Lab] / 232 [Self])	People who Smoke Drugs (n=205 [Lab] / 169 [Self])
	N (%)	N (%)	N (%)
By Laboratory Test (n=459)	20 (4)	8 (3)	12 (6)
By Self-Report (n=401)	15 (4)	8 (3)	7 (4)

Source: 2006 Toronto I-Track Survey

Finger prick blood samples were collected from participants and tested at a laboratory for HIV

Missing responses are not shown

Findings

- HIV prevalence was 5% by both laboratory test and self-report among people who inject or smoke drugs in Toronto.
- Prevalence was similar by both laboratory test and self-report, indicating that few people who were HIV-positive were unaware of their status.
- HIV prevalence was higher among people who smoke drugs (6%) than among people who inject drugs (3%) when measured by laboratory testing.
- HIV prevalence rates were similar for men and women:
 - By laboratory test, the prevalence among men was 4% and among women was 5%.
 - By self-report, the prevalence among men was 4% and among women was 3%.

Table 7.2.2 Hepatitis C Virus Prevalence among People who use Drugs in Toronto

Proportion HCV-Positive	All	People who Inject Drugs (n=253 [Lab] / 226 [Self])	People who Smoke Drugs (n=202 [Lab] / 167 [Self])
	N (%)	N (%)	N (%)
By Laboratory Test (n=455)	235 (52)	176 (70)	59 (29)
By Self-Report (n=393)	189 (48)	139 (62)	50 (30)

Source: Source: 2006 Toronto I-Track Survey

Finger prick blood samples were collected from participants and tested at a laboratory for hepatitis C

Missing responses are not shown

Findings

- Hepatitis C virus prevalence was about 50% by both laboratory test and self-report among people who inject or smoke drugs in Toronto.
- Prevalence was higher by laboratory test than by self-report, indicating that some people who inject drugs were unaware of their hepatitis C-positive status.
- Among people who smoke drugs, the prevalence was slightly higher by laboratory test than by self-report, indicating that a few people were unaware of their hepatitis C-positive status
- Prevalence was considerably higher among people who inject drugs (70%) than among people who smoke drugs (29%) when measured by laboratory testing.
- hepatitis C virus prevalence was similar for men and women:
 - By laboratory test, the prevalence among men and women was both 52%.
 - By self-report, the prevalence among men was 48% and among women was 49%.

Table 7.2.3 HIV Prevalence among People who Inject Drugs in Ottawa

Proportion HIV-Positive	All	Men	Women
	(n=217 [Lab] / 193 [Self])	(n=69 [Lab] / 57 [Self])	
	N (%)	N (%)	N (%)
By Laboratory Test (n=287)	32 (11)	26 (12)	6 (9)
By Self-Report (n=241)	30 (12)	23 (13)	6 (11)

Source: 2006 Ottawa I-Track Survey

Saliva samples were collected from participants and tested at a laboratory for HIV

Missing responses are not shown

Findings

- HIV prevalence was about 11% by both laboratory test and self-report among people who inject drugs in Ottawa.
- Prevalence was similar by both laboratory test and self-report, indicating that few people who were HIV-positive were unaware of their status.
- This prevalence is about 2.5-fold higher than observed in Toronto
- HIV prevalence was similar among men and women who inject drugs in Ottawa.
- Prevalence among people who smoke drugs in Ottawa was not available.

Table 7.2.4 Hepatitis C Prevalence among People who Inject Drugs in Ottawa

Proportion hepatitis C Virus-Positive	All (n=217 [Lab] / 180 [Self])	Men (n=69 [Lab] / 61 [Self])	Women (n=69 [Lab] / 61 [Self])
	N (%)	N (%)	N (%)
By Laboratory Test (n=286)	172 (60)	131 (60)	40 (58)
By Self-Report (n=242)	133 (55)	99 (55)	33 (54)

Source: 2006 Ottawa I-Track Survey

Saliva samples were collected from participants and tested at a laboratory for hepatitis C

Missing responses are not shown

Findings

- Hepatitis C virus prevalence was 55 to 60% by laboratory test and self-report among people who inject drugs in Ottawa.
- Prevalence was slightly higher by laboratory test than by self-report, indicating that a few people who were hepatitis C-positive were unaware of their status.
- This prevalence is slightly higher than observed in Toronto
- Hepatitis C prevalence was similar among men and women who inject drugs in Ottawa.
- Prevalence among people who smoke drugs in Ottawa was not available.

Table 7.2.5 Self-Reported Overdoses among People who Use Drugs in Toronto

Overdose	All (n=452)	People who Inject Drugs (n=244)	People who Smoke Drugs (n=208)
	N (%)	N (%)	N (%)
Have you ever overdosed in the past 6 months?	95 (21)	70 (29)	25 (12)
Have you been to an emergency department or been admitted to hospital in the last 6 months because of a drug overdose?	73 (16)	51 (20)	22 (10)

Source: 2006 Toronto I-Track Survey
Missing responses are not shown

Findings

- About 1 in 5 people who use drugs in Toronto reported that they had overdosed in the last 6 months.
- The percentage overdosing was higher among people who inject drugs (29%) than among people who smoke drugs (12%).
- About 1 in 6 people had been to an emergency room or admitted to a hospital because of an overdose.
- The percentage overdosing and visiting an emergency room or hospital was higher among people who inject drugs (20%) than among people who smoke drugs (10%).

Table 7.2.6 Self-Reported Overdoses among People who Use Drugs in Toronto, by Gender

Overdose	Men (n=323) N (%)	Women (n=126) N (%)
Have you ever overdosed in the past 6 months?	64 (20)	30 (24)
Have you been to an emergency department or been admitted to hospital in the last 6 months because of a drug overdose?	48 (15)	25 (19)

Source: 2006 Toronto I-Track Survey
Missing responses are not shown

Findings

- Self-reported overdose was similar among men and women.
- The percentage overdosing and visiting an emergency room or hospital was also similar among men and women.

Table 7.2.7 Self-Reported Overdoses among People who Use Drugs in Ottawa

Overdose	All (n=250)	Men (n=180)	Women (n=70)
	N (%)	N (%)	N (%)
Have you ever overdosed?	108 (43)	76 (42)	32 (46)
Have you overdosed in the past six months?	25 (23)	17 (22)	8 (25)

Source: Leonard, DeRubeis, and Strike,

2008

Findings

- About 1 in 5 people who use drugs in Ottawa reported that they had overdosed in the last 6 months.
- About 2 in 5 people reported that they had ever overdosed.
- Similar proportions of men and women in Ottawa reported having overdosed.
- The proportion reporting having overdosed was similar in Toronto and Ottawa.

Table 7.2.8 Self-Reported Symptoms Related to Crack Cocaine Smoking among People who Smoke Drugs in Ottawa

Symptoms	All (n=95)		Men (n=71)		Women (n=24)	
	N	(%)	N	(%)	N	(%)
Noticed any teeth and/or gum decay	44	(46)	30	(42)	14	(58)
Have you had itchy bumps anywhere on your body which have turned into open sores due to excessive scratching	23	(24)	15	(21)	8	(33)

Source: 2006 Ottawa I-Track Survey.

These questions ask about symptoms in the past 6 months.

The analysis by gender excludes transgendered people.

Findings

- Almost half the people who reported smoking crack cocaine in Ottawa reported symptoms related to tooth and gum sores.
- About 1 in 4 reported skin problems.
- Women reported both type of symptoms more frequently than men.
- These questions were asked of a subsample of survey participants who smoked crack cocaine.
- When a larger sample (275 people) were asked if they “have any sores, cuts, cracks, burns or other injuries on your lips or inside your mouth as a result of using pipes to smoke crack or crystal meth”, 38% answered yes. The percentage was similar among men and women.
- Similar data were not available for Toronto.

Section 7.3

Projected Health Benefits with Supervised Injection Facilities in Toronto and Ottawa

Background: We used mathematical modeling to project potential health benefits related to establishment of supervised injection facilities in Toronto and Ottawa. We focused only on HIV and hepatitis C infection rates and did not include health benefits related to averted overdoses, other blood-borne infections such as hepatitis B virus or infectious endocarditis, and other injection and smoking-related harms such as skin and oral injuries. We did not model overdose rates for three reasons. First, we could not calculate baseline overdose fatality rates because we were not able to distinguish how many people who died of drug-related overdoses were people who use drugs. Second, we similarly do not have reliable data on the rate of non-fatal overdoses. Third, the limited data that exists suggests that the overdose fatality rates in Toronto and Ottawa are

relatively low, suggesting that the major economic and health effects will be from preventing blood-borne infections.

Data: We developed a mathematical model of the populations of Toronto and Ottawa, focusing on drug use (including the proportion moving in and out of injecting and smoking related drug use and the proportion receiving methadone), HIV infection, hepatitis C infection, and HIV-hepatitis C virus co-infection. We incorporated treatment effects from HIV and hepatitis C virus therapies. We modeled only the effects of supervised injection facilities since data showing the effectiveness of supervised smoking facilities is unavailable. We assumed that the reduction in shared injecting experienced by clients of a supervised injection facility would be similar to that observed

in Vancouver after the implementation of Insite, the supervised injection facility in the Downtown Eastside neighbourhood of that city.


Findings:

We projected that the number of HIV infections averted by the first three facilities in Toronto was relatively constant (about 2 to 3 per facility per year).

We projected that the number of hepatitis C virus infections averted by the first three facilities in Toronto was relatively constant (about 15 to 20 per facility per year).

In Toronto, the number of additional HIV and hepatitis C virus infections averted by the 4th and 5th facilities was considerably less.

We projected that the number of HIV infections averted by the first two facilities in Ottawa was 10 and 6 per year.

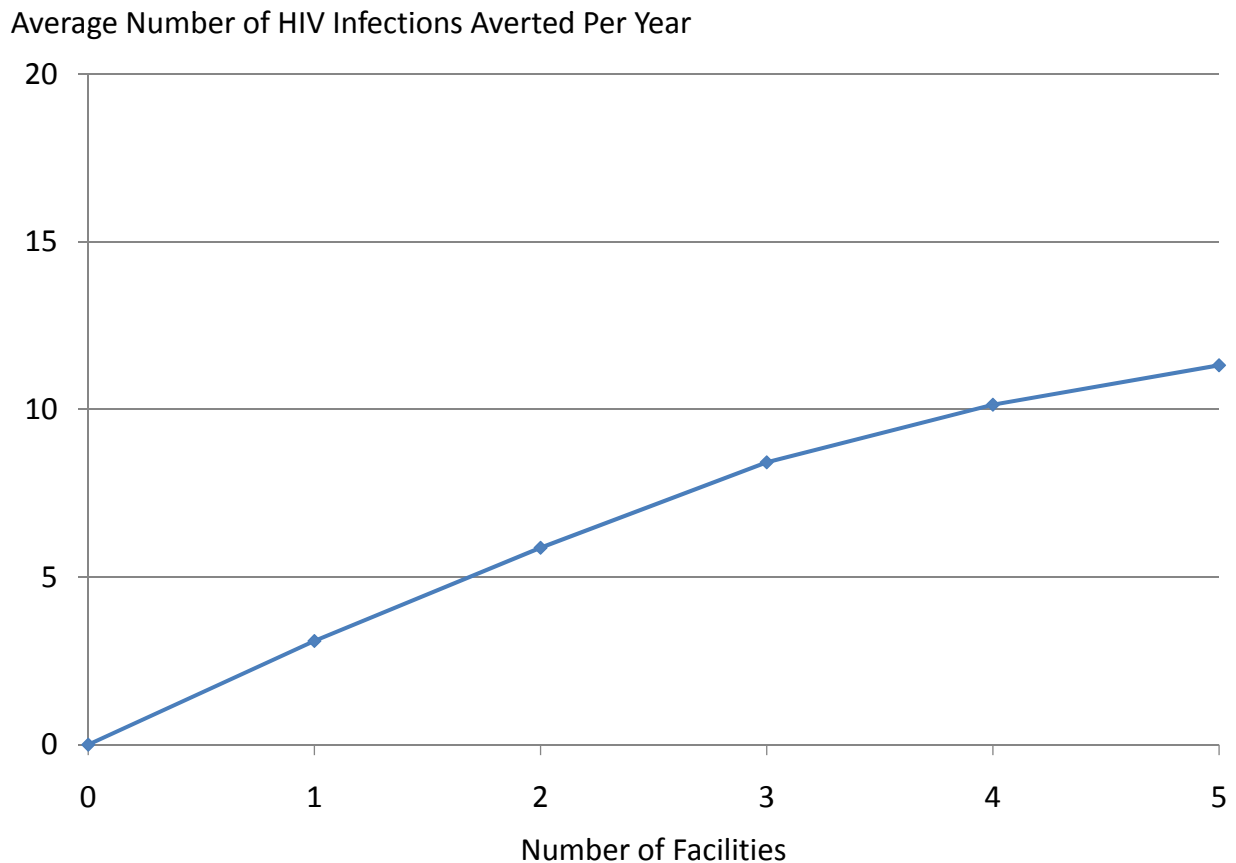


We projected that the number of hepatitis C virus infections averted by the first two facilities in Ottawa was 35 and 20 per year.

In Ottawa, the number of additional HIV and hepatitis C virus infections averted by the 3rd, 4th and 5th facilities was considerably less.

The differences between Ottawa and Toronto reflect the differences in HIV and hepatitis C prevalence rates as well as differences in the number and geographic distribution of people who use drugs in each city.

Figure 7.3.1 HIV Infections Averted in Toronto

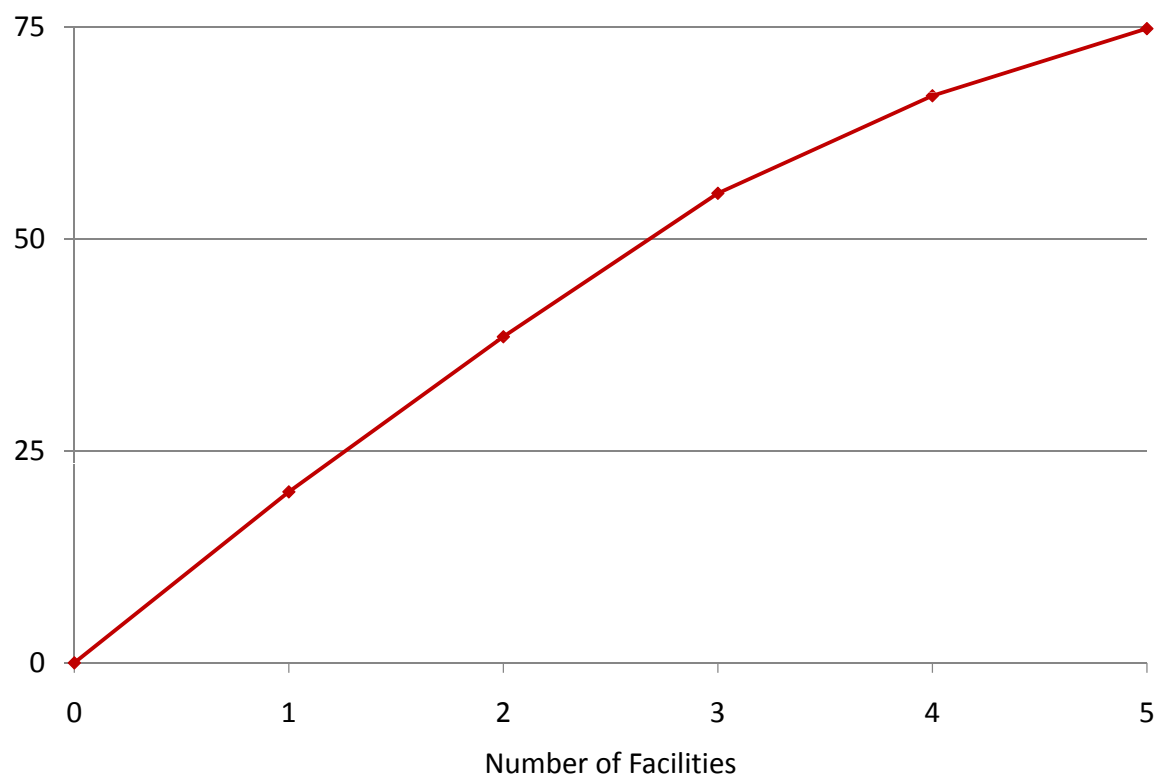


Findings

- We estimated the number of people who visit each facility as outlined in Chapter 6.
- The graph shows the average number of HIV infections averted per year in Toronto.
- We project that if three facilities were established, each would be associated with averting 2 to 3 additional HIV infections per year over this time period.
- The number of additional HIV infections averted by the 4th and 5th facilities was considerably less.

Figure 7.3.2 HCV Infections Averted in Toronto

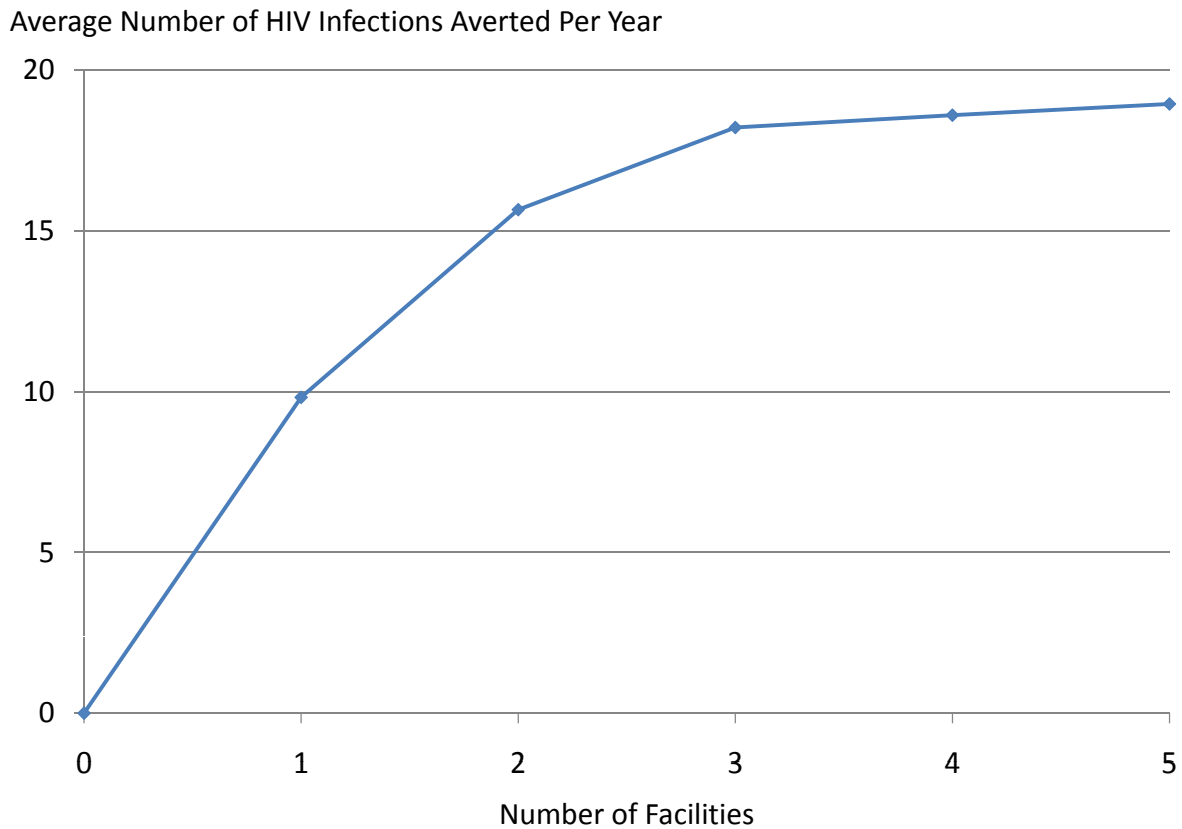
Average Number of Hepatitis C Infections Averted Per Year



Findings

- We estimated the number of people who visit each facility as outlined in Chapter 6.
- The graph shows the average number of hepatitis C virus infections averted per year in Toronto.
- We project that if three facilities were established, each would be associated with averting 15 to 20 additional hepatitis C virus infections per year over this time period.
- The number of additional HIV infections averted by the 4th and 5th facilities was considerably less.

