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PUBLIC HEALTH AND
EMERGENCY SERVICES

Waterloo Region
Supervised Injection Services

**FEASIBILITY
STUDY**

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Executive Summary

Across Canada, rising numbers of overdose and overdose-related harms has spurred communities to bolster strategies to address problematic substance use.

Comprehensive strategies that include a combination of prevention, harm reduction, treatment and enforcement measures tackle the issues from multiple levels. This approach is called a “four-pillar” model and has been the adopted strategy of the Waterloo Region Integrated Drugs Strategy. Activities to address problematic substance use have been implemented across all four pillars in Waterloo Region. A supervised injection service is a healthcare service operated according to harm reduction principles with the goal of reducing the negative health outcomes of substance use, including death. Exploring whether supervised injection services are needed was prioritized because of the rising number of overdose and overdose-related deaths in Waterloo Region.

What are Supervised Injection Services?

Fundamentally, a supervised injection service is a health care service. Locations are established to provide support, healthcare and a place for people to inject pre-obtained substances without fear of dying from an opioid-related overdose. At a supervised injection site, people may use drugs intravenously under the care of a trained health care provider. These locations can be small, allowing for two or three people to use the service at one time; but they can also be larger in scale. In Ontario, supervised injection services must be integrated with other services in order to be funded. First aid, referrals to treatment, access to clean needles and safe disposal of needles must also be available at the site.

Description of the Waterloo Region Supervised Injection Services Feasibility Study

Region of Waterloo Public Health and Emergency Services, in consultation with community partners, undertook a multipronged research study to determine the feasibility of supervised injection services for Waterloo Region. The study included:

- A review of secondary data sources related to opioid use in Waterloo Region;
- In-person surveys with people with experience of injection drug use;
- Key informant interviews with harm reduction service providers;
- Information and consultation (focus group) sessions with groups interested in the opioid response for Waterloo Region; and
- An online survey to gather public input.

Supervised injection services are being explored in Waterloo Region as part of a community response to social service issues as a result of increased opioid use. In order to legally operate supervised injection services, a federal exemption is required.

The application for exemption requires broad community consultation and a description of the local context supported by data.

The goal of phase one of the Waterloo Region Feasibility Study was to document and describe issues related to overdose and injection drug use in Waterloo Region; to determine if supervised injection services would be used by people at risk for overdose; to gain community input on how supervised injection services may be of benefit to the community, and to uncover concerns about such services being implemented in Waterloo Region. The study also aimed to understand how such concerns can be addressed.

Key findings of the Waterloo Region Supervised Injection Services Feasibility Study include:

- An estimated 4,000 people in Waterloo Region inject drugs.
- About half (47.8%) of the people surveyed who inject drugs inject daily and 75.6 per cent reported injecting in public in the last six months.
- The most commonly reported reason for public drug use was homelessness.
- Respondents reported injecting most often in downtown Kitchener, and in Galt City Centre/South Galt.
- About four out of five (78.6%) people reported injecting drugs alone, increasing their risk for fatal overdose.
- Accidental overdose was reported by 39.0 per cent of respondents and 47.1 per cent of respondents have administered naloxone to someone who was overdosing.
- Most people who inject drugs (86.3%) said that they would use or might use supervised injection services if they were available in Waterloo Region. Half (51.3%) indicated they would use a supervised injection site always (100% of the time) or usually (75% of the time) for their injections.
- The most commonly mentioned benefits of supervised injection services included a reduction in public drug use, a decrease in the number of overdoses, and a reduction in the spread of blood borne infections.
- Community concerns regarding supervised injection services centred on questions of whether supervised injection services would compromise the safety of dependants, people who may use the services, and the surrounding neighbourhood
- Participants across all methodologies recommended the following strategies to address the concerns of the community about supervised injection services:
 - improving communication about the process to consider supervised injection services;
 - educating the community on addiction, mental health, and harm reduction to build understanding and reduce stigma; and

- creating an advisory group to oversee and respond to issues that may arise during implementation of supervised injection services.

Conclusions:

- Substantial support exists for supervised injection services in Waterloo Region as a strategy to reduce the occurrence of overdose, reduce public injecting, connect individuals with health and social services in the community, and provide access to clean and sterile injection drug use equipment.
- Residents of Waterloo Region are genuinely concerned about those who suffer from drug addiction and are equally concerned about the implications of injection drug use on the community.
- There was strong support for service integration within a supervised injection service model. Access to addiction treatment options, either through referral or onsite, was seen as essential by all respondents including those who use substances.
- While most feel that supervised injection services are needed in Waterloo Region, some people did not support this strategy. Concerns were raised about where sites would be located and the potential impacts on the surrounding community including safety of children and dependents, property values, drug trafficking, and the effect on businesses.
- Increasing communication in the community about addiction, harm reduction, and supervised injection services was identified as a key strategy to addressing community concerns.
- Downtown Kitchener and South Cambridge (Galt) were identified as the most important locations for supervised injection services; however a third site (temporary or mobile) was also recommended to address potential need in other areas. It was strongly recommended by all groups not to concentrate services in one area by establishing one site in the region. There is fear that a single location would stigmatize an area, and overtime may result in more people moving to that area in order to access services.

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1.0 Introduction

1.1 What is the Opioid Crisis?

Opioid overdose-related deaths are on the rise in Canada. Health Canada reported more than 2,800 suspected opioid-related deaths across the country in 2016 and preliminary data suggests that the number of lives lost will most likely surpass 3,000 in 2017 (Health Canada, 2017). Across Canada, communities are planning and implementing comprehensive harm reduction strategies to address rising numbers of overdose and overdose-related deaths nationwide. The Federal Minister of Health reported in 2016 that Canada was facing a serious and growing opioid crisis signaled by high rates of addiction, overdoses and deaths across Canada. The opioid crisis is a complex health and social issue with devastating consequences for individuals, families, and communities (Health Canada, 2016).

Opioids are a family of drugs used to treat acute and chronic pain. Over the past several years there has been increasing concern regarding the misuse of prescription opioids, including overprescribing and the appearance of these medications in the illicit drug market. While fentanyl can enter the market through diversion of pharmaceutical fentanyl products in pill, powder or patch form, more and more, fentanyl and its analogues including Carfentanil and Cyclopropyl Fentanyl are imported or smuggled from abroad. In turn, these substances are used to create illicit products or added to other substances such as cocaine or heroine. When fentanyl is combined with other substances, the potency of the drug is increased and can be lethal, even in minute doses. When the person using the substance is unaware that they are taking fentanyl, the risk of overdose, particularly fatal overdose, is increased.

Addiction is characterized by the inability to stop using despite knowing the harmful consequences and wanting to stop. In 2016, more than 40,000 Ontarians were newly started on high doses of prescription opioids¹ (Kudhail, 2018) and 29 per cent of Canadians aged 18 years and older recently reported having used some form of opioids in the last five years² (Statistics Canada, 2018). Continued opioid use can cause dependence, which may lead to addiction. According to the National Institute on Drug Abuse, addiction is a “chronic, often relapsing brain disease that causes compulsive drug seeking and use, despite harmful consequences to the addicted individual and to those around him or her” (National Institute on Drug Abuse, 2016). Research shows that addictive disorders are health conditions and can be treated (Notarandrea, 2018).

¹ Over 90 mg of morphine per day, or the equivalent dose of a different opioid.

² Opioids are medications that relieve pain. Common opioids include fentanyl, OxyContin, morphine, and codeine.

1.2 What are supervised injection services?

Supervised injection services are legally-sanctioned, medically-supervised services where individuals can consume pre-obtained illicit drugs intravenously. Supervised injection services create a supportive environment for those suffering from addiction and are available worldwide, including in Canada.

In Ontario, the Ministry of Health and Long-Term Care established the supervised injection services program to complement and enhance existing harm reduction programming in response to growing public health concerns in Ontario related to opioid misuse and overdose. The Ministry lists the following impacts related to the establishment of supervised injection services (September 2017):

- Reduced overdose related morbidity;
- Improved community safety by decreasing public injecting and discarded needles, and no increase in drug-related crime;
- Increased referrals to health and social services including detoxification and drug treatment programs; and
- Reduced HIV and Hep C transmission as a result of fewer needles being shared and/or reused³.

In Ontario, supervised injection services must be integrated with other harm reduction services which at a minimum must include first aid, education on safer injection, provision (and disposal) of sterile injection supplies, distribution of naloxone, and referrals to other health and social services.

1.3 How do supervised injection services fit with other strategies to address problematic substance use?

Drug strategies in Canada aim to address problematic substance use through interventions that fall into four general categories: (1) prevention, (2) treatment and rehabilitation, (3) justice and enforcement and (4) harm reduction. When implemented in tandem, the four categories (or pillars) form a comprehensive strategy. While prevention-based strategies aim to educate and prevent addiction from occurring, harm reduction strategies aim to support people who are struggling with addiction. According to the Centre for Addiction and Mental Health, harm reduction programs do not only benefit individuals who use substances but also the community (2002):

³ These reported impacts are supported by evidence gathered from supervised injection services located in Canada and Australia (Potier, Laprevote, Dubois-Arber, Cottencin, & Rolland, 2014).

There is evidence that programs that reduce the short and long term harm to people who use benefit the entire community through reduced crime and public disorder, in addition to the benefits that accrue from the inclusion into mainstream life of previously marginalized members of society. The improved health and functioning of individuals and the net impact on harm in the community are notable indicators of the early success of harm reduction (Centre for Addiction and Mental Health, 2002).

Supervised Injection is a health-based strategy that aims to reduce harms facing people who use substances, including overdose, blood-borne infections, and other health care issues.