Figure 7.3.3 HIV Infections Averted in Ottawa

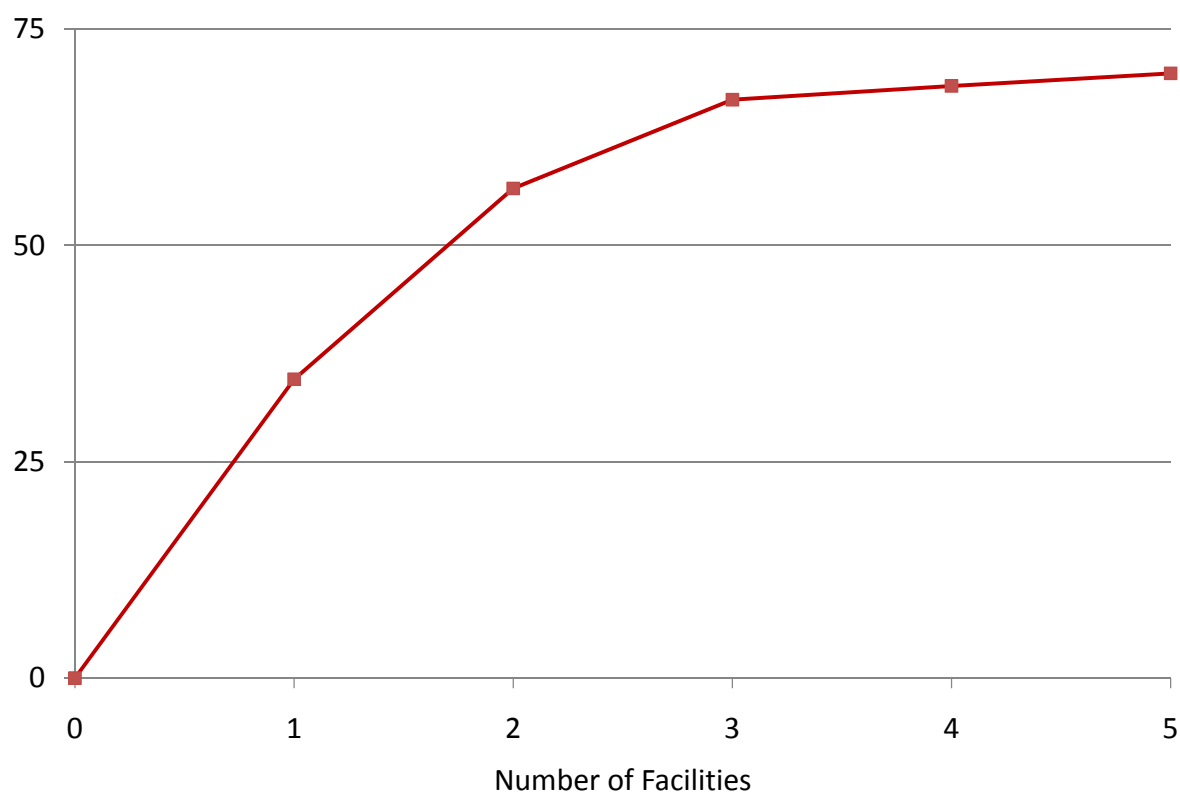


Findings

- We estimated the number of people who visit each facility as outlined in Chapter 6.
- The graph shows the average number of HIV infections averted per year in Ottawa.
- We project the first facility would be associated with about 10 averted HIV infections per year and the second facility would be associated with about 6 more additional averted HIV infections.
- The number of HIV infections averted by the 3rd, 4th and 5th facilities was considerably less.

Figure 7.3.4 HCV Infections Averted in Ottawa

Average Number of Hepatitis C Infections Averted Per Year



Findings

- We estimated the number of people who visit each facility as outlined in Chapter 6.
- The graph shows the average number of hepatitis C virus infections averted per year in Ottawa.
- We project the first facility would be associated with about 35 averted hepatitis C virus infections per year and the second facility would be associated with about 20 additional averted hepatitis C virus infections per year.
- The number of hepatitis C virus infections averted by the 3rd, 4th and 5th facilities was considerably less.

Section 7.4

Potential Cost-effectiveness of Supervised Injection Facilities in Toronto and Ottawa

Background: We used mathematical modeling to project potential health benefits and costs related to establishment of supervised injection facilities in Toronto and Ottawa. We focused only on HIV and hepatitis C infection rates and did not include health benefits related to averted overdoses, other blood-borne infections such as hepatitis B virus or infectious endocarditis, and other injection and smoking-related harms such as skin and oral injuries.

Data: We developed a mathematical model of the populations of Toronto and Ottawa, using data from the I-Track surveys and the medical literature. Details are provided in the Appendix. The model focuses on drug use (including the proportion moving in and out of injecting and smoking related drug use and the proportion receiving methadone), HIV infection,

hepatitis C infection, and HIV-hepatitis C virus co-infection. We incorporated treatment effects from HIV and hepatitis C virus therapies. We modeled only the effects of supervised injection facilities since data showing the effectiveness of supervised smoking facilities is unavailable. We assumed that the reduction in shared injecting experienced by clients of a supervised injection facility would be similar to that observed in Vancouver after the implementation of Insite, the supervised injection facility in the Downtown Eastside neighbourhood of that city.. We assumed that part of the supervised injection facility cost was fixed (due to costs such as rent and insurance) and part was variable (per-user costs such as supplies and food). We calculated net costs, incorporating both direct facility costs as well as health care costs related to drug use, HIV, and hepatitis

C virus infection (and incorporating cost savings from infections averted). Health effects were measured in terms of the number of HIV and hepatitis C virus infections averted and as the number of quality-adjusted life years (QALYs) gained. A QALY is calculated by assuming that each year in full health is given a weight of 1 and each year in suboptimal health is given a weight less than 1, the specific weight depending on the quality of life of patients in that health state. The incremental cost-effectiveness of an intervention is expressed as the extra cost of the intervention divided by the extra health gain, yielding a ratio expressed in dollars per QALY. An intervention with a low incremental cost effectiveness ratio represents good value for money while an intervention with a high incremental cost effectiveness ratio is economically unattractive.

Although debate exists about the threshold at which an intervention stops being considered “good value for money”, commonly used thresholds include \$50,000 / QALY and \$100,000 / QALY.

Cost-effectiveness estimates are reported as incremental costs for each additional facility divided by incremental gains for each additional facility, yielding incremental cost-effectiveness ratios. Costs and health effects in incremental cost-effectiveness ratios have been discounted, since gains in the near future are typically valued more highly than gains in the distant future.

Findings:

The discounted cost per HIV infection averted with the first supervised injection facility in Toronto is \$323,496 and with the first supervised injection facility in Ottawa is \$66,358.

For context, the estimated lifetime discounted direct healthcare costs of treating each person with HIV infection are about \$200,000 to \$300,000.

The discounted cost per hepatitis C infection averted with the first supervised injection facility in Toronto is \$47,489 and with the first supervised injection facility in Ottawa is \$18,591.

For context, the estimated lifetime discounted cost of treating someone with hepatitis C infection is \$15,000 to \$30,000. This cost may increase in the near future with the advent of new therapies.

The greatest cost savings in the Toronto and Ottawa models come from averting hepatitis C virus infections.

At a cost-effectiveness threshold of \$50,000 / QALY, the optimal number of facilities in Toronto is three. At a cost-effectiveness threshold of \$100,000 / QALY, the optimal number of facilities is four.

At a cost-effectiveness threshold of \$50,000 / QALY, the optimal number of facilities in Ottawa is two. At a cost-effectiveness threshold of \$100,000 / QALY, the optimal number of facilities is three.

These estimates are sensitive to estimates of the number of people who use drugs in each city, the projected reduction in needle sharing among users of supervised injection facilities, and the fixed costs associated with running a supervised injection facility.

Table 7.4.1 Cost per Infection Averted in Toronto

Number of Facilities	HIV Infections	Hepatitis C Infections	Incremental Net Cost	Cost per HIV Infection Averted	Cost per HCV Infection Averted
0	3,223	5,504	\$0		
1	3,186	5,251	\$12,002,914	\$323,496	\$47,489
2	3,153	5,022	\$12,583,670	\$377,126	\$54,977
3	3,122	4,811	\$13,003,542	\$424,827	\$61,484
4	3,101	4,667	\$14,721,572	\$712,964	\$102,507
5	3,087	4,568	\$15,861,167	\$1,121,790	\$160,488

Costs and health effects are discounted at 5% per year

Findings

- If the first supervised injection facility in Toronto were established where projected use was highest, the cost per HIV infection averted would be \$323,496
- If only HIV-related costs were counted, the first facility would be associated with a cost saving of \$1,447,914.
- The cost per HIV infection averted increases with each additional facility since fewer HIV infections are averted per site as the number of sites increases.
- If the first supervised injection facility in Toronto were established where projected use was highest, the cost per hepatitis C virus infection averted would be \$47,489
- If only hepatitis C virus-related costs were counted, the first facility would be associated with a cost saving of \$4,337,435.
- Thus, the greatest cost savings in the Toronto model come from averting hepatitis C virus infections.
- The cost per hepatitis C virus infection averted increases with each additional facility since fewer hepatitis C virus infections are averted per site as the number of sites increases.

Table 7.4.2 Cost per Infection Averted in Ottawa

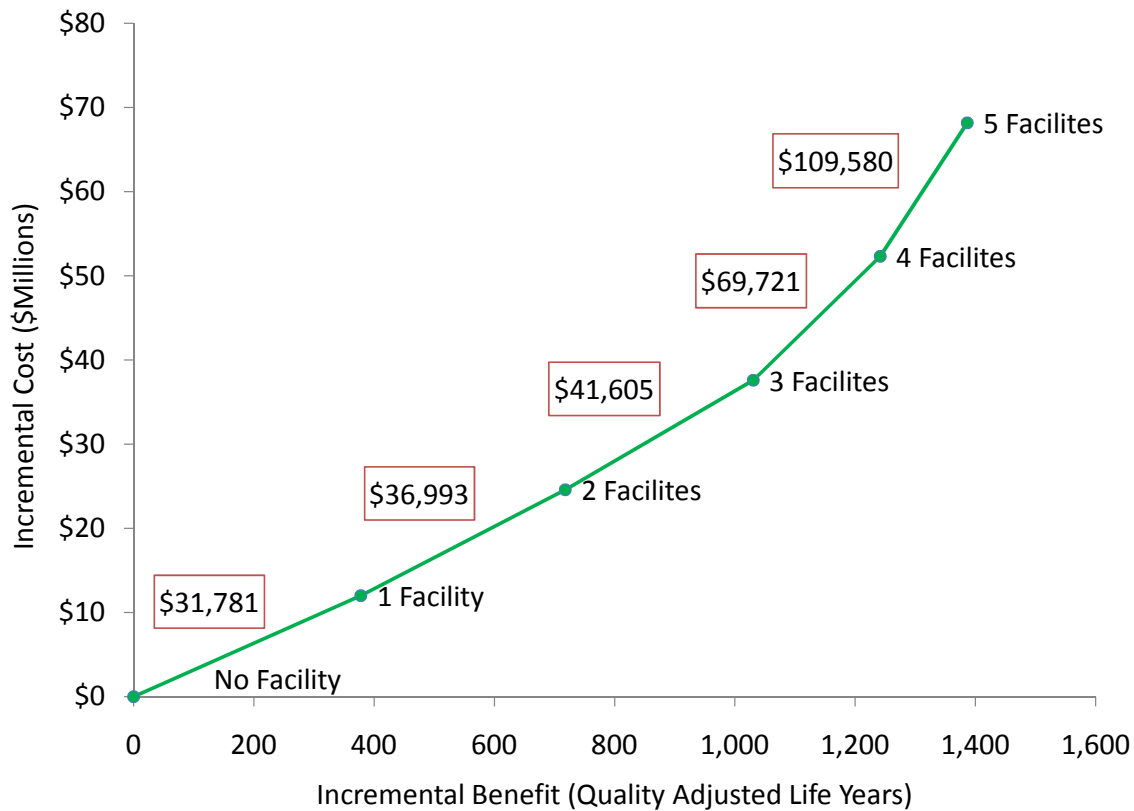
Number of Facilities	HIV Infections	hepatitis C Infections	Incremental Net Cost	Cost per HIV Infection Averted	Cost per HCV Infection Averted
0	1,143	2,500	\$0		
1	1,021	2,068	\$8,043,941	\$66,358	\$18,591
2	949	1,794	\$11,621,843	\$160,771	\$42,488
3	917	1,668	\$15,185,230	\$478,299	\$120,254
4	913	1,648	\$17,897,736	\$3,744,975	\$920,283
5	908	1,630	\$17,937,282	\$4,114,210	\$1,004,554

Costs and health effects are discounted at 5% per year

Findings

- If the first supervised injection facility in Ottawa were established where projected use was highest, the cost per HIV infection averted would be \$66,358
- If only HIV-related costs were counted, the first facility would be associated with a cost saving of \$ 3,796,523.
- The cost per HIV infection averted increases with each additional facility since fewer HIV infections are averted.
- If the first supervised injection facility in Ottawa were established where projected use was highest, the cost per hepatitis C virus infection averted would be \$18,591
- If only hepatitis C virus-related costs were counted, the first facility would be associated with a cost saving of \$6,501,612.
- Thus, the greatest cost savings in the Ottawa model come from averting hepatitis C virus infections.
- The cost per hepatitis C virus infection averted increases with each additional facility since fewer hepatitis C virus infections are averted.

Figure 7.4.1 Cost per Quality-Adjusted Life Year Gained in Toronto



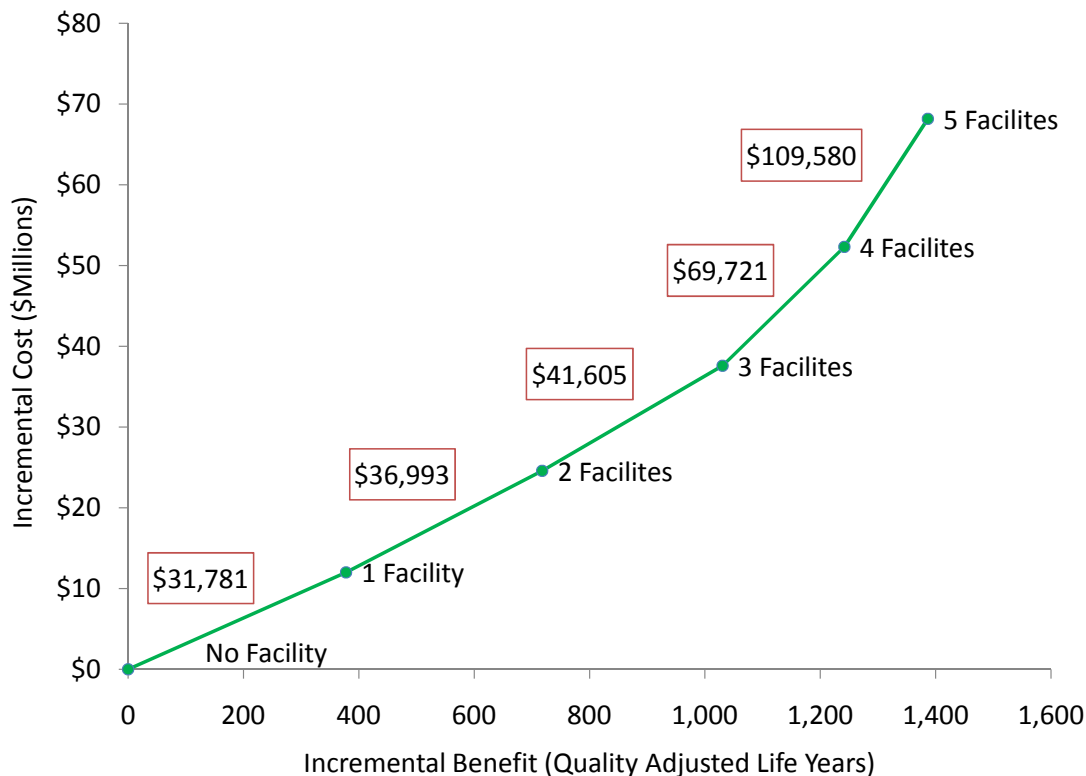
Costs and QALYs are discounted at 5% per year

Findings

- The graph illustrates the incremental health benefits, measured in quality adjusted life years (QALY), and the incremental costs, measured in dollars, of each additional supervised injection facility in Toronto.
- The numbers in boxes represent the incremental cost-effectiveness ratios comparing the two strategies connected by the corresponding lines.
- For example, the incremental cost-effectiveness of the first facility, compared to having no facilities, is \$31,781 per QALY gained. The incremental cost-effectiveness of the second facility, compared to the first facility, is \$36,993 per QALY gained.
- Some commonly cited thresholds for cost-effectiveness are \$50,000 and \$100,000 per QALY gained.

- At a cost-effectiveness threshold of \$50,000 / QALY, the optimal number of facilities in Toronto is three since the incremental cost-effectiveness of 4 facilities compared to 3 (\$69,721) exceeds the \$50,000 threshold while the incremental cost-effectiveness of 3 facilities compared to 2 is below the threshold (\$41,605).
- At a cost-effectiveness threshold of \$100,000 / QALY, the optimal number of facilities is four since the incremental cost-effectiveness of 5 facilities compared to 4 exceeds the \$100,000 threshold (\$109,580) while the incremental cost-effectiveness of 4 facilities compared to 3 is below the threshold (\$69,721).

Figure 7.4.2 Cost per Quality-Adjusted Life Year Gained in Ottawa



Costs and QALYs are discounted at 5% per year

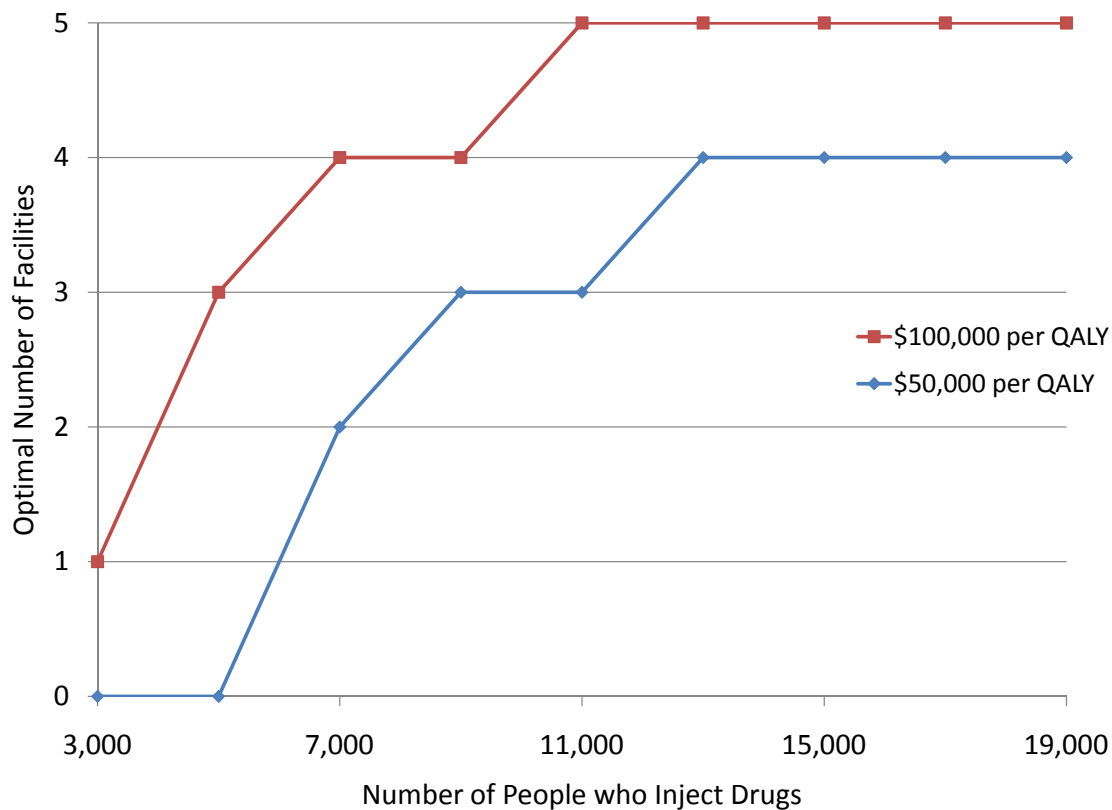
Findings

- The graph illustrates the incremental health benefits, measured in quality adjusted life years (QALY), and the incremental costs, measured in dollars, of each additional supervised injection facility in Ottawa.
- The numbers in boxes represent the incremental cost-effectiveness ratios comparing the two strategies connected by the corresponding lines.
- For example, the incremental cost-effectiveness of the first facility, compared to having no facilities, is \$10,432 per QALY gained. The incremental cost-effectiveness of the second facility, compared to the first facility, is \$25,293 per QALY gained.
- Some commonly cited thresholds for cost-effectiveness are \$50,000 and \$100,000 per QALY gained.
- At a cost-effectiveness threshold of \$50,000 / QALY, the optimal number of facilities in

Ottawa is two since the incremental cost-effectiveness of 3 facilities compared to 2 (\$75,228) exceeds the \$50,000 threshold while the incremental cost-effectiveness of 3 facilities compared to 2 is below the threshold (\$25,293).

- At a cost-effectiveness threshold of \$100,000 / QALY, the optimal number of facilities is three since the incremental cost-effectiveness of 4 facilities compared to 4 exceeds the \$100,000 threshold (\$589,597) while the incremental cost-effectiveness of 3 facilities compared to 2 is below the threshold (\$75,228).

Figure 7.4.3 Sensitivity Analysis: Number of People who use Drugs, Toronto



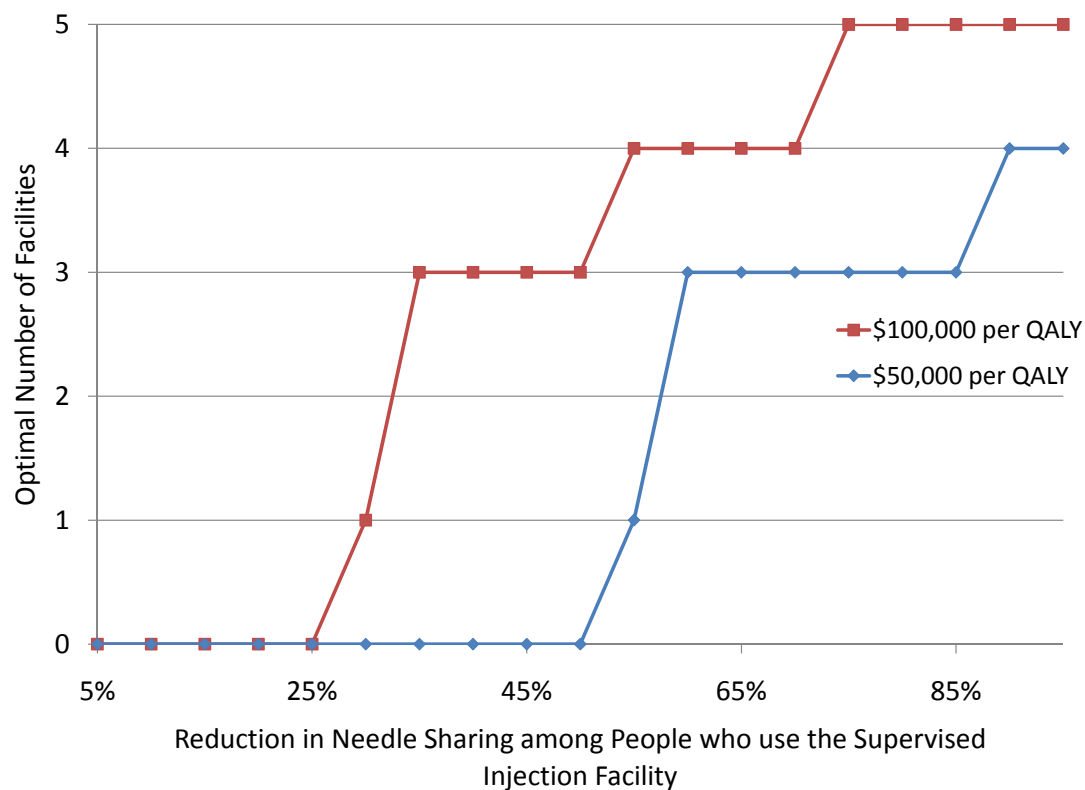
Findings

- One of the uncertainties in our model is the size of the population of people who inject drugs in Toronto.
- In our base case, we estimated this population to be 9,000 people
- We explored how our results would change if we varied this number between 3,000 and 19,000
- The blue line in the figure shows the optimal number of sites using a threshold of \$50,000 per QALY. The red line shows the optimal number of sites using a threshold of \$100,000 per QALY.
- At a threshold of \$50,000 per QALY, a supervised injection facility would not be cost-effective if there were fewer than 7000 people who use drugs in Toronto. Four facilities are

cost-effective if there are 13,000 or more people who use drugs in Toronto.

- At a threshold of \$100,000 per QALY, one supervised injection facility would be cost-effective if there were fewer than 5,000 people who use drugs in Toronto. Five facilities are cost-effective if there are 11,000 or more people who use drugs in Toronto.

Figure 7.4.4 Sensitivity Analysis: Reduction in Needle Sharing, Toronto

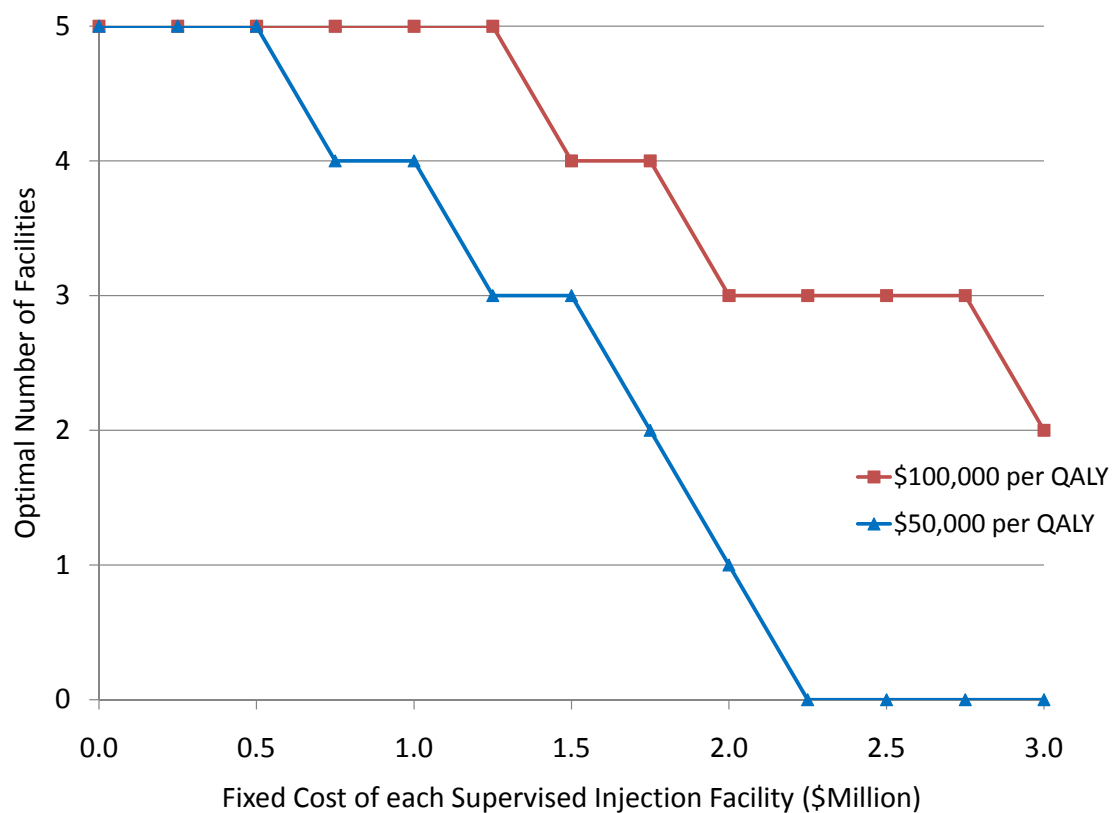


Findings

- One of the uncertainties in our model is the reduction in rates of needle sharing among people who use supervised injection facilities.
- In our base case, we estimated this reduction to be 68% based on results from the Vancouver supervised injection facility study.
- We explored how our results would change if we varied this number between 5% and 95%.
- The blue line in the figure shows the optimal number of sites using a threshold of \$50,000 per QALY. The red line shows the optimal number of sites using a threshold of \$100,000 per QALY.
- At a threshold of \$50,000 per QALY, a supervised injection facility would not be cost-effective if needle sharing fell by 50% or less. Four facilities are cost-effective if needle sharing falls by 90% or more.

- At a threshold of \$100,000 per QALY, a supervised injection facility would not be cost-effective if needle sharing fell by 25% or less. Five facilities are cost-effective if needle sharing falls by 75% or more.

Figure 7.4.5 Sensitivity Analysis: Cost of a supervised injection facility, Toronto

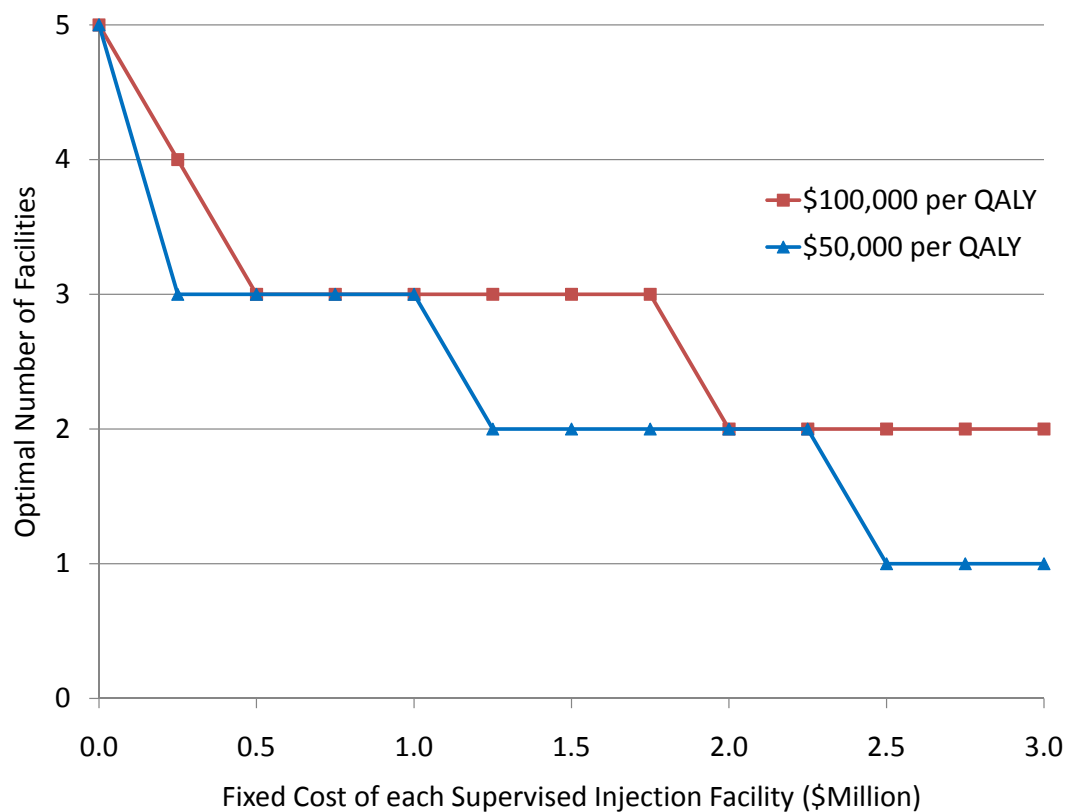


Findings

- One of the uncertainties in our model is the fixed cost of each supervised injection facility.
- In our base case, we estimated that \$1.44 million (of a \$3 million annual operating budget) was fixed.
- We explored how our results would change if we varied the fixed costs from \$0 (all variable) to \$3 million (all fixed). For example, fixed costs might be low if a supervised injection facility were implemented at an already established facility.
- The blue line in the figure shows the optimal number of sites using a threshold of \$50,000 per QALY. The red line shows the optimal number of sites using a threshold of \$100,000 per QALY.

- At a threshold of \$50,000 per QALY, a supervised injection facility would not be cost-effective in Toronto if fixed costs are \$2.25 million per year per facility or more. Five facilities are cost-effective if fixed costs are \$500,000 per year per facility or less.
- At a threshold of \$100,000 per QALY, two supervised injection facilities would not be cost-effective in Toronto if all costs were fixed. Five facilities are cost-effective if fixed costs are \$1.25 million per year per facility or less.

Figure 7.4.6 Sensitivity Analysis: Number of People who use Drugs, Ottawa

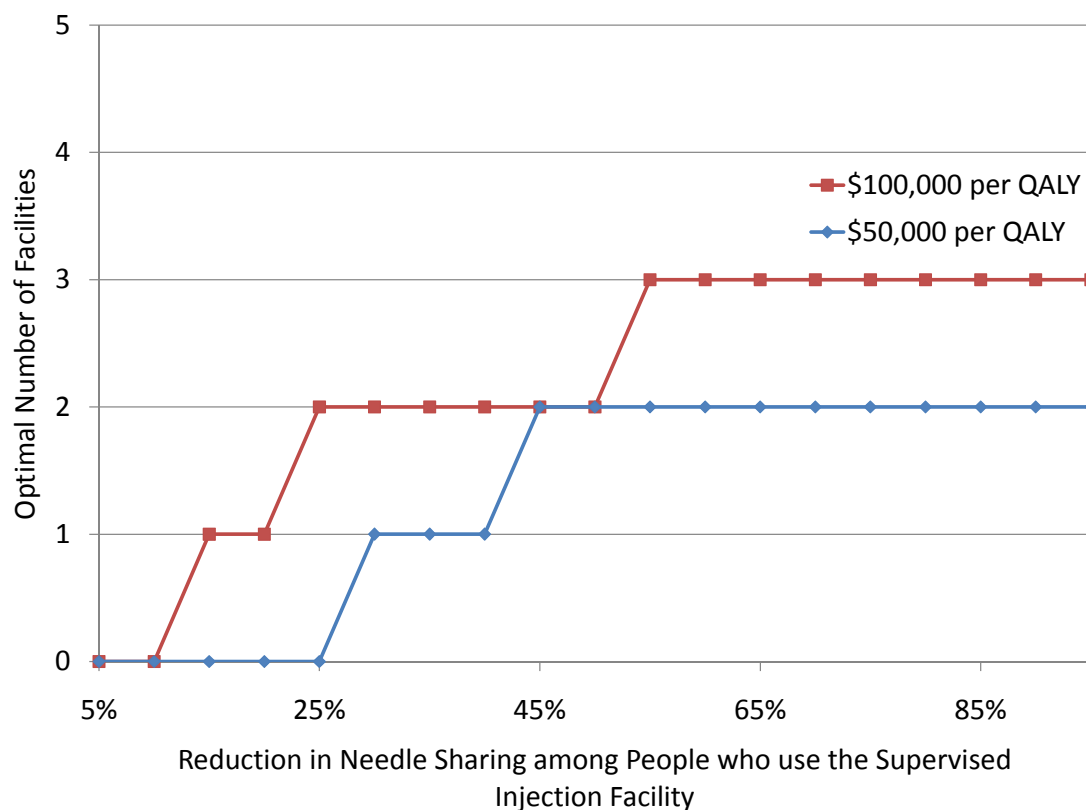


Findings

- One of the uncertainties in our model is the size of the population of people who inject drugs in Ottawa.
- In our base case, we estimated this population to be 3,000 people
- We explored how our results would change if we varied this number between 1,000 and 9,000.
- The blue line in the figure shows the optimal number of sites using a threshold of \$50,000 per QALY. The red line shows the optimal number of sites using a threshold of \$100,000 per QALY.

- At a threshold of \$50,000 per QALY, one supervised injection facility would be cost-effective if there were fewer than 2,000 people who use drugs in Ottawa. Three facilities are cost-effective if there are 5,000 or more people who use drugs in Ottawa.
- At a threshold of \$100,000 per QALY, two supervised injection facilities would be cost-effective if there were fewer than 3,000 people who use drugs in Ottawa. Three facilities are cost-effective if there are 3,000 or more people who use drugs in Ottawa.

Figure 7.4.7 Sensitivity Analysis: Reduction in Needle Sharing, Ottawa

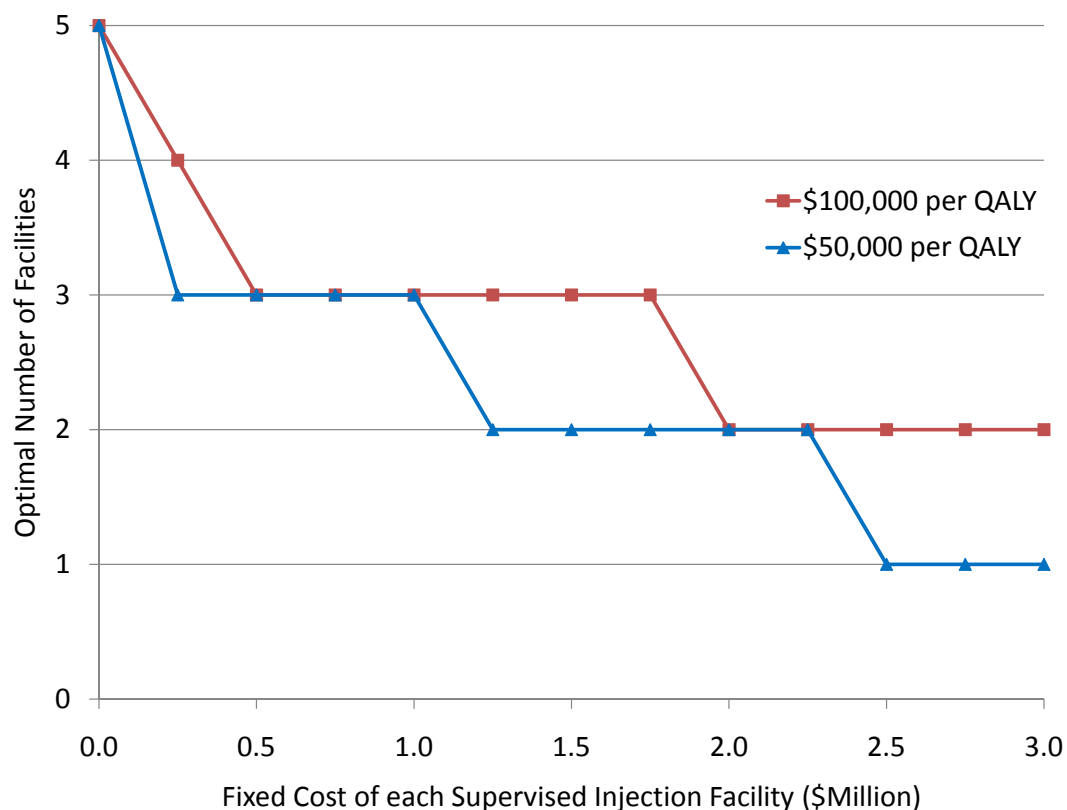


Findings

- One of the uncertainties in our model is the reduction in needle sharing among people who use supervised injection facilities.
- In our base case, we estimated this reduction to be 68% based on results from the Vancouver supervised injection facility study.
- We explored how our results would change if we varied this number between 5% and 95%.
- The blue line in the figure shows the optimal number of sites using a threshold of \$50,000 per QALY. The red line shows the optimal number of sites using a threshold of \$100,000 per QALY.
- At a threshold of \$50,000 per QALY, a supervised injection facility in Ottawa would not be cost-effective if needle sharing fell by 25% or less. Two facilities are cost-effective if needle sharing falls by 45% or more.