1.4 Study Objectives

To operate legally in Canada, supervised injection services require an exemption under Section 56 of the Federal Controlled Drugs and Substances Act (CDSA). In order to receive an exemption from Health Canada, the applicant is required to provide information regarding the intended public health benefits of the site and must include a description of local conditions indicating a need for the site and “expressions of community support or opposition”. Funding for supervised injection services in Ontario is provided by the Ministry of Health and Long-term Care. Applications for funding must contain similar data submitted through the federal application. A multi-pronged feasibility study was designed in order to gather the required information for Waterloo Region. The following objectives guided the study:

1. To determine the need for supervised injection services in Waterloo Region;
2. To determine the conditions under which supervised injection services would be used and judged as suitable or attractive by program deliverers and potential clients;
3. To determine the extent to which supervised injection services are seen as helpful to Waterloo Region by community stakeholders and the community, to uncover any concerns about supervised injection services, and to discuss mitigation strategies related to concerns;
4. To determine how supervised injection services could be integrated within existing harm reduction services in Waterloo Region; and
5. To determine potential locations for supervised injection services.

2.0 Study Design

2.1 Methodology

In July 2017, the British Columbia Centre on Substance Use⁴ (BCCSU) released the Supervised Consumption Services Operational Guidance⁵ document. This document provides evidence, best practices, and lessons learned from areas that have supervised consumption services in operation and recommends conducting a feasibility study with a mixed methods approach to ensure that key stakeholder groups are consulted when exploring the need for such services.

Region of Waterloo Public Health, in consultation with the Supervised Injection Services Feasibility Workgroup, employed this methodology for the following reasons:

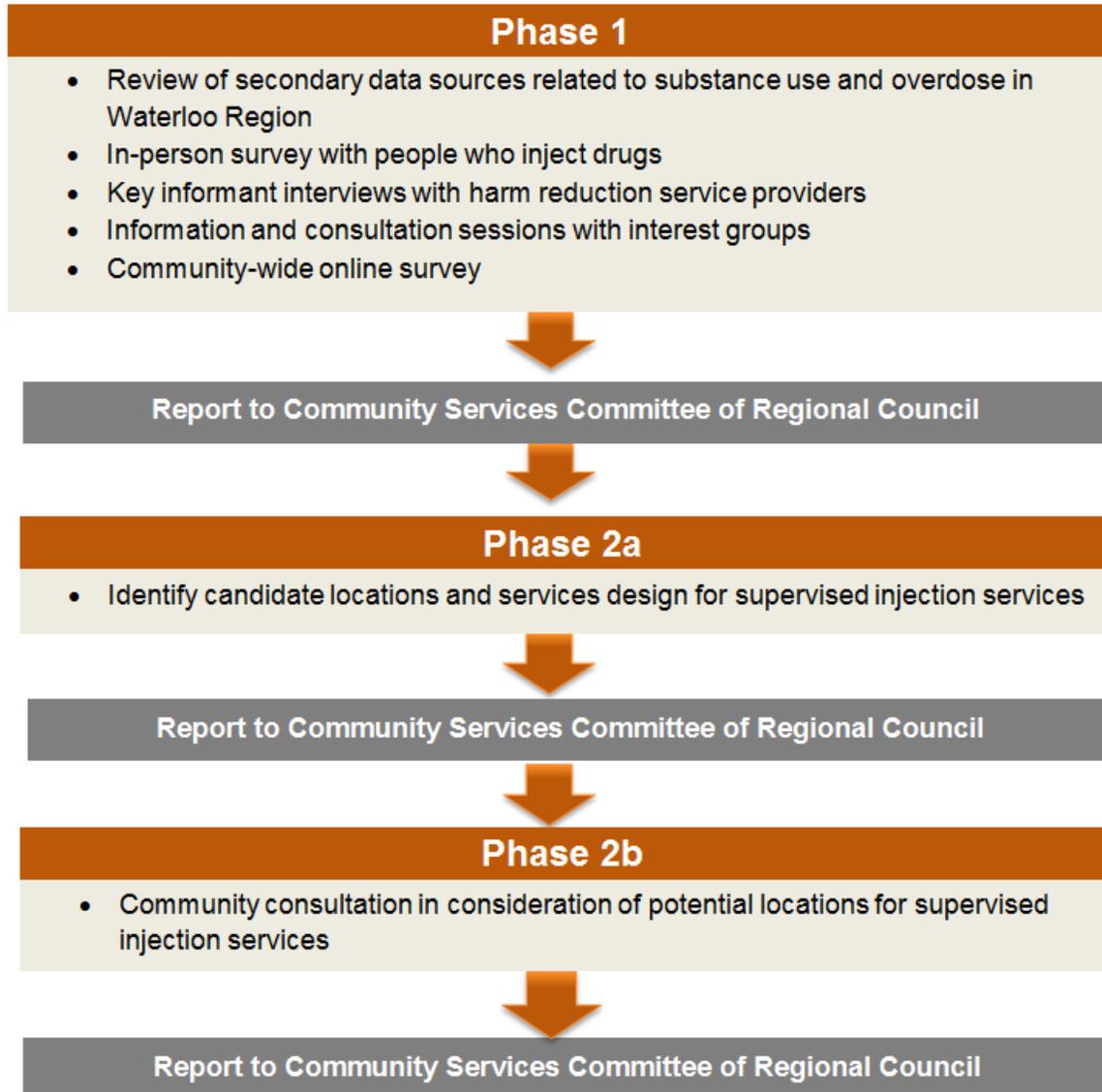
- The methodology was developed using the best available research relating to harm reduction and supervised consumption services;
- The methodology was successfully used in London, Thunder Bay, and Hamilton; and
- The consultation materials had been piloted on the target sample populations and the materials were easily modifiable to support the local context.

The Waterloo Region Supervised Injection Services Feasibility Study has two phases (refer to Figure 1). In the first phase, the need for supervised injection services is explored and broad community input is gathered in order to understand the perceived benefits and concerns of establishing supervised injection services in Waterloo Region. Subject to Regional Council's consideration and approval of the Phase 1 study findings, the second phase of the study would involve identification and exploration of potential locations for safe injection services, and further consultation with those who live, work, or go to school in close proximity to a proposed location. Implementation of this second phase would only occur if approval from the Community Services Committee of Regional Council is received on the Phase 1 recommendations.

⁴ The British Columbia Centre on Substance Use is made up of various levels of academia (e.g. associate faculty members, research scientists, postdoctoral fellows) whose mandate is to develop, help implement, and evaluate evidence-based approaches to substance use and addiction.

⁵ Operational Guidance document can be found on the British Columbia Centre on Substance Use website: <http://www.bccsu.ca/wp-content/uploads/2017/07/BC-SCS-Operational-Guidance.pdf>

Figure 1. Supervised Injection Services feasibility study consultation phases

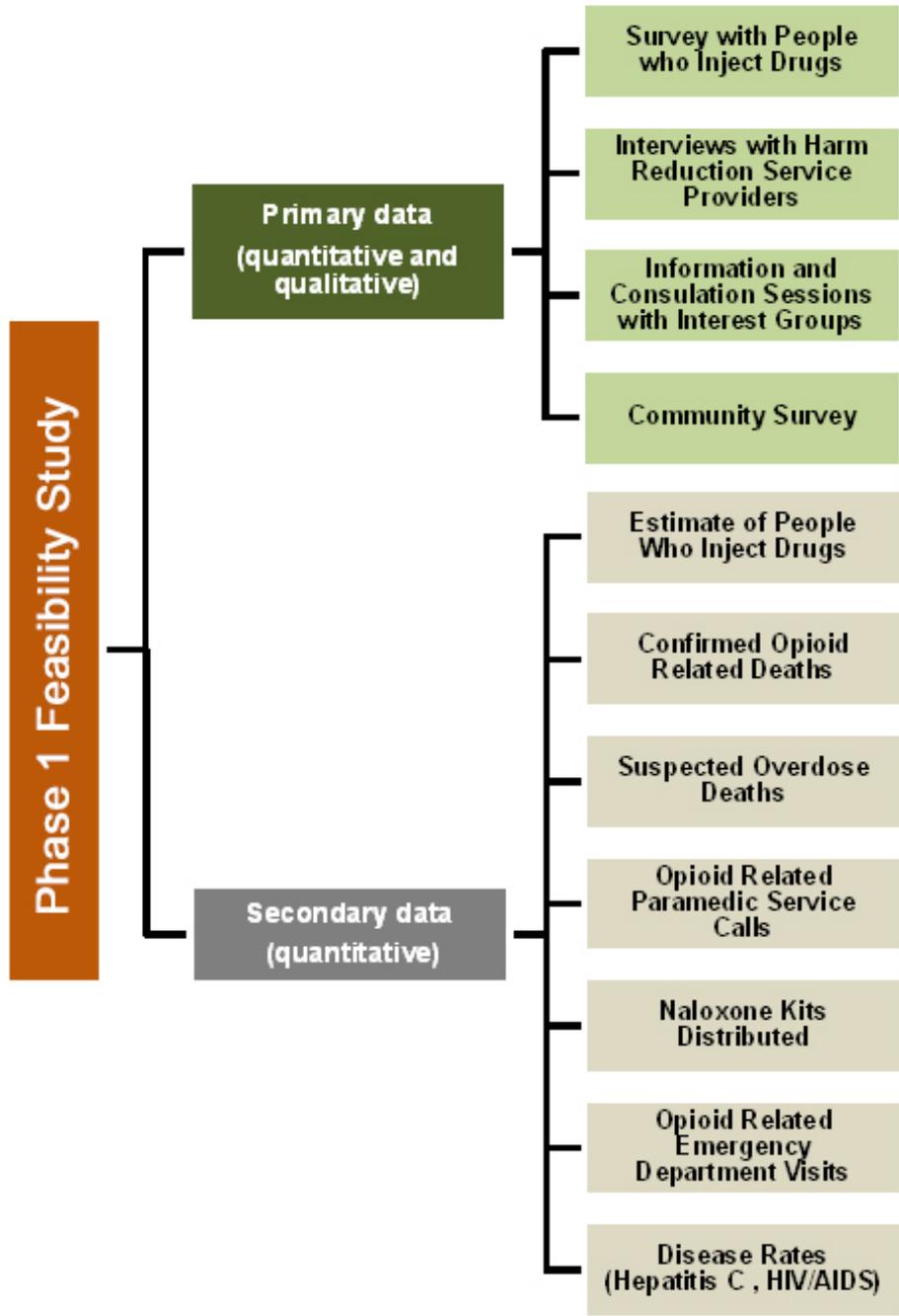


Currently, the Ministry of Health and Long-term Care only provides funding to operate supervised injection services, therefore this study focused solely on the feasibility of supervised injection and did not explore the feasibility of consumption of illicit substances by other means. The methodology for the study was reviewed and approved by the Region of Waterloo Public Health Research Ethics Board on October 16, 2017. Data collection began October 25, 2017.