- At a threshold of \$100,000 per QALY, a supervised injection facility in Ottawa would not be cost-effective if needle sharing fell by 10% or less. Three facilities are cost-effective if needle sharing falls by 55% or more.

Figure 7.4.8 Sensitivity Analysis: Fixed Cost of a supervised injection facility, Ottawa



Findings

- One of the uncertainties in our model is the fixed cost of each supervised injection facility,
- In our base case, we estimated that \$1.44 million (of a \$3 million annual operating budget) was fixed.
- We explored how our results would change if we varied the fixed costs from \$0 (all variable) to \$3 million (all fixed). For example, fixed costs might be low if a supervised injection facility were implemented at an already established facility.
- The blue line in the figure shows the optimal number of sites using a threshold of \$50,000 per QALY. The red line shows the optimal number of sites using a threshold of \$100,000 per QALY.

- At a threshold of \$50,000 per QALY, one supervised injection facility would be cost-effective in Ottawa if fixed costs are \$2.5 million per year per facility or more. Five facilities are cost-effective if fixed costs are less than \$250,000 per year per facility.
- At a threshold of \$100,000 per QALY, two supervised injection facilities would be cost-effective in Ottawa if fixed costs are \$2 million per year per facility or more. Five facilities are cost-effective if fixed costs are less than \$250,000 per year per facility.

Chapter 8

Potential Implementation and Liability Issues involved in Establishing Supervised Consumption Facilities

Background: If either city decides to move forward with implementation of a supervised consumption facility, stakeholders provided insight into implementation and liability issues. In this chapter, we answer two questions: 1) What supervised consumption facility implementation plan issues do stakeholders identify as important? and 2) What liability issues within an implementation plan do stakeholders identify and who should be responsible?

Summary: In other cities around the world that have supervised consumption facilities, implementation was preceded by extensive planning and community consultation. From the stakeholders, we learned what they thought would be necessary steps and activities to complete to make supervised consumption facility implementation happen. Some stakeholders who were strongly opposed to supervised consumption facilities were harder to engage than others in discussion about an implementation plan. Stakeholders stressed that an implementation plan should include an assessment of the existing scientific evidence for supervised consumption facilities, consideration of the generalizability of this evidence to local circumstances, a clear explanation of the facility's goals, community consultations, and a service model design that addresses the unique social and political environments of each city.

Even though more stakeholders were in favour of implementing multiple facilities than a single facility, stakeholders strongly recommended starting with a single pilot facility. This recommendation may give rise to some tensions because stakeholders were also generally concerned that one facility would be highly visible in a given neighbourhood and potentially create some undesirable outcomes (for example, congregation of people who use drugs or people selling drugs). It is possible that starting with a single pilot might produce these unwanted results. This point was not raised by stakeholders who were in favour of the pilot model. Stakeholders were clear that any pilot site that is implemented needs to include a clear and well articulated evaluation plan and also assurances to the community that the pilot supervised consumption facility would be closed if an evaluation showed that the facility was not working or was having adverse impacts on the community.

It is unlikely that supervised consumption facility implementation would be achieved anywhere lacking solid support from communities and local politicians.

While reducing consumption related risks and offering other health benefits, consumption of drugs within a supervised consumption facility may lead to negative health consequences and stakeholders across Ottawa and

Toronto raised concerns about these issues. Stakeholders stressed the need to consider liability and responsibility issues related to toxicity and other negative consequences from consumption of contaminated drugs and fatal overdoses on site at a supervised consumption facility. As well, stakeholders wanted an implementation plan to address the issue of assisted injection and related liability issues. Stakeholders were uncomfortable with a policy that would permit assisted injection within a supervised consumption facility. Overall, stakeholders did not provide clear guidance on what organizations should be responsible and accountable for a supervised consumption facility and these issues.

Section 8.1

What Supervised Consumption Facility Implementation Issues do Stakeholders Identify as Important?

Background: A successful supervised consumption facility implementation plan needs to provide opportunities for community members to contribute to its design and development. Participation in these processes is necessary to develop support within the community and amongst local policy makers.

Data: We used data from interviews and focus group discussions with 95 people who use drugs and 141 various stakeholders in Ottawa and Toronto.

Findings: An implementation plan needs to include several components: an assessment of the existing scientific evidence for supervised consumption facilities; consideration of the generalizability of the evidence to local circumstances; a clear explanation of the

facility's goals; community consultations; and a service model design that addresses the unique social and political environments of each city.

Major findings were:

A clear articulation of a facility's potential health benefits is important to build community support for a potential supervised consumption facility.

The supervised consumption facility should be part of a comprehensive and integrated response to community drug-related problems.

The design and operational policies of a supervised consumption facility should be based on evidence and involve partnerships with a variety of experts.

The design and operational policies should also consider

city-specific characteristics.

An implementation plan must include broad community consultation that reflects the diversity of opinions about supervised consumption facilities and be responsive to community concerns.

Many stakeholders want to see implementation start with a supervised consumption facility pilot that is subject to rigorous evaluation.

The implementation plan should allow for closure if a facility has a negative impact on the community.

Table 8.1.1 Clear Articulation of a Supervised Consumption Facility's Role in Improving Health and Addressing Drug Use

Quotations

I think the community and sort of the business owners and the people who live in the Byward Market, I mean they're always trying to, they're obviously people who are invested in the area, don't want to see drug use in that area. If you pitch it right, it's like, "You know, if you don't want to find syringes all over the place, you want to go to the Tim Horton's and just go to the bathroom and not run into problems, well then support the site," right. (Ottawa healthcare provider)

And I think the community would be more receptive, from our drug strategy work, as long as harm reduction was connected to treatment options and housing and all of those other things. People were much more supportive than if it's just kind of seen as giving up on people and just warehousing them in this little place downtown. Not that that's maybe the intent, but that's the perception often, I think. (Ottawa advisory group participant)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Community understanding and support can be established by providing community members with a thorough and clear explanation of what "harm reduction" means.
- Understanding and support may also require explaining how a supervised consumption facility would benefit the community (for example, fewer publicly discarded needles and fewer public order problems associated with drug use).
- A supervised consumption facility implementation plan should emphasize the range of health and social services that will be available for people who use drugs.
- Stakeholders indicated that a supervised consumption facility should be viewed as one intervention among a range of services and approaches for people who use drugs.
- Stakeholders who said that they would prefer to see people "get off" drugs instead of providing a facility for safer drug use advocated for including drug treatment as part of the services available on site. Most other stakeholders identified the need to make referrals and connections to drug treatment available to supervised consumption facility clients.
- More members of the public might support supervised consumption facilities if such facilities were seen as a first step to getting people into drug treatment, mental health services, and housing.

Table 8.1.2 Supervised Consumption Facility Design and Operational Policies Need to be Evidence-Based and City-Specific

Quotations

Okay, what do they have in Vancouver and what works and doesn't work are the things that I would be wondering myself. I don't know how to run a safe injection site...I'm not a public health person. So before I would want to give advice on conditions that I think would be good for Ottawa, I would like to know what others are doing so I could see, would that work in our community or not? (Ottawa resident)

Is it established that it's [a supervised consumption facility is] working and, if it is working, which of the elements are working, and which elements aren't working? And then pick the elements that are working and use those. (Toronto business owner)

I think Vancouver's program, the way it was set up, it was great, it was needed, and it met the needs of that particular neighbourhood. I'm not sure how realistic it is to think that we could have the same thing [a supervised consumption facility like Vancouver's that meet the needs of the community] in Ottawa. (Ottawa city employee)

It has to be done well enough that the sceptics and the naysayers – if they were given an opportunity to see it and talk to people and talk to staff, and truly begin to understand what these people may be going through – they would hopefully come on board. So I think it's got to be done well, I think it's got to be really slick. So it can't just be, you know, a room somewhere in the back of an industrial building that people know that they can go there. That's not the way to do it. (Toronto EMS participant)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- The design and operation of a supervised consumption facility should be based on the evidence of what has worked in other jurisdictions.
- Some stakeholders – generally those who were supportive of supervised consumption facilities – said that the supervised injection facility in Vancouver appears to work, appears credible, and was appropriate for that city. These stakeholders said that it is instructive to look at the Vancouver implementation plan to determine what components are feasible for other Canadian cities.
- Ottawa and Toronto need their own tailored supervised consumption facility models since each city has its own drug-use profiles and geographic patterns of drug use and each is different than Vancouver.
- Experts, such as public health and medical professionals and researchers, should lead the planning and implementation of a supervised consumption facility. Evidence-based implementation plans and careful execution are crucial for building credibility with the community.

Table 8.1.3 Supervised Consumption Facility Implementation must Include Broad and Responsive Community Consultations

Quotations

I think it's important to get people involved. Just like a lot of people are ignorant, they don't know what's going on. Especially people who sort of went through a change like we've have. We've been through a lot in this community. And I think community input's important. I think it would get rid of a lot of the fear and anger. And that's one thing our community lacks, is consultation. (Toronto resident)

Even before we go down this road, I think there needs to be a lot of other people that are consulted including the business community, including the residential communities, including a lot of other stakeholders, politicians, et cetera, the police service, to sit around and look at what the options are. Because quite frankly from my perspective, I think we've identified the solution without having the discussion that needs to take place first. (Ottawa police participant)

I think when you start to have more feedback as to how, for example, it's worked out in Sydney or Vancouver, where they're located, the impact it's had on the businesses, and the impact...once you have a broader understanding of what's happened with those sites, and you're able to inform the businesses and the residential people about consumption sites, it might change people's opinion of it. (Toronto business owner)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Supervised consumption facility implementation requires broad community consultation and education.
- Residents and business owners often said that they would want to be consulted well in advance of any supervised consumption facility implementation close to them.
- Residents' and business owners' previous experiences indicated that they were not always consulted prior to local decision-making about new services implemented in their community.
- An implementation plan should provide community members with information about the purpose of supervised consumption facilities and related outcomes.
- More knowledge about the impacts that supervised consumption facilities have on communities (for example, impact on local business) might address community concerns.
- Police were strongly opposed to supervised consumption facility implementation. However, some Ottawa police stated that an implementation plan would need police input.
- Some police said there has to be broad community consultations to ensure that the views of all stakeholder groups – not just those who support harm reduction and supervised consumption facilities – are heard.

Table 8.1.4 The Design and Operation of a Supervised Consumption Facility should include Partnerships and Collaboration with a Variety of Experts and Stakeholders

Quotations

I think it's an advantage in the initial set-up to be associated with another organization whether it's a hospital or even the city because you could, you may have greater resources in terms of social workers and public health personnel who can help with set-up and programs and the public health aspects, like the infectious disease aspects, that are going to be relevant to the site. (Toronto healthcare provider)

You know, I am certain that were you to strike up that plan with Public Health then they would be able to organize an advisory group with experts who actually work with these clients on a daily basis and are aware of their needs, their concerns, their challenges and, you know, would maybe even give you the opportunity to bring some of those clients to the table to be able to assist you in planning. So you wouldn't have to, again, start from scratch. I mean a lot of the infrastructure is already there. (Toronto healthcare provider)

So you'd have to be in a partnership with us [emergency ambulance services] because, well, I would suggest you be in a partnership with us because we have to establish a response plan. (Toronto EMS participant)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Supervised consumption facility implementation should build on the existing infrastructure and include partnerships and collaborations with a broad range of drug prevention, harm reduction, and treatment service providers, including strong relationships with community-based agencies.
- Supervised consumption facilities should have advisory boards and committees. Board members should include people who understand the health and social aspects of the lives of people who use drugs (for example, public health, primary health care, drug treatment, and community health care providers), and people who have current or past experience using drugs.
- Supervised consumption facilities should establish partnerships and protocols with emergency ambulance services whose personnel will be called to respond to emergencies at the facility.
- Referrals to a supervised consumption facility will likely come from emergency ambulance personnel and healthcare providers.
- Supervised consumption facilities should establish partnerships and protocols with the local police service regarding interactions with supervised consumption facility clients on site and in the nearby vicinity of the facility, and potential emergency responses in the facility.
- A supervised consumption facility implementation plan should include response plans and protocols regarding issues such as drug overdose, violent incidents on site, etc.

Table 8.1.5 Supervised Consumption Facilities should be Implemented as a Pilot Model with Clear Evaluation Criteria and a Plan for Closure in the Event of Adverse Effects on Clients and/or the Community

Quotations

[C]learly picking a pilot site would be important in terms of the right location. You'd probably want to start a project that is more of a pilot project and easily accessible, but also well-controlled. (Toronto healthcare provider)

I would personally want some assurance from the people who are running, the government, whoever's responsible to say if it doesn't work in twelve months, then we're going to pack up. (Toronto resident)

I think there'd need to be some sort of a pilot in the implementation to evaluate its effectiveness overall, not just kind of, "Okay, it's here." (Ottawa advisory group participant)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Most stakeholders believed that supervised consumption facility implementation should begin with a pilot facility.
- The location of the pilot facility should be carefully selected to increase accessibility and to avoid burden on the community.
- The criteria by which the facility will be evaluated should be clearly established.
- Some public health and other municipal employees recommended using existing evidence to design a facility that is tailored to the specific needs of the local drug-using populations.
- Ongoing support for a supervised consumption facility from residents and business owners will likely depend on demonstrating positive outcomes (for example, reducing the number of new cases of HIV or reducing drug-related disorder in the community).
- Many community members wanted assurance that a pilot supervised consumption facility would be closed if an evaluation showed that the facility was not working or was having adverse impacts on the community.

Section 8.2

What Liability Issues do Stakeholders Identify and Who Should be Responsible?

Background: Any supervised consumption facility implementation plan must identify and address liability issues and establish clear oversight and accountability mechanisms.

Assisted injection – whereby a supervised consumption facility staff member or fellow supervised consumption facility client physically helps someone to inject drugs – is an example of a liability issue that needs to be addressed prior to implementation. Assisted injection is permitted in some supervised consumption facilities around the world, though the extent and conditions of this practice are not fully known. Of 47 international supervised consumption facilities, only 7 (15%) reported allowing assisted injection by other clients; for the remaining 30 (64%) facilities, information about

this rule was not reported or available.

Data: We used data from interviews and focus group discussions with 95 people who use drugs and 141 various stakeholders in Ottawa and Toronto.

Findings: People who use drugs and other stakeholders raised concerns about the consumption of contaminated drugs, fatal overdoses, and assisted injections. The issues were similar across Ottawa and Toronto. Stakeholders were uncomfortable with a policy that would permit assisted injection within a supervised consumption facility. However, stakeholders did not provide clear guidance on what organizations should be responsible and accountable for a supervised consumption facility.

Table 8.2.1 Concerns about Consumption of Contaminated Drugs, Overdoses, and Discomfort with a Policy of Assisted Injection

Quotations

You know, again we're already injecting a questionable substance into our bodies...and if something were to happen, what's the liability issue for the facility? (Ottawa police participant)

And the liability for the RN, or whoever's helping someone inject themselves, if they do take a fatal hit, like what is their responsibility in that, you know? (Ottawa person who uses drugs)

I think legally it would be impossible for an agency to have their staff [assist with injection]. But I think that ethically, that if people want to invite a friend to help them, ask a friend to help them, it's really up to the individual. (Ottawa advisory group participant)

I have concerns about the healthcare professionals that are there supervising, just exactly how far ethically they go. I mean, do you help a person, how do you know what's in a needle if you actually help them inject, that kind of stuff. (Toronto city employee)

Staff specialized in doing that [assisted injection] would have to be insured, trained and insured, but I mean, obviously that's for each city to determine. But just being accompanied with someone, I don't think that would ever fly. (Toronto advisory group participant)

And would there be some kind of liability if somebody overdoses? If you've got like a, somebody from the medical profession there supervising and somebody overdoses, I would think that there might be some liability for that. (Toronto business owner)

You can supervise that person all you want. And I, or some of the others at the table, as a drug expert can look at that package, see a white powder, look at it and go, "It certainly looks like heroin," but I have no idea what's in there...You can't tell by looking at a package what they're putting into their needles. (Toronto police participant)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Stakeholders wondered if a supervised consumption facility could be held liable if a client had a negative reaction to drugs taken, overdosed, or died as a result of contaminated drugs while inside the facility.
- Police said that the dangers of consuming drugs of unknown purity are important reasons for not implementing a supervised consumption facility.
- Opinions on assisted injection were strong. Many people who use drugs and other stakeholders said that they would feel uncomfortable with a policy that would permit a staff member or another person inside a facility to help someone inject drugs.
- If assisted injection were permitted inside a supervised consumption facility, highly trained staff and clear protocols must be in place to minimize health and safety risks.

Table 8.2.2 Lack of Clarity Regarding which Organizations should be Responsible and Accountable for any Supervised Consumption Facilities Implemented

Quotations

'Cause you can't just open it up. Even The Works can't just go and open this up, without looking at legislation and by-laws. (Toronto city employee)

I would be very concerned where they'd put it [a supervised consumption facility]. I can't think of a single neighbourhood that this would benefit. It might benefit some individuals, but as a neighbourhood or a community I don't think there's a single one. And I'm responsibility for policing it, so the decision to do it is not mine. But I'll have to deal with the consequences of that decision. And one of my responsibilities is to be right up front with what I think those consequences would be. (Senior Police Officer)

I think we would want to have an understanding about the – and I'm assuming that this is a site operated by a public agency, such as Toronto Public Health, but it could be some other one, obviously, but a publicly accountable program – we would probably have to work within federal and provincial legislation and regulations to the extent that those were applicable. (Toronto city official)

Source: Interviews and focus groups with people who use drugs and other stakeholders in Ottawa and Toronto.

Findings

- Discussions about supervised consumption facility oversight and accountability were infrequent and mostly general in nature.
- Supervised consumption facility operations need to conform to applicable legislation and by-laws.
- A few stakeholders were uncertain if a supervised consumption facility could permit smoking of drugs under by-laws that prohibit tobacco smoking inside public places.
- As indicated by the police, the decision regarding whether or not to implement a supervised consumption facility is not within their purview. They noted that they would be accountable for policing the area outside the facility.
- Many stakeholders noted that supervised consumption facility operation requires understanding and cooperation from local police (for example, an agreement that the police will not stop clients on their way into or while exiting a facility).
- Research and evaluation promote accountability by examining whether a supervised consumption facility pilot is working and should stay open.
- Stakeholders who considered such issues recommended that public health departments, addictions services like the Centre for Addiction and Mental Health, and municipal and provincial governments be involved in supervised consumption facility oversight and governance.

Appendix 1. Glossary

Term	Definition
95% Confidence interval	A range of values for a measure (such as a proportion or an odds ratio) that is calculated so that the range has a 95% probability of including the true value of the measure. (Adapted from: http://www.cdc.gov/training/products/ss1000/ss1000-ol.pdf)
Abstinence	The practice of refraining from drug use.
Acidifier	A substance used to turn insoluble drugs, such as crack-cocaine, into a water-soluble form. This is done by mixing the drug with an acid, such as citric acid, ascorbic acid (vitamin C), acetic acid or lactic acid. (Adapted from: http://www.ohrdp.ca/products/acidifiers/)
Assisted injection	The act of one person physically helping another person to inject drugs.
Blood-borne infection	An infection that can be transmitted through direct contact with blood, such as through shared needles.
Community health centre	A non-profit organization that offers primary health care and health promotion programs for individuals, families and communities. In Ontario, community health centres are community-governed and have practitioners from multiple disciplines.
Cooker	See spoon.
Cost-effectiveness threshold	The cost-effectiveness ratio where an intervention stops being considered “good value for money” and starts being economically unattractive. Although debate exists about the threshold used by public payers in Canada would, commonly cited thresholds include \$50,000 / QALY and \$100,000 / QALY.
Craving	A very strong desire for a drug or for the intoxicating effects of the drug. (Adapted from: http://www.who.int/substance_abuse/terminology/who_lexicon/en/)
Decile	One of ten groups, each of which has close to the same number of elements.
Detoxification	The process of removal or neutralization of toxic (harmful) drug effects in the body; care and supportive services provided to persons recovering from psychoactive drug intoxication (as in detoxification centres). Also known as “detox”. (Cited from: Brands B, Sproule B, Marshman J. (Eds.). (1998). Drugs & Drug Abuse: A Reference Text, 3rd edition. Toronto, ON: Addiction Research Foundation)

Term	Definition
Downers or depressant	A class of drug that causes the functions of an organ system to slow down; Any agent that suppresses, inhibits, or decreases some aspects of central nervous system (CNS) activity. The main classes of CNS depressants are the sedatives/hypnotics, opioids, and neuroleptics. Examples of depressant drugs are alcohol, barbiturates, anaesthetics, benzodiazepines, opiates and their synthetic analogues. (Adapted from: Brands B, Sproule B, Marshman J. (Eds.). (1998). <i>Drugs & Drug Abuse: A Reference Text</i> , 3rd edition. Toronto, ON: Addiction Research Foundation; http://www.who.int/substance_abuse/terminology/who_lexicon/en/)
Drug	Any chemical agent that affects living processes. Commonly used to refer to a psychoactive drug, which are substances that can change sensation, mood, consciousness or other psychological or behavioural functions. Psychoactive drugs fall into four groups: depressants, stimulants, hallucinogens and psychiatric medications. Some psychoactive drugs are obtained legally and other through illegal means. Psychoactive drugs are manufactured by pharmaceutical companies and illegally manufactured. (Adapted from: Brands B, Sproule B, Marshman J. (Eds.). (1998). <i>Drugs & Drug Abuse: A Reference Text</i> , 3rd edition. Toronto, ON: Addiction Research Foundation)
Drug equipment	Any equipment that is used to mix or consume drugs, sometimes referred to as drug paraphernalia.
Drug substitution treatment	A form of medical care offered to people who use opioids based on a similar or identical substance to the drug normally used. It is offered in two forms: maintenance (providing the user with enough of the substance to reduce risky or harmful behaviour) and detoxification (gradually cutting the quantity of the drug to zero). Treatment comes either with or without psycho-social support. (Adapted from: http://tinyurl.com/6rck95j)
Filter	A device place on the tip of a needle to prevent any undissolved particles of the drug and other debris in a drug solution from being drawn into the syringe and then injected into a vein.
Fix	To use drugs.
Fixed costs	Operating costs that are constant. For a supervised consumption facility, fixed costs are those that do not change regardless of the number of clients who visit the facility (such as rent and insurance).
Focus group	A form of group interview where there is discussion between research participants about a particular topic, in order to generate data. Instead of the researcher asking each person to respond to a question individually, people are encouraged to talk to one another, ask questions, exchange anecdotes and comment on each other's experiences and points of view. The group discussion is guided/moderated by one or more researchers. (Adapted from: http://www.bmj.com/content/311/7000/299.extract)

Term	Definition
Harm reduction	Refers to policies, programs and practices that aim to reduce the harms associated with the use of psychoactive drugs in people unable or unwilling to stop. The defining features are the focus on the prevention of harm, rather than on the prevention of drug use itself, and the focus on people who continue to use drugs. (Cited from: http://www.Uihra.net/files/2010/05/31/IHRA_HRStatement.pdf)
Hepatitis C	A blood-borne virus that attacks the liver causing inflammation and scarring. Some patients will develop long-term complications, including liver damage, liver failure, and liver cancer. (Adapted from: http://www.hepcinfo.ca/sites/default/files/pdf/brochure_1_e.pdf?q=media/toolkit/items/brochure_1_e.pdf)
Human Immunodeficiency Virus (HIV)	A virus that weakens the immune system, the body's built-in defence against disease and illness. Without HIV treatment, the immune system becomes too weak to fight off serious illnesses. The most serious stage of HIV infection is called AIDS (Acquired Immunodeficiency Syndrome). (Adapted from: http://www.Ucatie.ca/en/practical-guides/hiv-aids-basic-facts)
Illicit drugs	A drug whose production or use is illegal (not approved by law).
Incremental cost-effectiveness ratio	A number for assessing two comparators, calculated by dividing the difference in dollars by the difference in health effects. The results are often expressed as dollars per QALY gained (see QALY).
Independently associated	A variable in a statistical model that explains the outcome of interest where the relationship is not influenced by other variables in the model.
Infectious diseases	Diseases that are caused by microorganisms such as bacteria, viruses, parasites or fungi.
Insite	A supervised injection facility located in Vancouver, British Columbia.
Intravenous	Through a vein.
Liability	Legally responsibility.
Mathematical models	The use of mathematics to represent real world phenomena. In infectious disease modeling, populations are represented by different compartments (for example HIV-negative persons, HIV-positive persons, and people who have died) and the movement between compartments is determined by mathematical formulas.

Term	Definition
Methadone	A long-acting opioid drug used as part of a long-term treatment plan as drug substitution therapy for opioid drugs such as heroin, codeine, morphine, Dilaudid® and Percodan®. Methadone acts more slowly in the body, for a longer period of time, than most other opioids. By acting slowly it can prevent withdrawal and eliminate or reduce drug cravings, without causing a person to get high. People who are dependent on opioid drugs can take methadone to help stabilize their lives and to reduce the harms related to their drug use. Methadone has been shown in many studies to reduce drug use and health and social issues related to drug use. Methadone therapy is accessible at a pharmacy via prescription. Methadone comes in tablet and liquid formulations. In Ontario, the liquid formulation is used for methadone maintenance therapy. (Adapted from: http://www.camh.net/About Addiction Mental Health/Drug and Addiction Information/methadone_therapy.html)
Morbidity	Disease, injury or disability.
Mortality	Death.
Needle exchange program	A program to help to reduce the risk of HIV and Hepatitis transmissions by increasing access to sterile needles and syringes, removing used needles from circulation in the community and educating clients about the risk of re-using injection equipment. (Cited from: http://www.ohrdp.ca/resources/needle-exchange-faqs/)
Not in My Backyard (NIMBY)	A term used to describe opposition by community stakeholders to the implementation of a program or facility in their neighbourhood.
Odds ratio	A way of comparing whether the probability of a certain event is the same for two groups used in research studies to quantify the association between an exposure and an outcome. An odds ratio of 1 implies that the event is equally likely in both groups. An odds ratio greater or less than one implies that the event is more or less likely in a specific group and that there is therefore an association between the exposure and the outcome. (Adapted from: http://www.childrensmc.org/stats/definitions/or.htm)
Overdose	Taking more than the usual or recommended amount of something, usually a drug. Overdoses can be accidental or intentional, and an overdose may result in serious, harmful symptoms or death.
Peer worker	A person who has experienced situations similar to those faced by the clients an agency serves. This person may currently use drugs or has a history of drug use, and they are employed to share their lived experience of drug use and to help other people who use drugs. (Cited from: http://www.harmreductionnetwork.mb.ca/docs/thrtf.pdf)

Term	Definition
Prevalence	The number or proportion of cases or events or attributes among a given population in a defined period of time.
Quality-adjusted life year (QALY)	A measure that incorporates both quality of life and survival. A QALY is calculated by assuming that each year in full health is given a weight of 1 and each year in suboptimal health is given a weight less than 1, the specific weight depending on the quality of life of patients in that health state.
Risky sexual behaviours	Participation in sexual acts that can increase the chance of experiencing negative health outcomes. These behaviours can increase the chance of being exposed to sexually transmitted infections such as HIV.
Safer crack use kits	A set of equipment given to people who smoke crack to prevent the harms associated with smoking. Typically the following items are part of a kit: a glass stem (often made out of heat-resistant glass, used as a pipe); a rubber mouthpiece and several brass screens (to cradle the crack when it is inserted into the pipe so that a flame can pass over the surface of the “rock”); and chopsticks (items used to insert crack, brass screen or alcohol swabs in to a pipe). (Adapted from: http://www.aidslaw.ca/publications/interfaces/downloadFile.php?ref=1390)
Safer drug use	Practices that reduce the risk of negative consequences of drug use such as disease transmission, injury, infection, and overdose. Examples include using clean equipment, disposing of used equipment properly, and receiving education about ways in which to reduce disease transmission.
Sensitivity analysis	A series of “what if” analyses, in which assumptions or variables in a mathematical model are changed over a range of values and the outcomes are assessed.
Sex work	The exchange of money or goods for sexual services. These transactions may take place on a regular basis or occasionally. Sex work can also be a formal or informal activity. For example, occasional sex work for sex work for food, shelter or protection is considered informal sex work. Sex work in organized settings (such as massage parlours or nightclubs) is considered formal sex work. (Adapted from: http://www.unfpa.org/hiv/docs/factsheet_genderwork.pdf)
Sexually transmitted infections	Infections that are transmitted through sexual contact (oral, vaginal or anal) with an infected individual’s bodily fluids or blood.
Shooting galleries	A communal drug using space where drugs can be purchased and consumed.
Spoon	A container used for mixing and heating drugs.

Term	Definition
Stakeholder	A person, group or organization that has an interest or concern about a particular topic, whose actions can influence the topic, or who can be influenced by the topic.
Statistical modeling	The use of statistical analyses to explore relationships between variables and potential outcomes.
Sterile water ampoule	Water that is free of contamination by infectious agents that is used for injecting drugs.
Stimulants	A class of drugs that elevate mood, increase feelings of well-being, and increase energy and alertness. These drugs include cocaine, methamphetamine, amphetamines, methylphenidate, nicotine, and MDMA also known as “Ecstasy.”
Supervised consumption facility	A place where people can use illicit drugs in a supervised and clean environment. Drugs can be injected or smoked. Trained health care staff supervise the drug use and can provide education, support, referrals, and first aid if needed. People are allowed to bring previously obtained drugs without being arrested.
Supervised injection facility	A supervised consumption facility in which drugs are injected.
Supervised smoking facility	A supervised consumption facility in which drugs are smoked.
Systematic review	A comprehensive overview of all relevant studies on a particular clinical or health-related topic or question. The systematic review is created after reviewing and combining information from both published and unpublished studies and then summarizing the findings.
Tourniquet	Also known as a “tie”. A long strip of elastic that is “tied” around a body part (such as an arm) to restrict blood flow, causing blood veins to bulge out and become accessible to inject drugs. (Adapted from: http://www.ohrdp.ca/products/tourniquets/)
Withdrawal	Symptoms that occur among people who are dependent on drugs when drugs are stopped, particularly when they are stopped suddenly. Withdrawal symptoms are specific to the type of drug that is used.

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Advisory Group


Ottawa Harm
Reduction Joint
Action Team

Toronto Drug
User Advisory
Group

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Study Reference
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Appendix 4. Methods

Data Sources

2006 I-Track: Enhanced Surveillance of Risk Behaviours among Injecting Drug Users

The Enhanced Surveillance of Risk Behaviours among People who Inject Drugs (I-Track) is an ongoing cross-sectional survey that is administered to people who use drugs across Canada. I-Track is a partnership between the Public Health Agency of Canada, researchers, provincial and local health authorities and community-based organizations from selected survey locations across Canada. The objectives of the I-Track survey are to provide national surveillance of HIV and hepatitis C virus associated risk behaviours among people who inject drugs in Canada and to describe the changing patterns in drug injecting practices, HIV and hepatitis C virus testing behaviours, and sexual behaviours among people who inject drugs. Survey sites that have HIV and hepatitis C virus testing technology available have additional survey objectives: to describe changing patterns in the prevalence and incidence of HIV infections among people who inject drugs at the national and local level; to describe changing patterns in the prevalence and incidence of hepatitis C virus infections among people who inject drugs at the national and local level; and to use the specimens collected under I-Track to study hepatitis C virus genotypes circulating in Canada (Public Health Agency of Canada, 2006).

The I-Track survey collects information from participants about their:

- Demographics (age, gender, education, employment etc)
- Method of drug use
- Types of drugs used
- Injection drug use and crack smoking practices
- Sexual behaviours
- HIV and hepatitis C virus testing and status
- Overdoses

The I-Track survey is conducted every two years. It was first piloted in 2002, phase 1 was conducted in 2004, phase 2 in 2006, and phase 3 commenced in April 2010. Participants were recruited at needle exchange programs or mobile and outreach services and through word-of-mouth. At some sites, promotion of the survey was done through flyers and posters. The Phase 2 I-Track survey collected data from sites in Victoria, Central and North Vancouver Island sites, Prince George, Edmonton, Regina, Thunder Bay, Sudbury, Toronto, Kingston and the SurvUDI network between 2005 and 2008. We analyzed data from the 2006 Phase 2 Toronto and 2006 Ottawa I-Track survey.

To be eligible to participate in the 2006 Toronto I-Track survey a person must have met the following criteria:

- Aged 16 years or older

- Drug use status:
- Injected drugs in the 6 months prior to completing the survey; or
- Smoked crack cocaine in the 6 months prior to completing the survey and did not have a history of injection drug use; or
- Smoked crack cocaine within the 6 months prior to completing the survey and had a history of injection drug use (but not within the last 6 months)
- Be capable of understanding the information provided about the survey and to provide informed consent
- Understand English
- Not have already participated in the current round of the interviews

The survey took approximately 30 to 45 minutes to complete and participants were offered \$20 for taking part in the study. Participants were also asked to provide 5 dried blood spots on a filter paper collection card to be used for HIV and hepatitis C virus testing. The samples were sent to the Public Health Agency of Canada for data entry and laboratory testing. Participants' names were not attached to their survey or dried blood spots. A total of 477 people who use drugs took part in the 2006 Toronto I-Track Survey: 257 people injected drugs within the 6 months prior to the survey; 115 people who smoked crack cocaine within the 6 months prior to the survey and had no history injection drug use; and 105 people smoked crack cocaine within the 6 months prior to the survey and had a history of injection drug use prior to the last 6 months.

To be eligible to participate in the 2006 Ottawa I-Track survey a person must have met the following criteria:

- Aged 16 years or older
- Injected drugs within the 6 months prior to the survey
- Be capable of understanding the information provided about the survey and to provide informed consent
- Understand English or French
- Not have already participated in the current round of interviews

The 2006 Ottawa I-Track survey was conducted in two waves, Wave 26 was conducted in May 2006 and Wave 27 was conducted in November 2006. A person who took part in Wave 26 was not eligible to take part in Wave 27. Each wave took approximately 30 minutes to complete and participants were offered \$10 for taking part in the study. Participants were also asked to provide saliva samples to be used for HIV and hepatitis C virus testing. Participants' names were not attached to their survey or saliva samples. A total of 192 people who inject drugs took part in the 2006 Ottawa I-Track survey Wave 26 and 101 people who inject drugs took part in Wave 27.

For both the 2006 Toronto I-Track survey and the 2006 Ottawa I-Track Survey we extracted data about gender, methods of drug use, types of drugs used, locations where drugs were used, frequency of drug use, risky drug use behaviours, and sexual behaviours. We extracted data regarding overdoses from the Toronto survey (this was not included in the Ottawa survey). survey). We also extracted

data from the 2006 Toronto I-Track survey regarding supervised injection facilities and supervised smoking facilities. People who injected drugs and people who smoked crack cocaine and had a history of injection drug use were asked about their willingness to use a supervised injection facility and, if applicable, why they would not use a facility. All survey participants were asked about their willingness to use a supervised smoking facility. People who injected drugs were asked about the frequency with which they would use a supervised injection facility. People who injected drugs were also asked about the services they considered important to include at a supervised injection facility, why they would use a supervised injection facility, the farthest distance they would be willing to travel to a facility, if they would be willing to take public transportation to a facility, and their preferred service model for a facility. People who smoked crack cocaine were asked to respond to the same questions about supervised smoking facilities.

2003 and 2009 CAMH Monitor Surveys

The Centre for Addiction and Mental Health (CAMH) conducts 12 monthly surveys (January to December) each year, called the CAMH Monitor (Ialomiteanu et al, 2011). This survey collects information about substance use (alcohol, tobacco, and other drug use), mental health, and public opinion about drug issues and policies from residents of Ontario, and is administered in English or French by the Institute for Social Research (ISR), York University. Approximately 2,000 Ontario adults (18 years or older) are interviewed by telephone each year, using computer

assisted telephone interviewing. The final survey results are weighted and the sample is representative of 9,460,369 Ontarians aged 18 years and older. Participants are selected using complex sampling methodology, consisting of stratification, weighting, and multi-stage selection, and random digit dialing methods. For more information about the CAMH Monitor sampling methods, refer to the technical guides (http://www.camh.net/research/camh_monitor.html). Some questions in the CAMH Monitor surveys are asked to all participants (e.g. demographic questions), while some questions are asked to selected participants (e.g. public opinion about supervised injection and smoking facilities). The questions participants answer depends on the month they take part in the survey (e.g. January to June surveys have different questions than July to December surveys). These two interview schedules are used so that the number of survey items can be increased, but the length of each interview remains the same. On average each survey takes approximately 24 minutes to complete.

We analyzed data from the 2003 and 2009 CAMH Monitor surveys. We included data about Ontario residents' demographic characteristics, their opinions about supervised injection and smoking facilities and their knowledge about such facilities. In 2003, 1211 of 2411 participants took part in data collection between July to December and they were asked only about their opinions of supervised injections facilities (Cruz et al, 2007). In 2009, questions about supervised injection were repeated and new questions about supervised smoking facilities were added to the CAMH monitor. The supervised injection and smoking facility questions were asked of the 1035 participants who

participated in the January to June 2009 CAMH monitor surveys. Demographic data were also collected and analyzed.

2008 Needs Assessment for a Safer Injecting Facility in Ottawa, Canada

We included research findings from the 2008 Needs Assessment for a Safer Injecting Facility in Ottawa, Canada (Leonard, DeRubeis, Strike, 2008) pertaining to drug use and injection practices, overdose history, attitudes towards supervised injection facilities, knowledge of and attitudes towards supervised injection facilities, service design preferences for supervised consumption site. The specific objectives of the Ottawa Needs Assessment study were: to determine prevailing attitudes towards a supervised injection facility among people who inject drugs in Ottawa; to document how patterns of drug use, demographic characteristics, health status and previous overdose experience may influence the willingness to use a supervised injection facility by people who inject drugs in Ottawa; and to identify preferences among people who inject drugs in Ottawa for the design, location, and ancillary services that would optimize uptake and benefits of a supervised injection facility. From August to September 2005, people who injected drugs were recruited from a needle exchange program (NEP), participating NEP partner agencies, and social and health services in the Ottawa to complete an interviewer-administered cross-sectional survey. Participants were also recruited through posters that were displayed at a diverse range of organizations. To be eligible to take part in the survey participants had to be capable of providing informed consent and to have injected drugs in the

six months preceding their interview. The survey took approximately 30 minutes to complete and it was administered in English or French. Participants were offered \$15 for taking part in the study. A total of 250 people who injected drugs completed the survey. Information was collected about participants' demographic characteristics, drug use and injection practices, experiences of overdoses, HIV and hepatitis C virus testing, drug treatment history, knowledge of and attitudes towards supervised injection facilities, and location and service design preferences, and community impact of supervised injection facilities.

2008 Shout Clinic Harm Reduction Survey

The Shout Clinic Harm Reduction project (Drugs, Homelessness & Health: Homeless Youth Speak Out About Harm Reduction) was developed due to the lack of up-to-date information about homeless street-involved youth's experiences accessing harm reduction services and their recommendations for these services (Barnaby, Penn, Erickson, 2010). This initiative was led by the Shout Clinic, which is part of Central Toronto Community Health Centers and funding was provided by the Wellesley Institute. The study had three main components: 1) Shout Clinic Harm Reduction survey; 2) focus groups; and 3) art-informed research activity. We analyzed the data from the Shout Clinic Harm Reduction survey to learn about drug use among youth in Toronto. Data collection for the Shout Clinic Harm Reduction survey took place from October 2008 to December 2008. The inclusion criteria for the 2008 Shout Clinic Harm Reduction survey were as follows. Participants

were eligible if, in the 6 months prior to data collection, they were:

- Between the ages of 16 to 24 years old
- Living in Toronto
- Users of crack or a non-prescription opioid or methamphetamine and/or injectors of any drug
- Homeless (defined as living on the street, in a squat, in a shelter or staying with friends or “couch surfing”)

Potential participants were recruited from youth serving community agencies in Toronto. The survey gathered information about:

- Demographic characteristics and ethnicity
- Housing and homelessness
- Substance use
- Health and social issues and use of services
- Sexual activity and use of latex barriers
- Use of harm reduction
- Primary and mental health services and drug treatment services

Peer researchers administered the survey, which took 45 to 75 minutes to complete. In total 100 homeless street-involved youths who use drugs took part in the survey. Participants were offered \$15 and two transit tokens.