A combination of secondary and primary data informed the findings. Secondary quantitative data sources were examined to understand the context of drug use and related consequences in Waterloo Region. These included data from harm reduction

programs, data from first responders including Waterloo Regional Police Services and Region of Waterloo Paramedic Services, and infectious disease rates. Primary data collection was used to document drug use patterns among people who inject drugs, as well as to gather opinions of people who use substances and harm reduction service providers regarding the need for supervised injection services. Additional qualitative methods were used to understand the extent to which such services are supported or opposed as a strategy to address opioid-related issues and substance use harms more generally. Figure 2 provides an overview of all data types used for Phase 1 of the Waterloo Region Supervised Injection Services Feasibility Study. For a list of data sources used, please see Appendix A.

Figure 2. Summary of data types and methodology for Phase 1



Consultation with community stakeholders was an important component of the study. Engagement of individuals who may use injection services was not only used to determine if such services would be used in Waterloo Region, but also helped to describe the conditions that would promote their use by those who would need them most. Further engagement of other community stakeholders including harm reduction service providers, community groups with an interest in addressing problematic

substance use, and the general population was provided with an opportunity for input regarding supervised injection services. The community consultations were effective in their goal of reaching a broad cross-section of people. Figure 3 lists the methods used for community consultation and their reach.

Figure 3. Community consultation methodology

Method	Sector reached
In-person surveys with people who inject drugs (146 conducted)	N/A
Key informant interviews with harm reduction service providers (11 conducted)	AIDS organization Addictions treatment Counselling organizations Emergency shelters (adults and youth) Health services Withdrawal management
Information and consultation sessions – focus groups (28 conducted)	Community interest groups Business Improvement Areas Police and Emergency Services Health services Housing Local Health Integration Network Municipal Services Outreach organizations Social Services
Community online survey (3,579 responses)	N/A

a) Survey with People Who Inject Drugs

Surveys were conducted with people who self-identified as having injected drugs in the last six months. The survey instrument, adapted from the British Columbia Centre on Substance Use guidance document, aimed to capture the following:

- Demographic information;
- Drug use and injection practices;
- Attitudes and opinions towards supervised injection services;
- Potential community impact of a supervised injection services;
- Overdose experience; and
- Drug treatment.

Community researchers with lived experience of substance use were hired by Region of Waterloo Public Health to visit agencies who serve people who inject drugs in the region between November 9, 2017 and December 8, 2017 to recruit participants to complete

the survey. Participants were eligible to complete the survey if they were 16 years of age or older; lived, worked or went to school in Waterloo Region; and had self-identified as having injected drugs in the last six months. Participants were also required to provide consent to participate in the study. The survey had 96 questions and took between 30 and 60 minutes to complete. Participants received a \$25 cash honorarium for their time.

Surveys were completed in person on paper, and promptly entered into an online survey tool (Enterprise Feedback Management) supported by Public Health. Region of Waterloo Public Health then exported the data to Microsoft Excel and SPSS for analysis.

b) Key Informant Interviews with Service Providers

Key informant interviews were held with harm reduction service providers in Waterloo Region from November 6-30, 2017. Harm reduction service providers have first hand experience of working with people who inject drugs and can provide valuable insight into the needs of this population.

Recruitment was done through email and interviews took place over the phone or in person. On two occasions, there were multiple attendees at the interview. Key informants were provided with an information and consent letter to participate in the study prior to beginning the interview. Following informed consent, a standardized set of questions adapted from materials developed by the BCCSU (refer to Appendix B for key informant interview guide), were used for each key informant interview. Interviews were approximately 30 minutes in length (except for the two group interviews which lasted over an hour).

Most responses were recorded electronically. In cases where this was not possible, hand written notes were transcribed in Microsoft Word upon completion of the interview. Responses were then summarized by question and points of commonality are shared in this report.

c) Information and Consultation Sessions

Information and consultation sessions were held with interest groups in the community between November 9, 2017 to December 20, 2017. Groups consulted consisted of stakeholders with a vested interest in the community opioid response or groups who possibly would be affected by implementation of supervised injection services in Waterloo Region. Selection of interest groups was informed by the BCCSU guidance document⁷, and by direction provided from the Supervised Injection Services Feasibility Workgroup as well as the Community Services Committee of Regional Council.

Sessions were arranged through email and delivered at a location of the group's choosing. The sessions consisted of an information component about supervised

injection services, harm reduction, and the purpose of the community consultation. This was followed by the consultation component (refer to Appendix C).

Sessions were facilitated by Region of Waterloo Public Health and Emergency Services. At a minimum, sessions were attended by the facilitator and note taker. For the majority of sessions, a subject matter expert was also present for questions. On five occasions, the lead researcher also attended the session. Word for word responses to the questions were recorded electronically in Microsoft Word. Sessions were between one and three hours long.

The qualitative data were analyzed for themes until saturation (until no new insights emerged). A second researcher involved in the information and consultations sessions validated the thematic analysis after it was conducted.

d) Community Survey

An online survey was developed in consultation with City of Hamilton Public Health Services who surveyed Hamiltonians in late 2016. Region of Waterloo Public Health adapted and localized their survey for use in this study.

The survey was developed using Enterprise Feedback Management software supported by Public Health. The survey took approximately 10 minutes to complete and was open from October 25, 2017 to December 1, 2017.

Participants were eligible to complete the survey if they were 16 years of age or older and lived, worked, or went to school in Waterloo Region. Participants were also required to provide consent to participate in the study prior to beginning the survey.

The survey was promoted to residents through a variety of means: emails to community networks, social media, print media, Public Health's website, and radio interviews.

The survey asked participants about the helpfulness of supervised injection services in Waterloo Region; whether or not they had any questions or concerns about supervised injection services; how those concerns could be addressed; the model of service (i.e. integrated, mobile) they believe should be provided in Waterloo Region; and basic demographic information. Participants were also provided a space to leave general comments about supervised injection services in Waterloo Region.

Region of Waterloo Public Health then exported the data to Microsoft Excel and SPSS for analysis.

2.2 Limitations

It is important to note that all research contains some limitations. This section documents the limitations of each method used within the study.

- a) In-person survey with people who inject drugs

The survey of people who inject drugs used convenience sampling⁶. People who inject drugs were recruited through organizations who serve this population. Community researchers visited two agencies that are located downtown Kitchener, one agency in Waterloo, and two agencies in South Cambridge. While the researchers were easily able to recruit participants at these locations, no attempt was made to reach individuals who inject substances but do not access services through the identified agencies. Also, because of the volume of clients at these agencies, some potential participants were turned away due to time constraints.

Given that there is unreliable baseline data on the number and demographics of people who inject drugs in Waterloo Region, the sample surveyed for this study cannot be assumed to be representative of all people in Waterloo Region who inject drugs.

Furthermore, the survey relied on self-reported information which may be subject to response biases including socially-desirability bias (answering in a way that makes the responder look more favorable to the experimenter) and recall bias (trouble recalling details of injection and overdose events).

b) Interviews with service providers

Purposive sampling⁷ was used to select participants for the key informant interviews. Members of the Supervised Injection Services Feasibility work group brainstormed harm reduction service providers in Waterloo Region to be interviewed. This process may have excluded some harm reduction service providers in the region. Therefore the findings are not representative of all harm reduction service providers in the region.

c) Information and consultation sessions

Purposive sampling was used to recruit interest groups for the information and consultation sessions. Responses are therefore not representative of the broader population. Some attempts to include priority groups experiencing barriers to services such as, Indigenous Communities and First Peoples, and Lesbian, Gay, Bisexual, Transgendered, and Two-Spirited communities were unsuccessful. As such, findings may not reflect experiences of people within those groups. While efforts were made to discourage people from attending more than one session, this occurred in fewer than ten instances and therefore those individuals had the opportunity to contribute their ideas more than once. Finally, it is important to note that while the consultation sessions sought opinions about supervised injection services, it also provided a platform for people to share concerns on other issues related to harm reduction interventions. Thematic analysis reflects all of the content from the information and consultation sessions; however, specific questions and concerns related to the broader context of

⁶ Sample units are selected on the basis of availability and not by a probability sampling method.

⁷ Respondents were selected based on characteristics of the population of interest and the objective of the study.

substance use may not be reflected in this report as the vast amount of content obtained was specifically related to supervised injection services.

d) Community Survey

The community survey used convenience sampling in order to provide universal access for residents of Waterloo Region to share their thoughts and concerns about supervised injection services. Despite extensive survey promotion to various demographic groups across Waterloo Region, there were low response rates from some groups including people aged 55 years and older, and people living in the townships of Waterloo Region. Therefore, the results shared in this report cannot be assumed to represent all people living in Waterloo Region.

While the survey was open, harm reduction services were garnering higher than normal media attention in the City of Cambridge. This may explain high response rates among Cambridge residents compared to any other City or Township in the region.

Finally, the Region of Waterloo intentionally used survey software that does not limit the number of times a survey can be filled out to a single Internet Protocol (IP) address. This was to ensure access for people who rely on public use computers such as those available at libraries or workplaces. As a result, the software does not prevent individuals from completing the survey multiple times in an effort to skew results. Responses by IP address were analyzed to explore this effect. Distribution of results by respondent with the same IP address was not substantially different from the distribution of results from the overall survey. Analysis also revealed that there were similar numbers of repeat respondents who were either very much in support of supervised injection services or not at all in support of supervised injection service, resulting in negligible impact on the findings overall.

3.0 Findings

3.1 Prevalence of Injection Drug Use and Overdose – A Review of the Secondary Data

Waterloo Region is made up of three municipalities and four townships and has a population of 583,500 people (according to the Canada 2016 census). Region of Waterloo Public Health is mandated to provide harm reduction programs including the Needle Syringe Program and the Naloxone Distribution Program. Public Health is also responsible for monitoring the health of the population as it relates to substance use. Opioid related issues have been increasing across the province including Waterloo Region. The following sections will illustrate the extent of opioid crisis in Waterloo Region as indicated by the following data:

- The estimated number of people who inject drugs in Waterloo Region
- Confirmed opioid related deaths (2015-2016)
- Suspected overdose deaths (2017)
- Opioid related Paramedic Service calls
- Naloxone kit distribution
- Opioid-related emergency department visits
- Rates of hepatitis C and HIV

3.1.1 Injection Drug Use in Waterloo Region

Although limited information is available on illicit drug use in Waterloo Region, it is estimated that approximately 3,919 residents inject drugs (current as of December 31, 2017). This estimate was calculated by counting the number of unique clients who visit needle syringe programs in Waterloo Region. It is important to note that this number is an underestimation as not all people who inject drugs access Needle Syringe Programs in Waterloo Region. In Canada, it has been reported that approximately 94.5 per cent of people who inject drugs used sterile injecting equipment at last injection (Stone, 2016) indicating that our needle syringe programs are servicing most but not all people who inject drugs in Waterloo Region. The 2017 estimate of 3,919 is a 166.6 per cent increase from an estimate reported in the Baseline Study of Drug Use in Waterloo Region conducted in 2008, where it was estimated (albeit through different methodology) that 1,470 residents injected drugs (Taylor, 2008).

Limited information is available to compare the proportions of people who use drugs in Waterloo Region to other areas of Canada. Typically, areas report on the range of people they believe inject drugs in their jurisdictions. For example, it is estimated that between 1,200 and 5,600 people inject drugs in Ottawa (Levy, 2016). Ottawa implemented supervised injection services in November 2017. In Lethbridge Alberta,

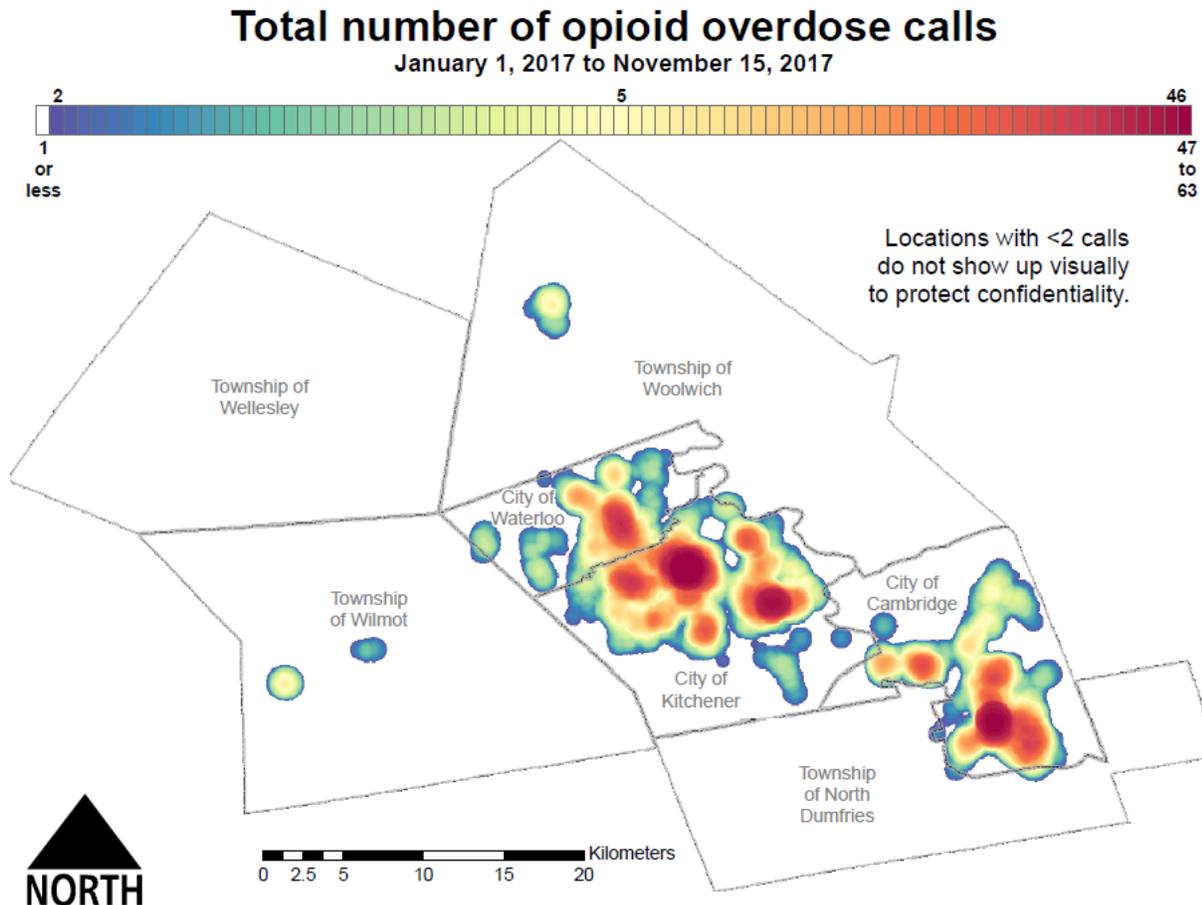
where supervised consumption services are slated to open in February 2018, approximately 3,000 of their residents inject drugs (Cotter, 2017).

3.1.2 Fatal and Non-Fatal Overdoses

The growing severity of opioid use in Waterloo Region is evident in the suspected number of overdose deaths reported by Waterloo Regional Police Services and confirmed opioid related deaths reported by the Office of the Chief Coroner for Ontario. The Coroner reported that there were 23 opioid related deaths in Waterloo Region in 2015 and 38 in 2016. At the end of 2017, Waterloo Regional Police Services reported that there were 71 calls for service where a death had occurred and a drug overdose was suspected (this number includes all suspected drug overdoses and is not limited to opioids and thus cannot be directly compared to the Coroner data); 32 of these deaths occurred in Kitchener, 29 in Cambridge, and 10 in Waterloo.

Region of Waterloo Paramedic Services responded to 197 opioid-related calls in 2015, 410 in 2016 and 795 in 2017. This represents a 303.6 per cent increase in the number of opioid related overdose calls in Waterloo Region between 2015 and 2017. Paramedic Services opioid related overdose calls are higher in Cambridge and Kitchener, compared the rest of Waterloo Region. Figure 4 shows the total number of opioid overdose calls by location.

Figure 4. Total number of opioid overdose calls by location, Waterloo Region



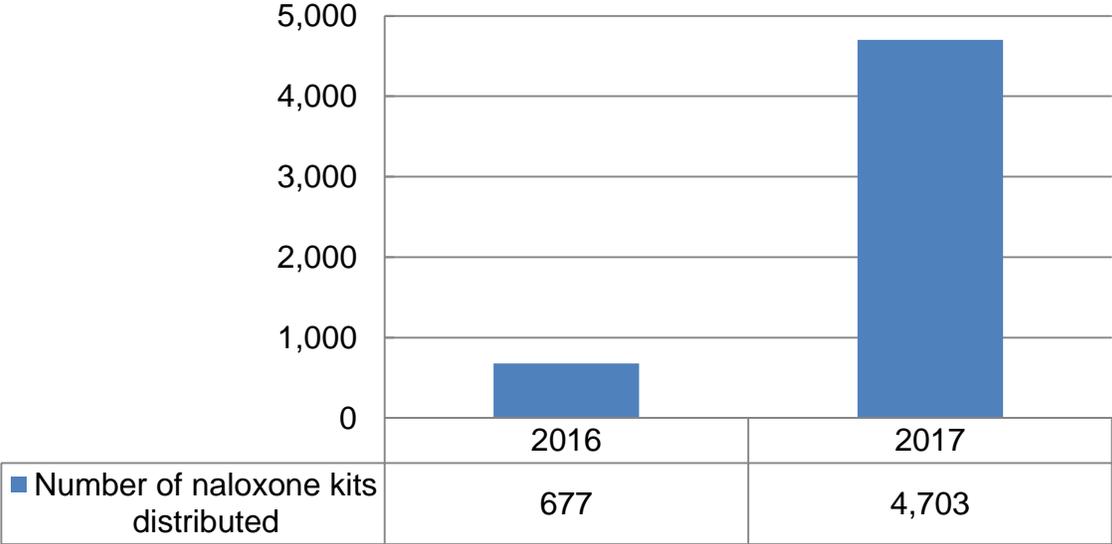
Source: Region of Waterloo Paramedic Services, January 1, 2017 to November 15, 2017.

3.1.3 Naloxone Distribution

Naloxone is a life saving medication used to temporarily reverse the effects of an opioid overdose and is available as a nasal spray or as an injection. In late 2013, Region of Waterloo Public Health and Sanguen Health Centre began offering naloxone kits to people with a history of past or current opioid use. In 2017, the program was expanded to include family and friends of a person at risk for an opioid overdose. In 2016, the Ontario Addiction Treatment Centres began distributing naloxone as well and in late 2017, Bridges, oneROOF, and the AIDS Committee of Cambridge, Kitchener, Waterloo and Area came on board. Region of Waterloo Public Health is currently exploring additional agencies to distribute naloxone. Naloxone is also available at pharmacies.

Naloxone distribution in Waterloo Region increased significantly between 2016 and 2017. Figure 5 shows the number of naloxone kits distributed by agencies in Waterloo Region, excluding pharmacies.