We extracted the following data from the Shout Clinic Harm Reduction Survey: substance use (including type of drug use, frequency of drug use, lending and borrowing equipment, locations of drug use), potential use of supervised consumption facilities, and

reasons for using supervised consumption facilities.

Institute of Clinical and Evaluative Sciences

We included population-based administrative health care data held at the Institute for Clinical Evaluative Sciences. These databases are regularly linked and queried in an anonymous fashion. We extracted the following data:

- From the Ontario Health Insurance Plan claims for physician visits, we included claims with a code for “Drug Addiction or Dependence”.
- From the National Ambulatory Care Reporting System (which captures information on visits to hospital and community based outpatient clinics and emergency departments), we included visits with a code for overdose for cocaine, opioids, or methadone.
- From the Discharge Abstract Database of hospital discharge codes, we included inpatient hospital stays with a discharge diagnosis of cocaine or opioid overdose.
- From the Ontario Drug Benefits claims database (which includes drugs paid for publicly for several groups, including people 65 and older, catastrophic drug insurance recipients, and people receiving social assistance), we included individuals receiving methadone, classified both by their home address and by their pharmacy address. The home address might be inaccurate for individuals who have moved but have not updated their health card.

For each data extract, we counted the number of individuals in each neighbourhood of Toronto and Ottawa in the years 2004 to 2009. We defined neighbourhoods by the first three digits of the postal code, known as the Forward Sortation Area (FSA).

Emergency Medical Services (EMS) Data

Data regarding drug related overdoses were obtained from the Toronto and Ottawa Emergency Medical Services (EMS). Toronto EMS granted us access to overdose records from 2002 to 2008. All patient identifiable information was removed from the data file that was released to us. The data file included the FSA of the overdose pickup location and the corresponding number of overdoses by FSA.

Ottawa EMS granted us permission to overdose records from 2004 to 2009; records prior to 2004 had incomplete FSA information. All patient identifiable information was removed from the data file we received and it included the first three identifiers of the FSA and the corresponding number of overdoses by each FSA. The FSA portion of the postal code was from the overdose call-in location/pickup location. Overdose data from 2004 to 2007 were derived from paper ambulance call reports (ACR) and contained only a subset of total overdose calls; this included calls that were dispatched as code 4 emergency, and any vehicles dispatched as 1, 2, and 3 code emergencies were not included in the data from 2004 to 2007. The overdose records for 2008 and 2009 were obtained from an electronic ACR database, and approximately 20% of the phone calls had inaccurate or

illegible pickup locations so the FSA could not be determined.

Systematic Literature Review

We conducted a systematic literature review of the design, rules, referral services, and other services available at supervised consumption facilities. We searched the following electronic databases for articles published between 1980 and May 2010: Medline, PsycINFO, and Embase on OVID, as well as Scopus and CINAHL. The search terms included: (supervised inject* or supervised consumption) OR safe* inject* OR (safe* cocaine or safe* crack) OR safe* consumption OR (smoking room* or consumption room* or fix room*) OR (inject* room* or inject* site* or inject* facilit*) OR medical* supervis* OR safe* smok* OR (consumption facilit* or consumption site*) OR (inject* center* or inject* centre*). We limited the search to primary research articles and excluded editorials, commentaries, and opinion articles. We examined the reference lists of review articles to identify other potentially relevant sources. We imposed no language restrictions on the search.

In addition, we searched the following websites for grey literature articles: Beckley Foundation, Canadian Centre on Substance Abuse, Australian National Drug Strategy, Australia National Drug and Alcohol Research Centre, International Harm Reduction Association, Canadian HIV/AIDS Legal Network, The Canadian Harm Reduction Network, Vancouver Area Network of Drug Users (VANDU), European Monitoring Centre for Drugs and Drug Addiction, International Network of Drug Consumption Rooms, and the Centre for Addiction and Mental health virtual library.

We retrieved the title and abstract (where available) of all potential articles. Two reviewers independently examined each title and abstract and selected articles mentioning supervised consumption facilities, describing design features of supervised consumption facilities, or potentially having information on supervised consumption facilities (but no mention of one in the title or abstract) for further review. Discrepancies between the two reviewers were resolved by consensus. We obtained the full text of identified articles for further review. We included articles in the final review if they described design features, as listed below, of any current or past supervised consumption facility. We excluded articles for the following reasons:

- 1) When multiple articles were published from the same study and an article provided no unique information from an article that was already included in the final review,.
- 2) Review articles of supervised consumption facilities without new information.
- 3) Articles that described supervised consumption facility features in general but did not specify which sites had particular features.

Key Informant Interviews & Focus Group Discussions with Stakeholders

People who use drugs were recruited for focus group discussions in Toronto and Ottawa by contacting harm reduction programs, needle and syringe programs, and community health centres that provide health and social services to this population. Programs in different geographical areas of both cities were targeted

to recruit a broad cross-section of people who use drugs. Staff members working at these programs were asked to recruit people who use drugs from among their client base. In each city, we recruited different types of participants for four kinds of focus group discussions: people who inject drugs, people who smoke drugs such as crack cocaine, a mixed group of people who both inject and smoke drugs, and a women-only group.

To recruit police, fire, and ambulance services personnel, the principal investigators or co-investigators approached contacts in senior management positions within the three services in both cities to provide them with information on the study and solicit their participation. For all three services, we requested senior management personnel for key informant interviews and frontline service personnel for focus groups. Each service recruited its own participants for the study.

Representatives from municipal government departments were recruited for the study, including: public health; shelter services, social services and housing; parks and recreation; and employment services. Members of the research team used their networks of professional contacts to approach personnel in senior management positions in these departments in both cities to provide them with information on the study and solicit their participation. We requested senior management personnel for key informant interviews and frontline personnel who had direct experience providing services to homeless and/or drug-using populations for focus groups. Each department recruited its own participants for the study.

Residents and business owners in Toronto and Ottawa were recruited for key informant

interviews and focus group discussions. Community, neighbourhood, and business improvement associations in areas where drug use was known to be a concern were contacted directly by the research team with information on the study and invited to participate. Once a contact at an association indicated interest in the study, they were asked to recruit participants for a focus group from among their membership. As well, a community safety group in Ottawa comprised of business owners, residents, health and social service workers, and the Ottawa Police Service asked that a focus group discussion be conducted with their group. This focus group discussion was conducted during a regularly scheduled meeting of the group and all members of the group were invited to participate.

In both cities, healthcare providers were recruited for key informant interviews only. The principal investigators utilized professional contacts to recruit doctors and nurses who had work experience with drug-using populations. We recruited healthcare providers who specialized in methadone provision, emergency care, addictions treatment, and community-based care for people who use drugs.

As well, we conducted two focus group discussions with our two project advisory groups – the Supervised Consumption Site Reference Group in Toronto and the Ottawa Harm Reduction Joint Action Team. Both groups were composed of service providers and frontline workers from health and social service fields with extensive experience working with drug-using populations.

Between December 2008 and January 2010, 236 people in total (124 in Toronto and 112

in Ottawa) participated in a key informant interview or focus group discussion for the study. Participants included 95 people who use drugs (63 in Toronto and 32 in Ottawa) and 141 other stakeholders (61 in Toronto and 80 in Ottawa). Please see Table 1.

Table 1: Key informant and focus group discussions by stakeholder type

Table 1: Key informant and focus group discussions by stakeholder type						
	Key informant interviews			Focus group discussions		
	Toronto # of interviews	Ottawa # of interviews	Total interviews	Toronto focus groups (# of participants)	Ottawa focus groups (# of participants)	Total focus groups (# of participants)
Police	1	3	4	1 (7)	1 (7)	2 (14)
Fire	1	0	1	1 (7)	0 (0)	1 (7)
Ambulance	2	2	4	1 (7)	1 (8)	2 (15)
City departments	2*	2	3	1 (7)	0 (0)	1 (7)
Advisory groups	5	5	11	1 (3)	1 (17)	2 (20)
Business owners	0	1	1	1 (6)	1 (7)	2 (13)
Residents	2	0	2	2 (11)	2 (14)	4 (25)
Community safety group				0 (0)	1 (14)	1 (14)
People who inject drugs				3 (23)	2 (13)	5 (36)
People who smoke drugs				3 (23)	2 (13)	5 (36)
Mixed people who use drugs				2 (17)	1 (6)	3 (23)
TOTAL	13	13	26	16 (111)	12 (99)	28 (210)

*Includes key informant interviewee who worked for the provincial Ministry of Health.

All participants were asked to read a consent form and provide informed consent before being asked any questions. Interviews and focus group discussions were conducted by the research coordinators, one of the principal investigators, and/or co-investigators. Key informant interviews typically lasted 45 minutes and focus group discussions took approximately 2 hours to complete. During the interviews and focus group discussions, participants were asked questions about:

- Perceived drug use in their communities;
- Potential benefits and drawbacks of supervised consumption facilities;
- Where supervised consumption facilities should be located;
- What rules, policies, and services should be in place in supervised consumption facilities if sites were to be implemented;
- Alternative approaches that address problematic drug use.

During focus group discussions conducted with people who use drugs, participants were also asked about their willingness to use a supervised consumption facility if one were opened. Police, fire, and ambulance services, city departments, and healthcare provider participants

were also asked to consider how a supervised consumption facility may impact their work and whether they would refer people who use drugs to a supervised consumption facility. All participants were asked to fill in a short demographic questionnaire and offered \$25CAD as an honorarium for their participation.

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Data Analyses

2006 Enhanced Surveillance of Risk Behaviours among Injecting Drug Users

We analyzed the 2006 Toronto I-Track survey data by grouping together people who smoked crack cocaine who had never injected with people who smoked crack cocaine and had a history of injection drug use. We coded people who responded “don’t know”, refused, or didn’t respond to the questions we analyzed as missing. Three people who identified as transgendered were excluded from the gender-specific analyses because the number was too small to include as a separate category. For the 2006 Ottawa I-Track analyses we merged together wave 26 and wave 27, and checked the dataset for duplicates. One duplicate was located and dropped from analyses. We excluded one transsexual person from the gender-specific analyses.

We used logistic regression analyses to explore characteristics associated with being likely to use a supervised injection facility and being likely to use a supervised smoking facility. We used data from the 2006 Toronto I-Track survey. We selected candidate variables for the regression models based upon findings from similar studies in the literature and our conceptual understanding of putative relationships. We tabulated or graphed potential explanatory variables against outcome measures to explore the nature of the relationships and the need for possible variable transformation. We also examined potential explanatory variables for cross-correlation and collinearity. We built 3 models. Model 1 assessed characteristics associated

with being likely to use a supervised injection facility among people who injected drugs in the 6 months prior to the interview and people who smoked crack cocaine and had a history of injection drug use 6 months prior to the interview. Model 2 assessed characteristics associated with being likely to use a supervised smoking facility among people who smoked crack cocaine drugs at the time of the interview, but had not injected drugs in the 6 months prior to the interview or who have never injected drugs. Model 3 assessed characteristics associated with being likely to use a supervised smoking facility among people who injected drugs in the 6 months prior to the interview. We checked model assumptions with the Hosmer and Lemeshow's goodness-of-fit test, multicollinearity tests and Receiver Operating Characteristic curves. We used Stata version 11.0 for all analyses.

2003 and 2009 CAMH Monitor Surveys

We cleaned, recoded and analyzed data about 1204 Ontario residents from the 2003 CAMH Monitor survey and 1035 Ontario residents from the 2009 CAMH Monitor survey. Ontario residents who responded as: don't know; refused; or left the response section missing to the questions we examined were coded as missing values. We conducted all analyses using the statistical program Stata version 11.2. We used the survey commands to apply weights to the data, so the results calculated would be representative of the proportion of Ontario, Toronto or Ottawa residents aged 18 and older.

In the 2009 CAMH Monitor, participants were asked in two separate questions about

their public knowledge of supervised injection facilities and supervised smoking facilities. We calculated relative frequencies and population weighted percentages for these questions for Ontario residents, Toronto residents, and Ottawa residents.

In the 2009 CAMH Monitor participants were asked four questions about the goals of supervised injection facilities, and four questions about the goals of supervised smoking facilities, to gauge their opinion about these facilities. We computed relative frequencies and weighted percentages for these eight questions. The original response options for these questions on the survey were: strongly disagree; somewhat agree; somewhat disagree; strongly agree. We recoded these response options into 3 groups: strongly disagree; somewhat agree or disagree; strongly agree; this was done because the somewhat agree or disagree group represents participants whose opinion has the potential to move in either direction. In the 2003 survey participants were only asked the four questions about the goals of supervised injection facilities. We compared the results across time for the 2003 and 2009 public opinion questions about supervised injection facilities.

We used data from the 2003 and 2009 CAMH Monitor surveys to create three composite measures to categorize opinions about supervised consumption facilities: 1) overall opinions about supervised injection facilities in 2003; 2) overall opinions about supervised injection facilities in 2009; and 3) overall opinions about supervised smoking facilities in 2009. We created three composite variables by recoding the four questions asked about the goals of supervised facilities:

- Strongly agreed: respondents who strongly agreed with any one of the four and did not respond strongly disagree to any questions.
- Strongly disagreed: Participants who answered strongly disagree to any 1 of the 4 questions and did not respond strongly agree to any questions will be coded as opponents.
- Mixed opinions: Participants who responded somewhat agree or somewhat disagree to at least 1 of the questions (and do not meet the criteria listed above) were coded as mixed opinion. Also, participants who respond strongly agree to at least 1 question and strongly disagree to at least 1 question will be included in the middle group. Participants who responded with refused or don't know to all questions (and do not meet the criteria above) were coded as a missing values.

We compared the results across time for the 2003 and 2009 composite measures of overall public opinion about supervised injection facilities.

We conducted generalized ordered logistic regression with the 2009 CAMH Monitor composite measures about overall public opinion of supervised injection facilities and supervised smoking facilities. We did this to learn more about the characteristic of residents who are supportive these two types of facilities. We considered including the following variables in the model: age, sex, employment, gender, income, marital status, religious affiliation, country of residence, attendance to religious services, alcohol consumption, and cannabis use. Variables were removed from the regression models based on reviewing descriptive statistics (cross-tabulations and correlations of potential explanatory variables and outcome measures; cross-tabulations and

correlations between explanatory variables to look for associations/collinearity), theory and previous literature that conducted similar analyses. The variables included in the final generalized ordered logistic regression model for supervised injection facilities were age, gender, education, religious affiliation, alcohol consumption, lifetime use of cannabis and knowledge of supervised injection facilities. The variables included in the final generalized ordered logistic regression model for supervised smoking facilities were age, gender, education, religious affiliation, alcohol consumption and knowledge of supervised smoking facilities. People who responded don't know, refused, and non-response were coded as missing and excluded from regression model analyses.

2008 Shout Clinic Harm Reduction Survey

We included data from the Shout Clinic Harm Reduction Survey for participants who injected any drug in the 6 months prior to the survey or smoked crack cocaine or crystal methamphetamine 6 months prior to the survey. We excluded participants who smoked other types of drugs (such as opioids). We calculated frequencies and percentages for the overall sample of street-involved youths, for street-involved youths defined by their method of drug use (e.g. youths who inject drugs and youths who smoked crack cocaine or crystal methamphetamine), and we analyzed data by gender (male and female). We excluded 8 youths from the analyses; 3 who didn't smoke crack cocaine or crystal methamphetamine or inject drugs and 5 who couldn't be classified as street-involved youths and they didn't indicate if they injected drugs

in past 6 months. We dropped 6 youths from the gender-specific analyses because 3 did not complete the question about gender and 3 indicated their gender as 'transgender' or 'trans' (sample sizes were too small to analyze transgendered as a separate category). We used Stata version 11.2 for all analyses.

Systematic Literature Review

Our initial search yielded 2019 abstracts from the scientific literature and 33 from grey literature sources. After title and abstract review, we retrieved 147 full text articles. We excluded 102: 64 did not have information about design features, 18 reported data that had previously been published, 2 were review articles without data about specific facilities, and 18 were not in English or could not be located.

For each article included in the review, we abstracted the following information into a data table:

- 1) Design features, such as location, site type (injection, smoking, or both), hours, number of spaces for drug use.
- 2) Services offered, such as drug equipment provided, staff on site, medical care and counselling services, hygiene and basic needs (washroom, shower, food, laundry, etc.).
- 3) Referrals to drug treatment, counselling, medical care, and social services.
- 4) Rules, such as registration, restrictions on drugs allowed, time limit, age and residency restrictions.

If the article did not clearly state whether a feature existed or not for a site then we

marked the feature as "not reported." When there was conflicting information between two or more articles regarding a feature, we included information from the most recently published.

Key Informant Interviews & Focus Group Discussions with Stakeholders

Audio recordings of all key informant interviews and focus group discussions were transcribed by a professional transcriptionist. An iterative analytic procedure was used to develop a qualitative codebook and to analyze the data collected. A sub-team reviewed transcripts and extracted themes and concepts. Transcripts were coded sequentially by type of stakeholder group. Meetings were held with sub-team members to compare and discuss coding and determine the reliability of the codebook, the coding process, and the analyses. The objective of the analyses was to accurately capture, describe, and compare the viewpoints of all participants across stakeholder groups. We compared thematic content across and within cities and stakeholder groups to identify any consistencies and discrepancies between and within cities and stakeholder groups.

Mapping

We mapped the geographic concentration of the number of people who use drugs using health administrative data sources, as outlined above. For each data source, we calculated the average number of individuals in each FSA over a five year period. Next, we calculated the number per square kilometre by dividing

by each FSA's area. We generated maps using Stata version 11.2

Cost-Effectiveness Analyses

We developed dynamic compartmental models of the population of 15-64 year-olds in Toronto and Ottawa. The population included the (non-drug using) general population, crack cocaine smokers, injecting opiate users. We modeled the spread of HIV and the hepatitis C virus (hepatitis C virus) in this population through sexual contact and the sharing of drug use equipment. From the model projections, we estimated the incremental costs and benefits associated with establishing supervised consumption sites in Toronto. Taking the perspective of the health care system, we measured costs in terms of the direct health care costs incurred by the population, but excluded indirect health care costs and other costs to society. Benefits were measured in terms of life-years and quality-adjusted life-years (QALYs) gained and HIV and hepatitis C virus infections averted. Costs and benefits were modeled over a 20 year time horizon and discounted at 5% per year. Base case parameter values are listed in Table 2.

Population Characteristics

We estimated the population size of 15-64 year-olds in Toronto from the 2010/2009 Toronto Central local health integration network (LHIN) annual report (1). They estimated the population size of the Toronto Central LHIN to be 1,144,152 in 2010, with 71% of the population being between the ages of 15 and 64 for a total population of 812,348 15-64 year-olds in the Toronto Central LHIN. The population size of 15-64 year-olds in

Ottawa was estimated from the 2008/2009 Champlain LHIN annual report (2). They estimated that 1,147,200 individuals lived in the Champlain LHIN in 2008, 70% of whom lived in Ottawa proper. We assumed that like Toronto, 71% of individuals living in Ottawa were between the ages of 15 and 64 for a total population of 570,158 15-64 year-olds.