Figure 5. Number of naloxone kits distributed in Waterloo Region, excluding pharmacies (2016-2017)



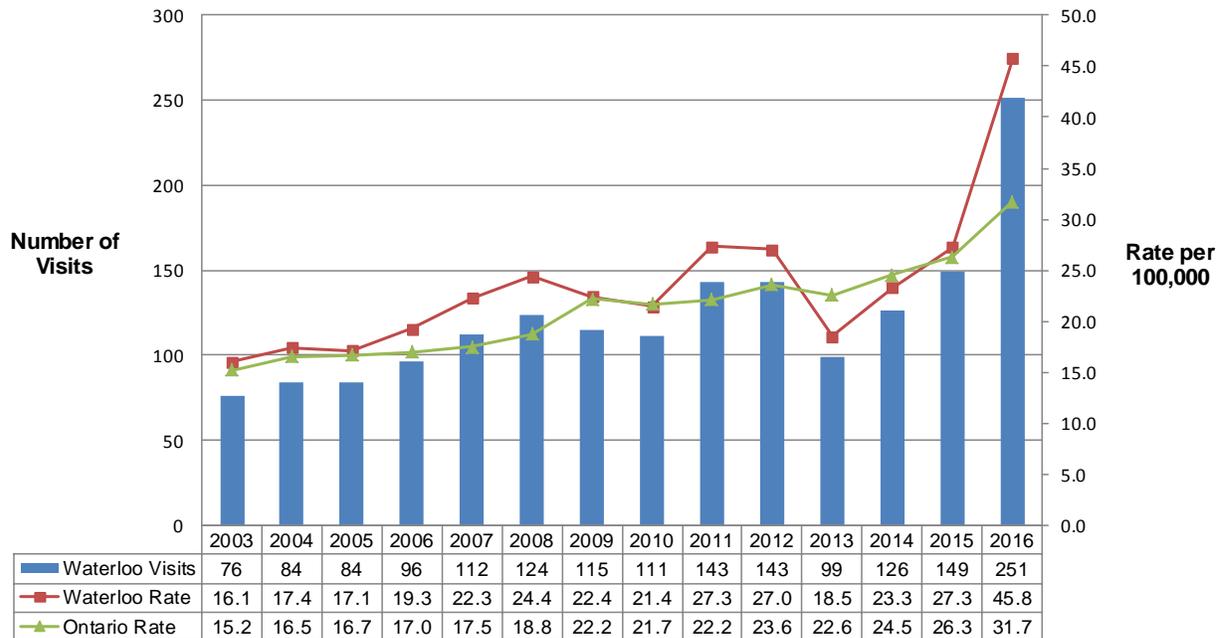
Source: Region of Waterloo Public Health and Emergency Services data, extracted January 9, 2018.

3.1.4 Impact on Local Health Care System

Local emergency departments have also seen the effects of the opioid crisis. In 2016, opioid related emergency department visits increased by 68.5 per cent compared to 2015. In 2016, the rate of opioid related emergency department visits in Waterloo Region was higher than that of Ontario (refer to Figure 6).

While data for 2017 is not complete, there were 169 opioid related emergency department visits reported by June 2017. The number of opioid related hospitalizations remains stable.

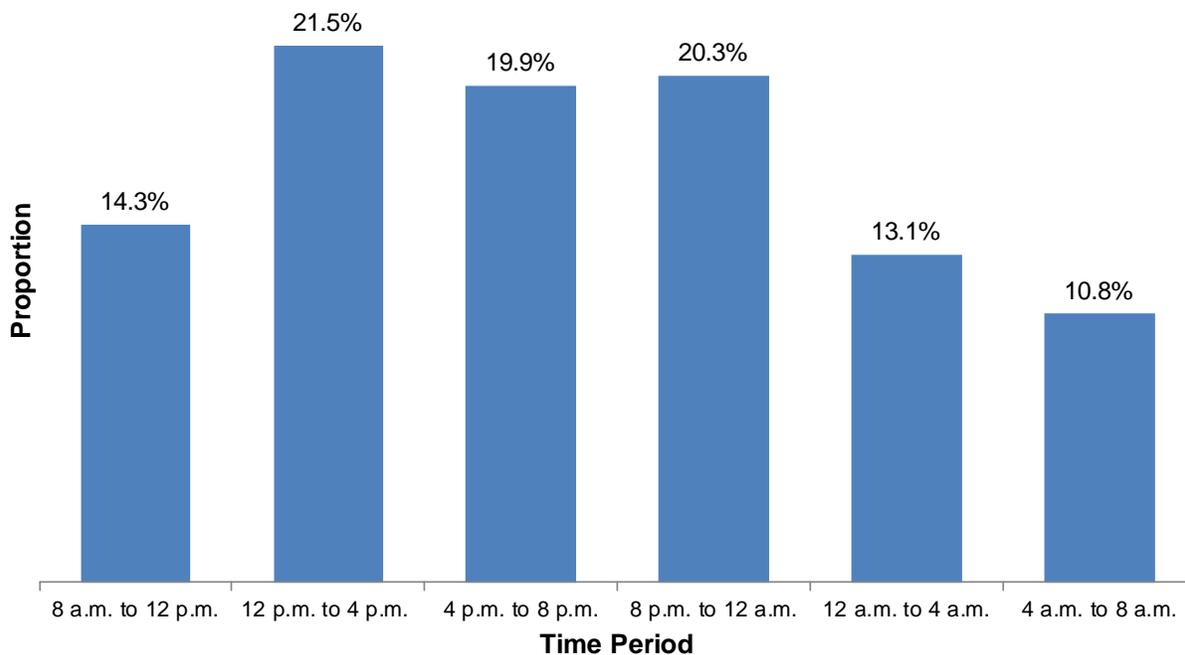
Figure 6. Number and rates per 100,000 population for opioid related emergency department visits, Waterloo Region and Ontario, 2003-2016



Source: Ambulatory All Visit Main Table, Ontario Ministry of Health and Long-Term Care. IntelliHEALTH ONTARIO, extracted January 16, 2018. Estimates of Population (2003-2016), Ontario Ministry of Health and Long-Term Care. IntelliHEALTH ONTARIO, extracted September 27, 2016.

In 2016, opioid related visits to the emergency department were highest between 12:00 noon and 4:00 p.m. and 8:00 p.m. and 12:00 midnight (refer to Figure 7).

Figure 7. Triage time of opioid related emergency department visits, Waterloo Region, 2016



Source: Ambulatory All Visit Main Table, Ontario Ministry of Health and Long-Term Care. IntelliHEALTH ONTARIO, extracted January 16, 2018

The Canadian Institute for Healthcare Information also reported that the rate of hospitalizations of babies with neonatal opioid abstinence syndrome in Canada has risen from 1,448 in 2012-2013 to 1,846 in 2016-2017 fiscal year, an increase of 27.5 per cent in just four years (Fitzgerald & Gruenwoldt, 2017).

3.1.5 Rates of Hepatitis C and HIV

Hepatitis C infection is an infection of the liver caused by the Hepatitis C virus (HCV). HCV spreads through contact with the blood of an infected person, mainly through sharing of contaminated needles, syringes or other drug equipment; blood transfusions prior to 1992 before screening became available; unsafe tattoos/piercings; sexual contact with an infected person; and/or, being born to an infected mother (Folkema, 2017). In 2017, the rate⁸ of HCV in Waterloo Region was 25.2 cases per 100,000 (N=135)⁹.

⁸ Crude incidence rate.

⁹ Source: iPHIS (2017), Region of Waterloo Public Health and Emergency Services, Extracted January 15, 2018. These estimates are preliminary and subject to change once the data has been finalized.

Human immunodeficiency virus (HIV) is a blood-borne infection that attacks the immune system (the body's internal defence system). HIV can lead to acquired immunodeficiency syndrome (AIDS) which is a disease of the immune system that makes the person at risk of getting other infections and diseases (Folkema, 2017). One of the risk factors for HIV is injection drug use. In 2017, there were 11 HIV/AIDS cases in Waterloo Region or 2.1 cases per 100,000.

Since 2006, local incidence rates of Hepatitis C and HIV have remained significantly lower than provincial rates, however quality of life consequences for those infected are significant.

3.2 Survey of People who Inject Drugs

3.2.1 Characteristics and Drug Use Patterns

A total of 146 people who self-identified as having injected drugs in the last six months completed the survey. Respondents indicated living, working or going to school in Waterloo Region and were at least 16 years of age or older.

Data analysis note: Given the length of the survey, not all questions were answered by every participant. Therefore, the denominator for each question varies. Proportions are presented based on the number of valid responses for each question and not a proportion of the total sample (n=146). The number of valid responses for each question can be found in Appendix D.

Demographic Information

Among survey participants, three quarters identified as male (73.1%) and the median age was 37 (range: 19 to 70). The majority of respondents resided in Kitchener (51.0%) or Cambridge (44.8%) and identified as Caucasian (85.6%). In the last six months, respondents reported living in a house or apartment most of the time (33.6%) followed by shelter or welfare residence (17.2%) and on the street¹⁰ (13.4%). Over half of respondents (57.9%) indicated that they currently live with someone who injects drugs. While 60.6 per cent of respondents indicated having completed high school and 22.5 per cent completed any college/university, 64.1 per cent reported a yearly personal income of less than \$20,000. Ontario Works (50.0%) and the Ontario Disability Support Program (35.6%) were most commonly reported sources of income. Close to one in five respondents (17.8%) reported engaging in sex work or exchanging sex for resources in the past six months.

¹⁰ On the street includes abandoned buildings, cars, and parks.

Drug Use and Injection Practices

The majority of respondents (81.9%) reported having injected drugs in the last 30 days and 47.8 per cent of respondents reported injecting on a daily basis in the last six months.

Respondents also reported high rates of public drug use (75.6%) in the last six months. Of those who reported injecting in public (n=102), 38.2 per cent noted that they inject publically over 75% of the time. The most commonly reported reason for public drug use was homelessness (See Table 1).

Table 1. Reasons for public drug use in the last six months (n=110)

Reason for public drug use	N (%)*
I'm homeless	64 (58.2)
It's convenient to where I hang out	42 (38.2)
I'm too far from home	40 (36.4)
There is nowhere to inject safely where I buy drugs	34 (30.9)
I don't want the person I am staying with to know I use/am still using	22 (20.0)
I prefer to be outside	18 (16.4)
I need assistance to fix	12 (10.9)
Dealing/middling (connecting sellers to purchasers)/steering (guiding potential buyers to selling)	12 (10.9)
Guest fees at friend's place, but I don't want to pay	7 (6.4)
Other	9 (8.2)

*Respondents could choose more than one answer; the total proportions for this question can exceed 100%.

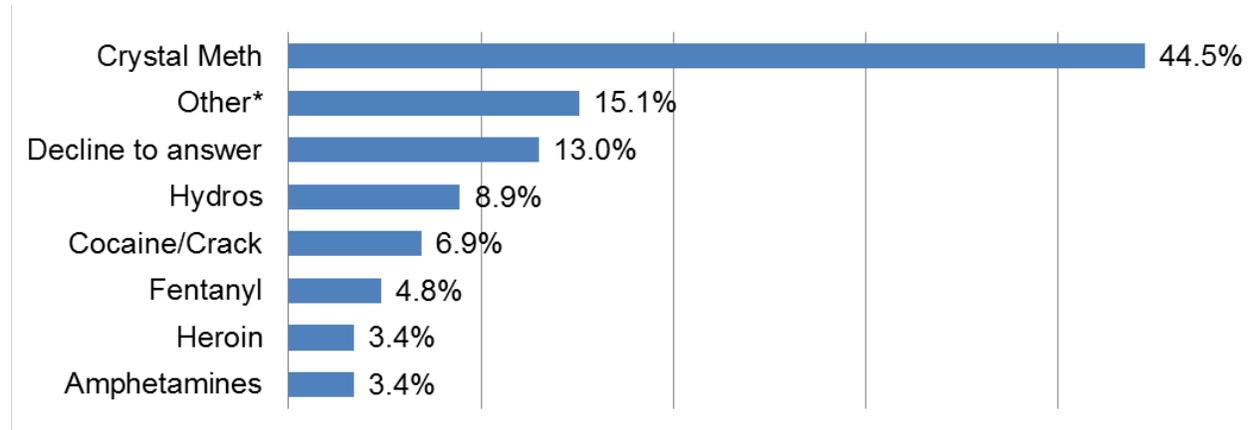
Participants were also asked to indicate which neighbourhoods they injected drugs in most often in the last six months. Respondents who identified living in Kitchener noted frequent injection drug use downtown Kitchener (44.6%) and in Country Hills (10.8%). Cambridge respondents reported frequent injection drug use in Galt City Centre/South Galt (40.0%).

Notably, 83.3 per cent of respondents indicated having accessed a local harm reduction program to exchange or obtain needles in the last six months. Respondents also indicated accessing supplies from their friends (78.9%) and from a dealer or someone on the street (59.4%). Risk for infectious disease transmission was also evident, with 20.8 per cent of participants noting that they had injected with needles knowing they had already been used in the last six months. Furthermore, 17.9 per cent of respondents had also loaned used syringes to other people. Many respondents (53.7%) noted not knowing where to get a clean needle in the last six months. This response was not qualified by time of day or day of the week which may explain the high proportion.

Most Commonly Injected Drugs and Drug of Choice

The most commonly injected drugs in the last six months were crystal meth (44.5%) and hydromorphone (8.9%). Thirteen per cent of respondents declined to answer.

Figure 8. Most commonly injected drugs among survey participants in the last six months (n=146)



*Other includes morphine, Ritalin or Biphentin, Speedball, Wellbutrin, and combinations of drugs identified by participants (e.g. crack and crystal meth, crystal meth and fentanyl, fentanyl and heroin).

The top three drugs most preferred by clients are crystal meth (54.1%), hydros (22.6%), and heroin (18.5%).

Accidental Overdose

Injection practices among participants illustrated the likelihood of overdose. Over three quarters of participants (78.6%) indicated they had ever injected alone, and 97.3 per cent reported that this occurred in the last six months. Of these participants (n=107), 60.7 per cent indicated that they injected alone at least 75% of the time in the last six months. Over three-quarters (78.0%) of respondents indicated that they have used a drug they believe was cut with another substance and of those, 41.1 per cent reported they were trying to use crystal meth at the time.

Accidental overdose was reported by 39.0 per cent of participants and 64.9 per cent of those reporting having ever overdosed, overdosed in the last six months. Of those respondents who had ever overdosed (n=57), 19.3 per cent indicated that they were alone when the overdose occurred. Fentanyl was reported having been injected prior to their last overdose by 67.3 per cent of respondents. More than half (60.0%) of respondents indicated that an ambulance was called the last time they overdosed, and in those instances, the police showed up 72.7 per cent of the time. The majority (87.5%) were taken to an emergency department/hospital. Of those who provided a location for

their most recent overdose (n=43), 44.2 per cent indicated a neighbourhood in Kitchener, and 39.5 per cent noted a neighbourhood in Cambridge.

The majority of respondents (78.8%) reported having heard of naloxone (n=115) and of those 95.7 per cent have heard about take-home naloxone kits; mainly through a friend (42.5%). More than half (62.7%) reported currently having a naloxone kit and of those, 56.4 per cent got it from the Sanguen Van. Naloxone has been administered by 47.1 per cent of respondents.

3.2.2 Supervised Injection Services and Factors Influencing their Acceptability

Survey participants were asked a number of questions about supervised injection services. Many respondents (71.2%) reported having heard of supervised injection services and most (86.3%) said that they would use them or might use them if they were available in Waterloo Region (66.7% and 19.6%, respectively). Reasons for using supervised injection services are presented in Table 2.

Table 2. Reasons for using supervised injection services (n=119)

Reason	N (%)*
I would be able to get clean sterile injection equipment	86 (72.3)
I would be able to inject indoors and not in a public space	73 (61.3)
Overdoses can be prevented	70 (58.8)
Overdoses can be treated	64 (53.8)
I would be safe from crime	63 (52.9)
I would be injecting responsibly	62 (52.1)
I would be able to see health professionals	61 (51.3)
I would be safe from being seen by the police	61 (51.3)
I would be able to get a referral for services such as detoxification or treatment	40 (33.6)

*Respondents could choose more than one answer; the total proportions for this question can exceed 100%.

When respondents were asked what the most important reason would be for using supervised injection services, 27.2 per cent indicated that they would be able to get clean sterile injection equipment, followed by overdose prevention (18.4%).

Participants who indicated they might or would not use supervised injection services (n=46; 33.3%) provided the following top 3 reasons:

- “I do not want to be seen” (91.3%);
- “I do not want people to know I am a drug user” (67.4%); and
- “I am afraid my name will not remain confidential (63.0%).

Supervised Injection Services – Impact on the Community

Survey participants were asked about the likelihood of particular things happening in the community if supervised injection services were to open in Waterloo Region. Table 3 presents potential outcomes and the number and proportion of respondents who believed it would be very likely or likely to occur.

Table 3. Community outcomes of a supervised injection service location, as identified by people who inject drugs (n=146)

If supervised injection services were to open in Waterloo Region:	N (%) Indicating Very Likely or Likely
The number of used syringes on the street would be reduced	120 (82.2)
People would learn more about drug treatment	118 (80.8)
Overdoses would be reduced	118 (80.8)
The number of people injecting outdoors would be reduced	115 (78.8)
Injection with used needles would be reduced	111 (76.0)
Users would visit the area more	90 (61.6)
Users would move to the area	80 (54.8)
Street violence would be reduced	77 (52.8)
Drug dealers would be attracted to the area	71 (48.6)
Crime would be reduced in the area	67 (45.9)

Preference for Supervised Injection Service Location

Respondents indicated that they would use a supervised injection service if it was located in a community health centre (76.0%) or Public Health clinic (71.2%).

Respondents indicated preference for the service to be located with other health and social services (53.4%) followed by mobile unit/van (40.4%).

Survey participants were asked to identify where in Waterloo Region supervised injection services should be located. Downtown Kitchener (38.6%) and downtown Galt (33.7%) were identified as leading choices for location. Other locations that were mentioned include Preston (11.5%), Country Hills (8.0%), and Bridgeport/Breithaupt/Mount Hope (8.0%). Survey participants were asked how many supervised injection service locations are needed in Waterloo Region. Of those who responded (n=87), 83.9 per cent believe that between two and six locations are needed region wide.

Hours of Operation

Respondents were asked what time of day would be their first choice to use supervised injection services. Morning hours between 8am and 12pm were picked by the majority (41.1%), followed by afternoon hours of 12pm until 4pm (15.8%) and early evening between 4pm and 8pm (6.2%). Respondents were then asked to indicate their second

choice for when they would use supervised injection services. Overnight (midnight until 8am) was preferred by 30.4 per cent of respondents, followed by afternoon hours (29.4%). While a single “24/7” option was not available as a selection, interviewer comments at the end of the survey indicated a number of requests from clients for this model.

Use of Supervised Injection Services and Design Preferences

Similar proportions of respondents indicated that they would use a supervised injection service location always and usually¹¹ (25.3% and 26.0%, respectively). Over half (51.4%) believe the best set up would be private cubicles for injecting spaces and 56.8 per cent of respondents noted that people who use drugs should be involved in running the site. These individuals could be involved by monitoring the entrance and surrounding area (72.3%), greeting clients (73.5%), and being available in the chill-out room (68.7%) and in the waiting area (59.0%).

In order to understand how supervised injection services might be implemented if need is determined, participants were asked to rate the following guidelines in terms of very acceptable to very unacceptable. The proportions of those indicating very acceptable or acceptable are presented in Table 4.