We estimated the number of people who use drugs in Toronto using health administrative databases (Toronto Community Health Profiles) and data from a survey of people who use drugs in Toronto (I-TRACK). In 2006, we estimated that 5,229 unique individuals received publicly funded methadone from a pharmacy in Toronto. Patient eligibility requirements for public funding include receiving social assistance or disability payments, being over the age of 65, or being a resident in an extended care facility. Thus, we did not estimate methadone recipients who paid for their drug out of pocket or through private insurance mechanisms. In the I-TRACK survey of people who use drugs, 102 of 257 people who use drugs reported having used methadone. Assuming that the rate of diverted methadone is low and that all people who use methadone used injected (rather than oral) opioids, the estimated number of people who inject drugs in Toronto is 13,175 (11,378 to 15,533 were the low and high estimates, respectively). We derived a similar estimate when we used back-calculation methods from HIV epidemiological data. In 2008, the modeled number of HIV-positive people who use drugs in Toronto was 450 (3). The HIV prevalence rate among people who use drugs in Toronto in the I-TRACK survey was 3.15% (95% confidence interval [95%CI] 1.37% to 6.11%), yielding an estimate of 14,288 people who use drugs (7,363 and 32,861 at the upper

and lower confidence bounds, respectively). These calculations assume that the survey is representative of people who use drugs, that the epidemiological models are accurate, and that the estimates are stable over time. A 2001 study estimated that there were 17,700 people who use drugs in the greater Toronto area (city and environs) in 1996 (4). We determined the base case number of people who use drugs through model calibration to the incidence of injected-related HIV and HCV, which yielded an estimate of 9,000. To reflect the imprecision and assumptions in our estimates, we tested a wide range of values (3,000 to 20,000) in our sensitivity analyses.

We estimated the number of people who use drugs in Ottawa from provincial reports on HIV/AIDS in Ontario and the Ottawa I-TRACK survey results. In 2008, the modeled number of HIV-positive people who use drugs in the Champlain LHIN was 640 (3). The HIV prevalence rate among people who use drugs in Ottawa in the I-TRACK survey was 11.45% (95% CI 7.48% to 14.74%), yielding an estimate of 5,590 people who use drugs (4,342 and 8,556 at the upper and lower confidence bounds, respectively). This assumes that the survey is representative of all people who use drugs in the Champlain LHIN. These estimates are similar to the estimated 3,640 people who use drugs in the Champlain LHIN projected by epidemiological models (3). These estimates may over-estimate the number of people who use drugs in Ottawa since the Champlain LHIN includes other communities. Like for the case of Toronto, we determined the base case number of people who use drugs through model calibration to the incidence of injected-related HIV and HCV, which yielded an estimate of 1,200. To reflect the imprecision and assumptions in our estimates, we tested a

wide range of values (1,000 to 10,000) in our sensitivity analyses.

We estimated the total number of people who use drugs and people who use non-injection cocaine in Toronto and Ottawa from administrative health records, including opioid or cocaine-related hospital discharge records or emergency room admission records, and receipt of methadone through public funding mechanisms. The total number of unique individuals with an administrative health record code was 18,650 in Toronto and 4,750 in Ottawa. In the I-TRACK survey, 93% of injectors in Toronto had also used non-injection cocaine in the last 6 months (5). For simplicity, we assumed that all injectors in both cities also used cocaine. We assumed that the number of people who use non-injection cocaine was the difference between the total number of people who use opioid/cocaine and the number of estimated people who use drugs ($18,650 - 9,000 = 9,650$, rounded to 9,600 in Toronto and $4,750 - 1,200 = 3,550$ in Ottawa) and used a wide range in sensitivity analysis (1,000 to 15,000).

Population Dynamics

We estimated migration rates from 2006 Canadian census data reporting the number of individuals aged 15-64 moving into and out of the Toronto metropolitan area and the Ottawa-Gatineau (Ontario part) metropolitan census area (6). We estimated rates of aging in and out of the population based on the population pyramid of Ontario determined from the 2006 Canadian census (7). Assuming that age-structure remains approximately constant over time, we calculated the fraction of 14-year-olds that survive to be 15 by dividing the number of 14-year-olds in Ontario by the

number of 15-year-olds. The rate of aging into the population is then the expected number of 14-year-olds turning 15 divided by the total population size of 15-64 year-olds in Ontario. We did a similar calculation to compute the annual rate of aging out of the population. These calculations yielded an annual rate of aging in of 1.71% (95% CI 1.65% to 1.78%) and an annual rate of aging out of 1.42% (95% CI 1.36% to 1.48%). We then adjusted these rates for each city to match the projected 0.3% annual growth of the population of Toronto and 1% annual growth in the population of Ottawa (1,2).

We estimated the rate at which people who use drugs abstain from drug use and return to the general population from an observational study of survival and cessation rates in people who use opiate drugs in Edinburgh (8). The study found that 50% of people who use drugs having enrolled in opiate replacement therapy for 1-5 years had ceased using drugs by 15 years after first drug use. We therefore estimated the rate of drug use cessation to be 0.05 (95% CI 0.02 to 0.07) for people who use drugs in methadone maintenance therapy. We assumed no spontaneous recovery among people who use drugs not in methadone maintenance therapy. To calculate the annual rates at which non-users initiate illicit drug use, we assumed that the prevalence of drug use in the population would remain constant over time. This resulted in an annual rate of 0.06% and 0.05% for the initiation of crack cocaine use and 0.07% and 0.02% for the initiation of heroin use in Toronto and Ottawa, respectively.

We estimated the rate at which people who use drugs discontinue methadone maintenance therapy from a study of methadone maintenance programs in

British Columbia in which they estimated the 12-month retention rate to be 40.5% (95% CI 38.8% to 42.2%) (9). Assuming a constant hazard model, this corresponds to a 0.90 (95% CI 0.86 to 0.95) annual rate of leaving methadone maintenance therapy and returning to drug use. We assumed that the fraction of people who use drugs in methadone maintenance therapy remains constant over time. Based on the I-TRACK survey, 40% (95% CI 34% to 46%) of people who use drugs in Toronto and 11.6% (95% CI 7.9% to 15.3%) of people who use drugs in Ottawa receive methadone maintenance therapy. We calibrated the rate at which people who use drugs enter these programs in order to maintain this constant fraction of people who use drugs in therapy, resulting in an annual rate of 0.65 and 0.13 of initiating methadone maintenance therapy in Toronto and Ottawa, respectively.

Disease Prevalence

We estimated the prevalence of HIV in the general population from epidemiological monitoring data and estimates, which estimated that 7,080 HIV-positive non-injection drug using individuals were alive in Toronto in 2008, for a prevalence of 0.61% (3). A recent epidemiological report estimated that there were 81,065 individuals who were not injecting drugs at the time of the estimate living with HCV in Ontario in 2007, resulting in a prevalence of 0.63% in the general population (10). We assumed that this prevalence was constant across the province. We estimated the prevalence of HIV and HCV in cocaine smokers and people who use drugs from the Toronto and Ottawa I-TRACK surveys, among respondents who

consented to be tested. Since the Ottawa I-TRACK survey did not interview cocaine smokers, we assumed that prevalence of HIV and HCV among cocaine smokers in Ottawa was the same as among those in Toronto. The Public Health Agency of Canada estimates that 25% of HIV-infected people who use drugs and 35% of HIV-infected heterosexuals are unaware that they are infected (11). Thus we assumed that 65% of non-users were aware of their infection, while 75% of people who use drugs were. We assumed that crack cocaine smokers had the same level of awareness of their HIV-infection status.

Disease Dynamics

We modeled three HIV infection states: HIV-infected but unaware of infection status, HIV-infected and aware of infection, and HIV-infected receiving antiretroviral therapy. We estimated the time from HIV infection to diagnosis and the time from diagnosis to the initiation of antiretroviral treatment from average CD4 counts at diagnosis and natural history models of HIV. A study of 13 clinical cohorts in the US and Canada found that 46% of patients were diagnosed at CD4 counts > 350 cells/mm³ in 2007 (12). The average CD4 count is 576 cells/mm³ for patients diagnosed at CD4 counts above 350 cells/mm³ and 166 cells/mm³ for those diagnosed below 350 cells/mm³ in Ontario (unpublished data). Without antiretroviral treatment, CD4 counts decline as a function of viral load according to the equation $-79 + 33.5 \log(\text{viral load})$ (13). We assume that the viral load in an untreated, HIV-infected individual remains at a constant set point over time. A study of population viral load in British Columbia, Canada found a median viral load of 35,000 copies/mL among

HIV-infected individuals in 1996, which provides an estimate of the viral load set point prior to the widespread use of antiretroviral therapy (14). At this viral load set point, the annual decline in CD4 count is 73 cells/mm³. Assuming that individuals begin with an initial CD4 count of 900 cells/mm³, we estimated the average time to diagnosis to be 4.4 years and 10.1 years for individuals diagnosed above and below 350 cells/mm³, respectively. We assumed that antiretroviral therapy is initiated at CD4 counts below 350 cells/mm³, which yields an average of 3.1 years from diagnosis to treatment eligibility for those diagnosed at CD4 counts > 350 cells/mm³. Individuals diagnosed at CD4 counts < 350 cells/mm³ are immediately eligible for antiretroviral therapy upon diagnosis. We assumed a constant hazard model to convert from the average times until diagnosis and the initiation of antiretroviral therapy to annual rates of diagnosis and progression to antiretroviral therapy. In the model, HIV-infected individuals who are unaware of their infection transition to becoming aware of their infection at an annual rate of $0.46^*(1/4.4) = 0.10$ and transition immediately to receiving antiretroviral therapy at an annual rate of $0.54^*(1/10.1) = 0.05$. Individuals HIV-infected and aware of their infection initiate antiretroviral therapy in the model at an annual rate of $1/3.1 = 0.32$.

The mean CD4 count of people who use drugs at HIV diagnosis is 425 cells/mm³ in Ontario (unpublished data). Assuming that people who use drugs experience the same annual rate of decline of 73 cells/mm³ in CD4 count as non-people who use drugs, we calculated the mean time from seroconversion to diagnosis to be 6.5 years. We assumed that people who use drugs initiate antiretroviral

therapy later than non-people who use drugs based on a study in Maryland in which there was a median delay of 15.7 months between eligibility for antiretroviral therapy and the initiation of therapy among people who use drugs (15). Assuming an exponential distribution of delay times, we estimated the mean delay in treatment initiation to be 1.9 years. In the study, people who use drugs were treatment-eligible when their CD4 counts dropped below 350 cells/mm³. We estimated that CD4 counts would decline from 350 cells/mm³ to 212 cells/mm³ in 1.9 years based on an annual decline of 73 cells/mm³. This resulted in an average time from diagnosis to the initiation of antiretroviral therapy to be 2.9 years among people who use drugs. We again assumed a constant hazard model to convert from the average times until diagnosis and the initiation of antiretroviral therapy to annual rates of diagnosis and progression to antiretroviral therapy.

We assumed only a single disease state for hepatitis C, which reflect the average costs, utility, and mortality risks of individuals with a chronic hepatitis C infection.

Sexual Transmission

Results from the control arm of a recent randomized control trial of serodiscordant couples reported a seroconversion incidence of 2.2% (95% CI 1.6% to 3.1%) among initially HIV-negative partners per partnership-year (16). This is similar to the 1% probability of HIV transmission per partnership per year used in previous analyses, based on estimates of a 0.1% probability per-act of HIV transmission among serodiscordant heterosexual couples and assuming 100 sex acts per year (17–19). Homosexual

contact is associated with a higher risk of HIV transmission. The per-act risk of HIV transmission for unprotected receptive anal sex is estimated to be 0.82% (95% CI 0.24% to 2.76%) (20). We determined the base case HIV transmission probability through model calibration to observed HIV incidence and prevalence, yielding a 3% probability of HIV transmission per partner per year. Since we do not distinguish between heterosexual and homosexual partners, this represents an aggregate of the risks of HIV transmission through heterosexual and homosexual contact.

HIV-infected individuals who use antiretroviral therapy are less likely to transmit HIV to their sexual partners. Many previous analyses have estimated the relative risk of transmission from a study by Quinn et al. in which each log increase in HIV RNA levels was associated with an increase by a factor of 2.45 in the risk of transmission (21). Assuming a decrease in from 105 copies of HIV RNA per millilitre while untreated to 100 copies while on treatment, we calculate the relative risk of sexual transmission of HIV to be 0.13 while on ART. A more recent randomized control trial suggests that the use of antiretroviral therapy may reduce HIV transmission in heterosexual couples by 96% (16). In the base case, we assumed a relative risk of transmission of 0.04 while on antiretroviral therapy and vary this assumption in sensitivity analysis.

We assume no sexual transmission of hepatitis C based on a recent literature review which estimated the probability of sexual transmission of hepatitis C to be less than 1 in 10 million sexual contacts (22).

Sexual Behaviour

Sexual behaviour surveys indicate that the majority of Canadians report only one sex partner in the past 12 months, though a small majority may have a substantial number of sex partners (23). We estimated the number of sex partners among the non-drug using population in model calibration, with an estimate of 5 partners per year. We estimated that individuals in the general population use condoms with 24% of sexual contacts based on an analysis of a 2009 US national sexual health survey, which found that 26% (95% CI 23%-28%) of men and 22% (95% CI 19%-25%) of women reported condom use at last penile-vaginal sexual contact (24). This is similar to the findings of a local health survey conducted by the Capital District Health Authority in Nova Scotia, in which 29% of respondents who had ever had sexual intercourse reported using a condom at last sexual contact (25).

People who use drugs typically report a greater number of sex partners than the general population. The I-TRACK surveys asked people who use drugs to indicate separately the number of male and female sex partners they had in the past six months among the following categories: none, 1 partner, 2-5 partners, 6-20 partners, or 21 or more partners. We calculated a weighted average of these responses, using the mid-point of the range as the average number of partners in each category, to estimate the average number of male and female partners. The last category (21 or more partners) has no specified upper limit. We assumed that 50 partners was a reasonable upper limit on the maximum number of sex partners in the past six months, but varied this from 21 to 100 to calculate a range over the average number of partners. We assumed that the majority of people who

use drugs surveyed were heterosexual and therefore averaged the number of male and female partners to estimate the overall average number of sexual partners. We estimated that crack cocaine smokers in Toronto had an average of 3.4 (range 2.6 to 4.7) sex partners in the past six months. People who use drugs reported an average of 3.8 (range 2.8 to 5.4) and 1.5 (range 1.4 to 1.8) in the past six months in Toronto and Ottawa, respectively. We adjusted the number of sexual partners among people who use drugs within these ranges in model calibration.

In the same study, of those people who use drugs reporting sexual contact in the past month, 54% (95% CI 48% to 59%) in Toronto and 41% (95% CI 33% to 49%) in Ottawa reported using condoms at last sex. When reported separately, the reported rates of condom use were similar among people who use drugs and crack cocaine smokers. We adjusted rates of condom use within the 95% confidence intervals to calibrate to observed HIV incidence and prevalence. We assumed that condom use reduces the sexual transmission of HIV and HCV by 80% based on a systematic review of condom effectiveness studies that found that condom use reduced HIV transmission by 80%, on average, with estimates as low as 35% and as high as 94% (26).

Studies indicate that people who use drugs have sex more often with other people who use drugs rather than with non-users. In a multi-city U.S. study, 30% of people who use drugs and 10% of crack smokers had sex partners who injected drugs (27). In a U.K. study, 56% of people who use drugs had sex partners who used drugs (28). We adjusted preferential mixing within this range in calibration to maintain constant HIV and

HCV prevalence among people who use drugs, yielding preference rates of 30% and 60% for people who use drugs and crack smokers, respectively, for both cities.

We assumed that sexual risk behaviours change following an HIV diagnosis, consistent with a meta-analysis that found a reduction of 68% in unprotected sexual activity among those with a known HIV infection (29). Few studies have focused on changes in risk behaviour among people who use drugs following an HIV diagnosis. A study of female crack cocaine smokers found an odds ratio of 0.36 (95% CI 0.13 to 0.99) for unprotected sex among those infected with HIV (30). Based on a 54% rate of condom use among people who use drugs in the Toronto I-TRACK survey, we calculated a rate of unprotected sex among HIV-negative people who use drugs of 46%. For an odds ratio of 0.36 for unprotected sex, we calculated the rate of unprotected sex among HIV-positive people who use drugs to be 23%. This yields a relative risk of 0.51 (range 0.22 to 0.99) of unprotected sex among people who use drugs following an HIV diagnosis.

Transmission through sharing of Injection Equipment

We estimated the probability of transmission of HIV per shared injection to be 0.8% from studies of people who use drugs in Thailand (31). Though HIV-positive individuals have a reduced viral load while on antiretroviral therapy, we assumed that virologic suppression does not substantially impact the transmission of HIV through needle sharing because blood contact requires a small virus inoculum for the transmission of HIV.

We estimated the probability of hepatitis

C transmission per shared injection from a modeling study of the spread of hepatitis C in people who use drugs in which transmission rates were estimated to be between 1% and 4% per shared injection (32). We estimated the fraction of people who use drugs that develop chronic hepatitis C infection following acute infection from a meta-analysis of the natural history of hepatitis C infection which estimates that 26% of individuals with acute hepatitis C infection spontaneously clear the virus (33). Thus we estimated that the probability of developing chronic hepatitis C infection is between 0.7% and 3% per shared injection. We adjusted the probability of transmission within this range to maintain a constant hepatitis C prevalence among people who use drugs which yields a transmission probability of 1.2% per shared injection probability of transmission in both Toronto and Ottawa.

Needle-Sharing

The I-TRACK surveys collected data about the injecting frequency and needle-sharing among people who use drugs. People who use drugs were asked to indicate their frequency of injecting in the past month among the following categories: none, once in a while, 1 to 2 times per week, 3 to 4 times per week, or every day. People who use drugs indicating that they injected every day reported an average of 4.8 injections per day. Among people who use drugs reporting injecting in the past month, we calculated a weighted average of the number of injections per day by assuming average injection frequencies for each category (1 per 14 days for once in a while, 1.5 per 7 days for 1 to 2 times per week, and 3.5 per 7 days for 3 to 4 times per week).

We calculated low and high estimates by using the upper and lower limits of the average injecting frequencies for each category. We estimated that, on average, people who use drugs inject 1.7 times per day or 609 (range 480 to 740) times per year in Toronto and 1.9 times per day or 708 (range 552 to 871) times per year in Ottawa.

The I-TRACK surveys also asked about needle-sharing. In Toronto, 18% of people who use drugs reported sharing needles with someone else in the past six months. Of those reporting sharing, people who use drugs in Toronto were asked to indicate how often they shared needles among the following categories: occasionally, sometimes, usually, or always. Assuming that these categories span the range from 0% to 100%, we assigned the numerical ranges of 1-25%, 26-50%, 51-99%, and 100% to the four categories, respectively. We assumed that the average sharing frequency in each category was the mid-point of the numerical range. Based on these assumptions, we estimated that among people who use drugs reporting sharing, 40% of injections are shared. Taking into account that 18% of people who use drugs reported sharing needles, we estimated that 7% (range 6.0% to 8.4%) of all injections in Toronto are shared. In Ottawa, people who use drugs were asked to indicate how many injections they had shared in the past month among the following categories: 0 injections, 1 to 10 injections, 11 to 20 injections, 31 to 40 injections, 41 to 50 injections, 61 to 70 injections, or 71 to 80 injections. We assumed that the average sharing frequency in each category was the mid-point of the numerical range. Based on these assumptions, we estimated that 4.5% (range 3.5% to 5.6%) of injections in Ottawa are shared.

We adjusted the annual number of injections and the fraction of shared injections to calibrate to stable HIV and HCV prevalence among people who inject drugs. In Toronto, this resulted in 480 injections per year, with 3% of injections shared. In Ottawa this yielded an estimate of 550 injections per year, with 3% of injections shared. These estimates are towards the low range estimate for these parameters. This may be due to over-reporting in the data or for the presence of established injecting partnerships where syringes are not shared completely at random. We assumed no difference in needle sharing due to HIV infection (34).

Opioid replacement therapy programs reduce the frequency of injecting by 56% to 80% (35–37) and reduce the risk of sharing injection equipment by 50% to 90% (37–39). In the base case, we assumed that people who use drugs in methadone maintenance therapy inject 65% less frequently and share injections 75% less often than people who use drugs not in therapy.