Table 4. Acceptability of guidelines under consideration for supervised injection services, as perceived by people who inject drugs

Guideline	N (%) Indicating Very Acceptable or Acceptable
Injections are supervised by a trained staff member who can respond to overdoses	119 (90.2)
Have to hang around for 10 to 15 minutes after injecting so that your health care can be monitored	88 (60.3)
30 minute time limit for injections	88 (60.3)
Not allowed to have others assist in the preparation of injections	67 (45.9)
Not allowed to assist each other with injections	66 (45.2)
Not allowed to share drugs	66 (45.2)
Register each time you use it	65 (44.5)
May have to sit and wait until space is available for you to inject	65 (44.5)
Video surveillance cameras onsite to protect users	61 (41.8)
Required to show client ID number	57 (39.0)
Not allowed to smoke crack/crystal meth	57 (39.0)
Have to live in the neighbourhood where the SIS is	43 (29.5)
Required to show government ID	33 (22.6)

¹¹ Usually was defined as use of a supervised injection service over 75% of the time.

Respondents were asked how often they would use drug testing services prior to injecting at a supervised injection site if it were available. Many respondents (61.6%) indicated that they would use drug testing services over 75% of the time but would only be willing to wait less than 10 minutes for the results (72.2%).

Respondents were also asked how long they would be willing to walk to a supervised injection service in the summer and winter months. The majority of respondents reported being willing to walk up to 20 minutes (59.6%) in the summer and between 5 and 10 minutes (52.7%) in the winter to a supervised injection site.

More than half of respondents (57.5%) indicated they would travel by bus to a supervised injection site and 72.6 per cent indicated they would travel by bike.

Respondents were also asked to rate the importance of services under consideration for supervised injection services. Table 5 shows the ten most important services identified by respondents.

Table 5. Top ten most important services under consideration for supervised injection services, as identified by people who inject drugs

Service	Proportion Indicating Very Important or Important
1. HIV and hepatitis C testing	89.4
2. Nursing staff for medical care and supervised injection teaching	87.9
3. Washrooms	87.4
4. Needle distribution	87.1
5. Referral to drug treatment, rehab, and other services when you're ready to use them	82.6
6. Assistance with housing, employment and basic skills	81.2
7. A 'chill out' room to go to after injecting	80.3
8. Injection equipment distribution	77.4
9. Access to general health services	77.4
10. Drug testing	77.4

History of Drug Treatment

Close to half of respondents (45.2%) indicated having been in a detox or drug treatment program at some point in their lifetime and of those, 37.9 per cent attended a program in the last six months. The most commonly reported drug program attended in the last six months was a detox program with other prescribed drugs (20.0%).

Almost one in ten (9.6%) respondents reported that they had tried to get into a treatment program in the last six months but were unsuccessful.

3.3 Interviews with Harm Reduction Service Providers: The Need for Supervised Injection Services and Considerations for Implementation

Harm reduction services providers were asked a series of questions to determine whether supervised injection services are needed in Waterloo Region along with other questions that would inform how the service should be offered and how to address challenges to implementation. The responses are organized by the question asked.

A total of 11 key informant interviews were completed with harm reduction service providers in Waterloo Region (refer to Appendix E for the list of key informant interviews by organization).

Need for Supervised Injection Services in Waterloo Region

Overall, key informants were knowledgeable of supervised injection services including their intended purpose, how they are operated, and outcomes experienced by the client and the community at large. Outcomes for the client included connecting individuals with health and social services, facilitating treatment, reducing fatal and non-fatal overdoses, and decreasing the spread of blood borne infections including Hepatitis C and HIV. Outcomes for the community as a whole included a reduction in public drug use and needle litter. One service provider described the development of supervised injection services as “creating a path to wellness” for those in the community who require health and social services but are often unable to access them.

All key informants indicated that supervised injection services have been needed in Waterloo Region for some time. As one participant stated,

“We need them today, not six months from now”

Service providers believe that supervised injection services would not only reduce the number of fatal overdoses in Waterloo Region but would also result in other important outcomes. These include:

- Reducing the stigma associated with addiction in the community;
- Keeping people alive and reducing health risks associated with injection drug use;
- Facilitating access to treatment and providing users with basic health and social services;
- Providing hope for life and a place where people feel comfortable talking with someone about their situation;
- Providing health care providers with a window of opportunity to support an individual when they are ready for treatment;

- Providing service providers with the opportunity to make connections with this vulnerable population and get them the services that they need. Supervised injection services would allow for deeper conversations that would lead to recovery and further help; and
- Increase proper disposal of used needles, decrease drug use in public places, and positively impact crime rates.

Perceived Challenges of Supervised Injection Services in Waterloo Region

Key informants identified potential challenges with having supervised injection services in Waterloo Region. These included:

- Stigma – Key informants cautioned that if service users were shamed or judged for attending a supervised injection service location, they will not use it. In addition, it was shared that the location of a site may stigmatize the surrounding neighbourhood.
- Nimbyism (Not in my backyard) – Key informants noted that while community members may support supervised injection services, the selection of neighbourhood will be difficult as there are perceived notions that this type of service will have negative impacts on the area.
- Community support – Key informants suggested there is a lack of information circulating in the community about addiction, harm reduction, and the supervised injection services program model. They encouraged more public education.
- Limited treatment options available – Key informants noted that while supervised injection services are important to support people experiencing harms related to substance use, better access to treatment is needed.

“We must help people find ways to relate to the issue on an individual level. Every single person will be affected if we don’t do something”

Acceptance and Use of Supervised Injection Services in Waterloo Region

Key informants believe that supervised injection services would be used by the majority of people who inject drugs. Respondents shared that clients have been asking for this service for some time as many are scared with the amount of overdoses and deaths happening in the community. More difficult to reach populations (i.e. youth, people who use occasionally, and those that hide their use) would require outreach to encourage use of the service. It was hypothesized by key informants that a supervised injection service location would be successful if it was easily accessible, run by peers and other trusted individuals, and it was proven to be a safe place without worry of legal repercussions.

“We don’t want youth fatalities to be what pushes people to agree with this”

“A site would be empowering to a population who has never had a place specific for their needs. This population wants to do healthy things but has not yet been provided with the opportunity to do so”

Addressing Community Concerns

Harm reduction service providers acknowledged that community residents have concerns about the possibility of supervised injection services being established in Waterloo Region. It was shared that residents are worried that:

- A supervised injection site in close proximity to their home will have implications on property values;
- Their children’s safety will be at risk, especially if a supervised injection site is located near a school;
- The surrounding neighbourhood will experience more loitering, crime, increased presence of drug dealers and needle litter; and
- Supervised injection services would encourage and support drug use in the community and clients would not seek treatment.

Providers suggested various strategies to mitigate community concerns of supervised injection services, including:

- Education - Service providers described the importance of addressing misconceptions about supervised injection services including the belief that supervised injection services will encourage people to use drugs instead of seeking treatment. It was suggested that education about addiction and substance use is needed and that sharing stories is an important way to enhance understanding and increase empathy.
- Communication – Service providers stressed the importance of communicating with the public during all phases of the Supervised Injection Services Feasibility Study using a variety of approaches. It was recommended that a spokesperson that is well known be a consistent voice for supervised injection services in Waterloo Region.
- Mitigation Advisory Group - Several providers described the need for a group to oversee the implementation of supervised injection services that would respond to any issues a site experiences after implementation. Providers agree that building trust between clients of a potential site, the community, and service providers is critical to the success of any future site.

Preferences for Supervised Injection Services Implementation: Lead Agency, Locations and Integration

a) Lead Agency

There was overwhelming support from key informants for Sanguen Health Centre to operate supervised injection services in Waterloo Region. Sanguen was identified as having the appropriate medical model to support the needs of those who will use the site. In addition, respondents encouraged involvement from Public Health, shelters in the area, and people with lived experience.

b) Number and Location of SISs Needed

When asked how many sites are needed in Waterloo Region, responses ranged from one to 12 sites. The majority indicated that three sites were needed at this time; one in each municipality (Kitchener, Cambridge, and Waterloo). While most respondents agreed that all of Waterloo Region is impacted by drug use, the areas of King and Fairway, Kitchener downtown, and South Cambridge (Galt) were mentioned as needing supervised injection services sooner than others. Several respondents suggested locating supervised injection services in locations that are frequented by the public including libraries, shopping centres and strip malls, and around Waterloo Region's post secondary institutions.

c) Days and Hours of Operation

When asked which days and hours a site should operate, the majority of respondents indicated 24 hours a day, seven days a week. This was followed by statements that drug use patterns are unique for each individual and it would be difficult to select hours in the day that would meet everyone's needs. Respondents were mindful that a 24/7 operation may not be feasible with the resources available, and suggested to track usage patterns and tailor operating hours to the hours that the site is used most often.

In the event that a 24/7 operation was not initially feasible, key informants noted that focusing on evenings, overnight and weekend hours would be most beneficial as other health and social services are not available during those times.

d) Service Integration

Key informants were asked which services should be offered at a supervised injection site. Their responses are summarized in Table 6.