Transmission through sharing of crack smoking equipment

A study of non-injecting people who use drugs found that those who reported sharing crack pipes and other equipment were more likely to be infected with hepatitis C, though this study did not estimate the risk of transmission per sharing event (40). We calibrated to constant hepatitis C prevalence among crack cocaine smokers to estimate the probability of transmission of hepatitis C per sharing event, imposing the restriction that this should be less than the probability of transmission through needle sharing. This yields a 0.04% probability of transmission of hepatitis C

per-act of sharing crack smoking equipment. We assumed no transmission of HIV through sharing of crack smoking equipment.

Sharing of Crack Smoking Equipment

We estimated the frequency of crack cocaine use from a study of crack cocaine use among injecting and non-injecting people who use drugs across 22 US cities (27). Non-injecting crack cocaine smokers reported using drugs 81.9 times in the past 30 days, from which we estimate that crack cocaine smokers smoke an average of 2.7 times per day. In the same study, people who use drugs reported using drugs 109.8 times in the past 30 days, while people who use drugs also smoking crack cocaine used drugs 134.7 times in the past 30 days. We assumed that this increase in the frequency of drug use among people who use drugs smoking crack cocaine represented crack cocaine use, from which we estimated that people who use drugs also smoking crack cocaine smoke an average of 0.83 times per day. In Toronto, 93% of people who use drugs also reported smoking crack cocaine (5). We therefore assumed that all people who use drugs also smoke crack cocaine.

High rates of equipment sharing have been reported by people who use crack cocaine. In a survey of non-injecting people who use drugs in Seville, Spain, 83% of people who use crack cocaine reported sharing equipment (40). Similarly, a study of injecting people who use drugs who also smoked crack in Ottawa found that at baseline 85% of people who use drugs shared crack pipes and other crack smoking equipment (41). Consistent with these studies, 73% of crack cocaine smoking participants in the Toronto I-TRACK survey

reported borrowing drug use equipment. We assumed the same rate of sharing crack equipment among crack cocaine smokers and injecting people who use drugs also smoking crack cocaine. We assumed crack cocaine smokers in Ottawa share equipment with the same rate.

Mortality

We estimated the annual mortality rate in non-people who use drugs from an average of age-specific mortality rates weighted by the population distribution of 15 to 64 year olds in Ontario (42,43). We assumed that people who use drugs experience an annual drug-related mortality rate of 1.08%, estimated from a meta-analysis of injection drug using cohorts (44). From the same study, we estimated a relative risk of death among people who use drugs in opioid replacement therapy of 0.4. People who use cocaine have a greater mortality risk than people who use heroin due to increased risks of suicide, accidents, and altercations. A study in France estimated a standardized mortality ratio of 4.50 for people who use heroin and 5.27 for People who use cocaine from which we estimated a relative mortality hazard ratio on the mortality of 1.17 for People who use cocaine (relative to people who use heroin) (45).

We estimated the annual mortality risk for HIV-positive non-people who use drugs from a Danish study of a cohort of HIV-infected individuals (46). They observed an annual mortality rate of 2.2% among HIV-infected individuals not receiving antiretroviral therapy. But this cohort also included individuals co-infected with hepatitis C. To adjust for this, we estimated the mortality hazard ratio for co-infection with HIV and

hepatitis C to be 3.0 (relative to HIV infection only) based on an annual mortality rate of 5.7% among individuals co-infected with HIV and hepatitis C as compared to a 1.9% annual mortality rate among individuals only infected with HIV. The overall prevalence of hepatitis C in the cohort was 17%. Assuming that the mortality rate observed among HIV-infected individuals not receiving antiretroviral therapy is the average of the mortality rate of those only infected with HIV and those co-infected with hepatitis C, weighted by the prevalence of hepatitis C, we estimated an annual mortality rate of 1.64% for individuals only infected with HIV not receiving treatment. We modeled the risk of death associated with HIV infection in people who use drugs from a cohort study in Spain which estimated the relative risk of death for HIV-positive people who use drugs to be 4.08 relative to HIV-negative people who use drugs (47). We assumed a relative risk reduction in mortality associated with the antiretroviral therapy use of 0.48 based on a study of 12 cohorts in the United States and Europe (48). We assumed this relative risk was the same for both the general population and people who use drugs.

We estimated the mortality risk of hepatitis C infected individuals from a recent cohort study of 34,480 hepatitis C infected patients matched to uninfected controls in the VA health system (49). Patients co-infected with HIV were excluded. As compared to the control population, patients infected with hepatitis C experienced a mortality hazard ratio of 1.37. We assumed that this hazard ratio was the same for both the general population and people who use drugs.

Calibration

We adjusted the annual rates of aging into Toronto and Ottawa to match the projected population growth in each city. In Toronto, individuals age in at an annual rate of 0.65% to match the projected 0.3% annual growth, while in Ottawa, we found the required rate of aging in to be 1.8% to match the projected 1% annual growth. We calculated the annual rates at which non-users initiate crack smoking or injection drug use to be 0.06% and 0.07%, respectively, in Toronto, and 0.02% and 0.04% in Ottawa, in order to maintain a constant fraction of crack smokers and people who use drugs in the population. We calculated the annual rates at which people who use drugs enter methadone maintenance therapy to be 0.65 in Toronto and 0.13 in Ottawa such that a constant fraction of people who use drugs on treatment is maintained in each city.

We adjusted the number of injecting people who use drugs, risk categories (number of sex partners, condom use, preference for sex partners who use drugs, shared injections) and transmission probabilities in model calibration. We calibrated HIV-related parameters to match HIV incidence as well as the proportion of HIV infections that are attributed to injection drug use versus sexual contact reported in the most recent report on HIV/AIDS surveillance in Ontario (3). We assumed that the HIV and hepatitis C epidemics in people who use drugs in these cities are relatively stable. Thus we also calibrated risk categories and disease transmission parameters to maintain constant prevalence of disease in these populations.

Costs

We estimated the average annual health care costs for 15-64 year-olds from the average of age- and gender-specific health care expenditures reported by the government of Ontario weighted by the age and gender distributions of 15-64 year-olds in Ontario (Table 3) (43,50). We estimated the annual health care costs for people who use drugs from estimated of drug abuse related health care costs (18). A national report on the costs of substance abuse in Canada released by the Canadian Center on Substance Abuse estimates that inpatient hospital care accounts for 69% of total health care costs related to illicit drug use (\$778,000 out of \$1.13 million) (51). A study of health utilization among people who use drugs in Vancouver estimated an annual admission rate of 0.77 for HIV-negative individuals, with a median stay of 5 days per admission and an average daily cost of \$610 in 2001 (52). Assuming this represents 69% of total health care costs, we estimated the annual direct health care costs of an HIV-negative person who uses drugs to be \$4,000 in 2009 Canadian dollars.

We estimated that being in methadone maintenance therapy reduces a person who use drug's base health care costs by 20% based on a cost effectiveness analysis of addiction treatment programs in California (18,19,53). However, individuals in methadone maintenance therapy incur additional program and medication costs, which are estimated to be about \$6,000 in 2002 in Canada (\$6,900 in 2009 CAD) (18,54).

We were unable to find Canadian data on specific costs of injecting drugs and smoking crack cocaine. Instead we calculated these costs from reports of drug use related

expenditures in Australia, which indicated that \$113 million and \$2,386 million were spent in direct health care costs related to cocaine and heroin use, respectively, in 2004 (55). We subtracted the \$29 million spent on methadone maintenance therapy in Australia in 2003 from heroin-related costs to account only for base health care costs of heroin use (56). Dividing by the estimated 13,892 People who use cocaine and 41,401 people who use heroin in Australia in 2004 (55), we calculated the annual direct health care costs to be \$8,134 per person who uses cocaine and \$56,134 per person who uses heroin. The relative health care cost of cocaine use as compared to heroin use is therefore 14.5%.

The cost of HIV infection differs by the stage of disease (unaware, aware, and receiving antiretroviral therapy). We assumed that HIV-infected individuals unaware of their disease state incur the same healthcare costs as those uninfected with HIV. We estimated the costs of those aware of their HIV infection and those receiving antiretroviral therapy for their disease from a retrospective analysis of health care utilization by HIV-infected patients in the Southern Alberta. This study found that the average direct HIV-related costs to be about \$8,858 for therapy-naïve and \$15,930 therapy-experienced patients inflated to 2009 Canadian dollars (57).

We estimate the cost of hepatitis C infection using the same sources and methodology as in the analysis of Vancouver's safe injection site, which extrapolates the annual cost of infection to the Canadian setting from lifetime cost estimates from the United States (18,58,59).

We assumed that the cost of operating a supervised consumption site in Toronto or

Ottawa would be similar as that of operating a site in Vancouver. The operating budget of the Vancouver site in 2010 was \$2,969,400 with 312,214 visits by 12,236 unique clients in that year (60). In the absence of fixed and variable cost estimates for the Vancouver site, we assumed that the cost structure would be similar to a supervised injecting center in Sidney, Australia, where 48.4% of the annual operating budget was allocated to fixed operating expenses. Applying this to the budget of the Vancouver facility yields an estimated fixed cost of \$1,440,000. The remaining budget then represents a per-client variable cost of \$125 per client per year. The total operating costs of establishing multiple sites is then the sum of the fixed cost of \$1,440,000 multiplied by the total number of sites established and the per-client cost of \$125 multiplied by the total number of clients served.

Utilities

We calculated the baseline utility of the general population to be 0.894 (95% CI 0.887 to 0.901) by taking an average of the age-specific EQ-5D scores reported by a nationally representative sample of US adults aged 20 years or older (61), weighted by the age distribution of the population of Ontario (Table 4). We estimated the baseline utility of people who use heroin to be 0.73 from a utility assessment of people who use heroin in the Netherlands using the EQ-ED survey (62). Studies have found no statistically significant differences in utility associated with cocaine use or enrolment in methadone maintenance programs as compared to heroin use (62,63). Therefore, we applied the same utility of 0.73 to both crack cocaine smokers and people


who use heroin in methadone maintenance therapy.

We assumed that HIV infected individuals unaware of their infection experience the same utility as their uninfected counterparts. Post-diagnosis, consistent with studies and meta-analyses, we assumed that HIV infection is associated with a utility of 0.9 (64–66). We assumed the same utility for HIV infected individuals receiving ARTs, as studies have not found significant differences in utility associated with ART (67–70). The utility of chronic HCV infection was estimated from a meta-analysis that calculated a utility of 0.82 for untreated chronic HCV infection (71).

For compartments consisting of multiple health conditions, we assumed that the minimum applicable utility reflected the overall utility of that compartment. For example, the utility of a person who uses heroin infected with HIV would be the minimum of the baseline utility of a person who uses heroin (0.73) and the utility of HIV infection (0.9) for an overall utility of 0.73. Combining utilities in this way has been found to better match elicited multi-state utilities as compared to multiplicative and additive methods (72,73).

Supervised Consumption Site Effects

In the base case, we assumed that supervised consumption sites in Toronto would have similar impacts on risky activities as was found among clients of the Vancouver supervised injection site. In Vancouver, studies found an odds ratio of 0.3 (95% CI 0.11 to 0.82) of sharing syringes among



clients of the site (74). An odds ratio has the mathematical form

$$OR = (q/(1-q))/(p/(1-p)),$$

where p is the baseline probability and q is the post-intervention probability. We assume that clients of a supervised consumption site in either Toronto or Ottawa would have the same odds ratio of sharing as those using a site in Vancouver. Therefore, we can calculate the fraction of injections that would be shared by clients of a supervised consumption site in these cities, q , from the sharing reported in the I-TRACK surveys, p . Based on the I-TRACK survey data we estimated that people who use drugs share 7% of injections in Toronto and 4.5% of injections in Ottawa. We would then expect that clients of a supervised consumption site would share 2.3% of injections in Toronto and 1.4% of injections in Ottawa, for a relative risk of needle sharing of 0.32 (range 0.14 to 0.70) and 0.31 (range 0.15 to 0.66) associated with use of a supervised consumption site in Toronto and Ottawa, respectively. Given the similarity of these estimates, we assume a relative risk of 0.32 for both cities and vary this assumption in sensitivity analysis.

Table 2: Input Parameters

Variable	Toronto Value (low–high)	Ottawa Value (low–high)	Source
Population size	812,348	570,158	(1,2)
Drug user population size			
Crack cocaine smokers - n	9,600 (1,000–15,000)	3,550 (1,000–15,000)	Calculated
Injection people who use drugs - n	9,000 (3,000–20,000)	1,200 (1,000–10,000)	Calibration, (3,4)
Proportion of injection people who use drugs receiving methadone - %	40 (34–46)	12 (7.9–15.3)	I-TRACK
Migration rates			
Out of population - %	1.93 (1.91–1.94)	3.52 (3.48–3.57)	(6)
Into non-user, HIV-, HCV- population - %	3.40 (3.38–3.42)	4.47 (4.42–4.52)	(6)
Aging rates			
Aging in (at age 15) per year - %	0.65 (1.65–1.78)	1.83 (1.65–1.78)	Calibration, (42)
Aging out (at age 65) per year - %	1.42 (1.36–1.48)	1.42 (1.36–1.48)	(42)
Drug use dynamics			
Rate at which HIV-, HCV- non-users start smoking cocaine (annual) - %	0.06	0.05	Calibration
Rate at which HIV-, HCV- non-users start injecting heroin (annual) - %	0.07	0.02	Calibration
Rate at which people who use drugs stop drug use and return to the general population (annual) - %	11 (4–18)	“	(8)
Opioid replacement therapy			
Rate at which injection people who use drugs initiate methadone maintenance therapy (annual) - %	65	12.8	Calibration
Rate at which injection people who use drugs end methadone maintenance therapy and return to drug use (annual) - %	90 (86–95)	“	(9)
Rate at which injection people who use drugs end methadone maintenance therapy and stop injecting (annual) - %	5 (2–7)	“	(8)
HIV prevalence - %			
Non-user	0.61 (0.59–0.62)	“	(3)
Cocaine smoker	5.8 (2.6–9.1)	Assumed from Toronto	I-TRACK
Injection drug user	3.2 (1.0–5.3)	11.1 (7.5–14.7)	I-TRACK
Initially unaware – non-user	65	“	(11)
Initially unaware – drug-user	75	“	(11)
HCV prevalence - %			
Non-user	0.63 (0.626–0.635)	“	(10)
Cocaine smoker	29.0 (22.9–35.5)	Assumed from Toronto	I-TRACK
Injection drug user	51.6 (47.1–56.2)	59.5 (53.9–65.2)	I-TRACK

Annual risk of sexual transmission, per partner

HIV - %	3 (0.4–3.1)	3 (0.4–3.1)	Calibration, (16,17)
Relative risk with antiretroviral use	0.04 (0–0.13)	“	(16,21)
Relative risk with condom use	0.2 (0.06–0.65)	“	(26)
HCV	0	“	(75,76)

Annual number of sexual partners

Non-user	5.0 (1.0–?)	5.0 (1.0–?)	Calibration, (23)
Injection drug user	5.6 (5.6–10.5)	2.0 (2.0–4.0)	Calibration, I-TRACK
Cocaine smoker	9.4 (5.2–9.4)	Assumed from Toronto	Calibration, I-TRACK

Condom use

Non-users, HIV-negative - %	24 (19–29)	“	(24,25)
Non-users, HIV-positive - %	76 (67–83)	“	Calculated, (29)
Crack smokers, HIV-negative - %	40 (40–60)	Assumed from Toronto	Calibration, I-TRACK
Injection drug user, HIV-negative - %	60 (40–60)	50 (30–50)	Calibration, I-TRACK
Relative risk of unprotected sex, after HIV diagnosis	0.51 (0.22–0.99)	“	(30)

Drug user preferential sexual mixing

Non-user - %	0	“	Assumed
Injection drug user - %	30 (10–60)	30 (10–60)	Calibration, (27,28)
Cocaine smoker - %	60 (10–60)	Assumed from Toronto	Calibration, (27,28)

Transmission risk per shared injection

HIV - %	0.7 (0.7–1.0)	0.7 (0.7–1.0)	Calibration, (31)
HCV - %	1.2 (0.5–3.2)	1.2 (0.5–3.2)	Calibration, (32)

Injections

Annual number of injections - n	480 (480–740)	550 (550–870)	Calibration, I-TRACK
Shared injections - %	3.0 (6.0–8.5)	3.0 (3.5–5.6)	Calibration, I-TRACK
Effects of ORT			
Relative number of injections among users of opioid replacement therapy	0.35 (0.20–0.44)	“	(35–37)
Relative risk of sharing injections among users of opioid replacement therapy	0.25 (0.10–0.50)	“	(37–39)

Transmission risk per episode of sharing crack cocaine paraphernalia

HIV - %	0	0	
HCV - %	0.02	0.02	Calibration

Crack cocaine smoking

Annual episodes, injection drug user -n	303	“	Calibration Estimated, (27)
Annual episodes, Crack cocaine smoker - n	986	“	(27)
Proportion of episodes in which equipment is shared - %	73	Assumed from Toronto	I-TRACK, (40)

Clinical Course of HIV infection

Non-user			Bayoumi 2011, (12,13)
Annual rate of HIV diagnosis - %	10	"	
Annual rate of HIV diagnosis and immediate initiation ART - %	5	"	
Annual rate of ART initiation following diagnosis - %	32	"	
Drug user			Bayoumi 2011, (13,15)
Annual rate of HIV diagnosis - %	15	"	
Annual rate of ART initiation following diagnosis - %	34	"	
Mortality			
Non-users, annual mortality risk - %	0.224	"	(42,43)
Excess annual mortality rate due to injection drug use - %	0.52 (0.11–0.74)	"	(44)
Relative mortality risk injection drug user using opioid replacement therapy (relative to injection drug user)	0.4 (0.2–0.8)	"	(44)
Relative mortality hazard for crack cocaine smoker (compared to injection drug user)	1.17	"	(45)
HIV-positive non-user - %	1.63 (1.33–2.14)	"	(46)
Relative mortality risk for HIV-positive injection drug user (relative to HIV-negative injection drug user)	4.08 (3.63–4.58)	"	(47)
Relative mortality risk for HCV-positive non-user (relative to HCV-negative non-user)	1.37 (1.31–1.47)	"	(49)
Relative mortality risk for HCV+ injection drug user (relative to HCV- injection drug user)	1.0 (1.0–2.0)	"	(77)
Relative mortality risk for HCV-HIV co-infected individuals (relative to HCV-)	3.0 (2.0–4.0)	"	(46)
Relative mortality risk with antiretroviral therapy	0.48 (0.41–0.57)	"	(48)

Table 3: Costs

Annual Health-Related Costs (2009 CAD)	Base case value	Source
General population	\$2,133	(50)
Injection drug user	\$4,000 (\$3,000–\$7,000)	(51,52)
Relative cost in methadone maintenance therapy	0.8	(18,19,53)
Cost of methadone maintenance therapy	\$6,864 (\$4,000–\$9,000)	(54)
Relative cost of crack cocaine smoker (compared to injection drug user)	0.145	(55,56)
HIV-positive, not using antiretroviral therapy	\$8,858	(57)
HIV-positive, using antiretroviral therapy	\$15,930	(57)
Chronic HCV infection	\$2,657 (\$2,000–\$3,000)	(18,58,59)
Annual Supervised Consumption Site Costs		
Fixed cost	\$500,000	Calculated
Variable costs per user	\$202	Calculated, (60)

Table 4: Utilities

Utilities	Base case value	Source
Non-user	0.894 (0.887–0.901)	(61)
Person who injects drugs	0.73 (0.69–0.88)	(62)
Relative utility of methadone treatment	1.0 (1.0–1.4)	(62)
Person who injects drugs in methadone treatment	0.73 (0.73–1.0)	Calculated
Cocaine smoker	0.73 (0.69–0.88)	(63)
HIV+	0.9 (0.85–0.95)	(64–66)
Relative utility, HIV+ with ART	1.0 (0.80–1.0)	(67–69)
HCV+	0.82 (0.70–0.86)	(71)

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