Table 6. Suggested services to be offered alongside supervised injection

Types of Services	Services
Harm Reduction	<ul style="list-style-type: none"> • Access to clean supplies, proper disposal of used equipment, and naloxone
Health Services	<ul style="list-style-type: none"> • Access to a nurse practitioner or general practitioner • Nurse on site • Basic health care including testing for blood-borne infections, pregnancy, and abscess and wound care • Methadone clinic
Mental Health and Addictions Services	<ul style="list-style-type: none"> • Access to a counsellor • Pathways for psychiatric supports, harm reduction psychotherapy, rehabilitation • Support groups they can participate in
Social Services	<ul style="list-style-type: none"> • Outreach worker who can provide referrals to community supports • Housing and income supports • Involvement of peer workers (people with lived or living experience of drug use)
Basic Needs	<ul style="list-style-type: none"> • Snacks and water for clients • Access to basic needs (e.g. deodorant, toothbrushes), laundry facilities, showers, and a washroom • Drop-in space or lounge area

“The drug use community is experiencing a lot and it’s being internalized. It will perpetuate more harmful drug use. They need a safe place to talk about what’s going on”

3.4 Information and Consultation Sessions: Concerns, Benefits and Implementation Considerations according to Key Interest Groups in Waterloo Region

Information and Consultation (focus group) sessions were held with interest groups from across Waterloo Region (refer to Appendix F for a list of participant groups). Findings are organized into seven themes, including:

- Support for supervised injection services in Waterloo Region with “not in my backyard” cautions
- The need for supervised injection services to provide a safe space
- Communication is key for concerns with supervised injection services
- Supervised injection services and education creating a cultural shift with respect to addiction
- Service integration is key for concerns with supervised injection services
- A hybrid service model for supervised injection services in Waterloo Region
- Locations: equity, access, safety

Support for supervised injection services in Waterloo Region with “not in my backyard” cautions

Qualitative analysis revealed a theme of strong support for the notion that if Supervised Injection Services were implemented in some form in Waterloo Region, it would benefit the community. The majority of those providing responses were supportive of supervised injection services and were looking for implementation solutions that allow us to be a caring community while still addressing and managing valid concerns about impact on safety, families, businesses, and culture. For instance, support was sometimes provided with a “not in my backyard” mentality. Although analysis revealed strong support for supervised injection services implementation in some form, some did not believe supervised injection services are right for their neighbourhood or to have in Waterloo Region overall. They still, however, expressed concern with the issues of overdose deaths and drug use, and wanted efforts to focus on prevention, treatment, and identification of root causes.

“It’s health. It’s not just harm reduction, but your health matters to us. Seeing someone overdose is traumatic. Having a site will help community members in general.”

“Safety – for both individuals [who inject drugs] and the community – as much as the NIMBY [not in my backyard] is an issue, it’s helpful to have information, education, support, intervention, an attempt at counselling.”

“When you protest and say this will have an impact on my community, you’re labeled that you don’t care about drug users and that you have a stigma against them. I don’t want to see anyone overdose, die, get AIDS.”

The Need for Supervised Injection Services to Provide a Safe Space

Many participants discussed the importance of providing a safe space for people with lived experience of injection drug use. Having a safe, non-judgemental space where people with lived experience feel included in the community and where injection drug use is not associated with fear of reprisal and shame but rather with safety and support, was believed to be a significant outcome of supervised injection services. Participants described such a location as not only decreasing overdose deaths and reducing other harms to those with lived experience, but also providing acceptance and inclusion for people who often experience marginalization. It was felt that when services meet people where they are in their drug use, it opens doors for relationship development with peers and service providers and can support people to improve their health over the long term, including accessing treatment if they are ready.

“There is a feeling of insecurity. A space like this is opening a door. That carries a lot more weight than is understood. People knowing that where they are in life is okay in the moment changes a community dynamic. Those volatile and insecure feelings trickle out into the community.”

Communication is Key for Concerns with Supervised Injection Services

Communication was considered a key factor in addressing questions and concerns and to ensure success of supervised injection services. It was shared that communication should be multipronged, interactive, frequent, and transparent, including honest information about risks, unknowns, and the potential community impacts. It was felt that various topics require better communication including information about safe zones, whether supervised injection services enable or encourage drug use, how the community’s safety will be addressed, the cost-benefit analysis of supervised injection services, and site logistics, including needle litter and disposal. Commonly heard suggestions included:

- Having a dedicated public relations person

- Having an approach to community relationship development that breaks down barriers by allowing people to be heard and draws on the commonalities amongst differing perspectives
- Provision of information about how supervised injection services fit within the broader Waterloo Region Integrated Drugs Strategy's four pillared approach
- Having an up-to-date website for information on the feasibility study with social media
- Having a mechanism for questions and answers
- Having responsive education and communication via Forums/Town Halls or other method of large public meetings
- Sharing stories of people and families who have been personally impacted by substance use
- Sharing and learning from other communities and ours about implementation of similar services
- Engaging the community in addressing concerns

“People want to hear what it’s all about, the options, and what some community impacts are. It’s really more from what is the community impact, not so much from the technical standpoint. I think the community is really interested in understanding this as well. That’s really key.”

Supervised Injection Services and Education Creating a Cultural Shift with Respect to Addiction

Participants discussed how supervised injection services can be a platform for a strong education strategy aimed at reducing the stigma of addiction, and shifting the culture to reframe it as a health issue. Many questions and concerns reflected a lack of understanding and stereotyping of people with living or lived experience of injection drug use, misconceptions of how they came to use drugs, and of the path to treatment and recovery. It was felt that a larger education strategy would reframe addiction as a health issue, and include strategies such as humanizing people with lived experience, highlighting their diversity, myth busting, and sharing of personal experiences to help shift the culture. Education and communication would highlight root and underlying causes, the complexity of addiction, and convey the diversity of people with lived experience.

“I think there’s still a misconception in the community about who the user is. But you can give some people all the data in the world, and it’s very easy to do the ‘us vs. them’. It’s difficult for people with lived experience to make their story public, but some people will never be swayed by empirical stuff. It would help to get support from people to weave into the story. [Otherwise] it will be NIMBY [not in my backyard], I don’t care about ‘these people’.”

Service Integration is Key for Concerns with Supervised Injection Services

Integrating other services with supervised injection services was seen to be one of the most important benefits as it would provide people with access to services that they may not have sought out otherwise. Participants defined service integration as service provider interaction and connection, referrals, co-location of services, and ease of movement between services. The following were considered priorities:

- Counselling (mental health and addictions)
- Primary care
- Access to treatment and recovery
- Housing services
- Community/Peer support
- Provision of a safe space
- Substance testing
- Community and social services
- Employment
- Community policing
- Food security

It was indicated that supervised injection services should not be implemented unless there is service integration with and bolstering of access to rapid treatment. Expansion to supervised consumption services and consideration for provision of drugs, such as prescription hydromorphone, also emerged in the service integration discussion.

“Access to treatment services on site – we’re gonna sell this as harm reduction, then it’s on a continuum so part of that harm reduction is offering treatment service, and safe injection is part of that package, so sell the whole package and not just the safe injection site. It will be easier to grasp if a person can go in and access harm reduction and services rather than just safe injection.”

A Hybrid Service Model for Supervised Injection Services in Waterloo Region

Participants discussed the need to consider a hybrid model would combine aspects of mobile or temporary supervised injection services in addition to permanent locations of supervised injection services. It was indicated that this would best serve our geography, meet the needs of the community, and allow for agility and responsiveness.

Several considerations for hybrid models came forward:

- Testing locations by establishing a temporary locations first
- Have permanent locations and use mobile for outreach (data informed and client request based)
- Have an agile model that can be responsive to changes in injection drug use, weather, and other factors contributing to patterns of movement throughout the community

Suggestions for hybrid models centred on concerns that injection drug use is complex and ever changing and that supervised injection services need to be implemented in a way that they can easily be assessed and modified to responsively meet the needs of the community.

“Mobile [supervised injection services] or a network makes a lot of sense. Neighborhoods change. Something gets established and the neighbourhood can be completely different five years later. There could be a more nimble way to approach it logically.”

Locations: Equity, Access, Safety

Equitable distribution of locations, ease of access, and safety emerged as key criteria for determining locations.

a) Equity

Distributing locations across Waterloo Region emerged as important from the perspective of properly meeting the needs of those who would use the services as well as reducing potential community impacts and concentration of people and services by having just one service in one location. Participants felt that at least three locations are needed with one in each of the downtown cores of South Cambridge (Galt), Kitchener, and Waterloo. In addition to locations in the cores, there were some suggestions to have additional smaller locations that would make the service more “normalized” and improve access for all. Locations that encourage some movement of people throughout the community, were seen as more desirable. Many recommended not to implement supervised injection services unless there would be more than one location.

“How do we change the culture so that when setting up a supervised injection site, we don’t create the feared neighbourhoods?”; “We want to be a caring, inclusive community, but there’s the fine line of hurting businesses.”

“We have some geographical differences in our region. My feeling is that if we went forward with SIS, and we only had one area when that’s happening, it wouldn’t service our population fully. We would need multiple sites in order to properly serve our population.”

b) Access

Participants shared that supervised injection services should be easy to access and should be located in downtown cores, along the central transit corridor, and near transit terminals or easily accessed routes and stops. It was felt that they should be located in areas where the people are who would access services. Co-locating supervised injection services with other services was also seen to increase access as use of the site would be more discreet. Some participants believed that pairing injection services with other services that members of the public would regularly use could facilitate de-stigmatization. There were also suggestions to think outside the box of traditional service models to increase access; for example, having them available whenever or wherever someone might need them such as in shopping malls, pharmacies, family doctor offices, or existing Public Health clinics.

Another component of access was reflected in the vast majority of those responding indicating that supervised injection services should be a 24 hour, 7 day a week service. Most indicated that supervised injection services should not be implemented unless it will be 24/7. Other suggestions were provided with the caveat that “if 24/7 is not available”:

- Ensure evening, overnight, and weekend hours; offer partial services for hours when other harm reduction services are available and then enhanced when closed
- Determine the hours based on when people with lived experience indicated they would access supervised injection services
- Operate 24/7 to start and then determine use pattern and tailor service provision accordingly

“Run 24/7 for a test period and determine when the best times are and adjust accordingly. You have to be open to determine when the best allocation of resources can be used. That’s the way you set it up.”

c) Safety

Integration of Supervised Injection Services into the community in a way that prioritizes safety was seen as vital. This includes community policing and relationship development including establishment of a safe zone, concerns with drawing drug trafficking and crime to the area, and paying attention to proximity to schools, parks, residential areas, and businesses.

Other content emerging when discussing locations focused on patterns of use and concerns regarding improperly discarded needles in the community.

“A concern I have on one large permanent site, surrounded by a safe zone, is that in addition to drug sales and purchases, people buying drugs don’t have money. They have to buy drugs and usually resort to crime, breaking and entering, and prostitution. When you have a site, you create ground zero for people without the money who do drugs. Businesses and homes in that area will be impacted.”

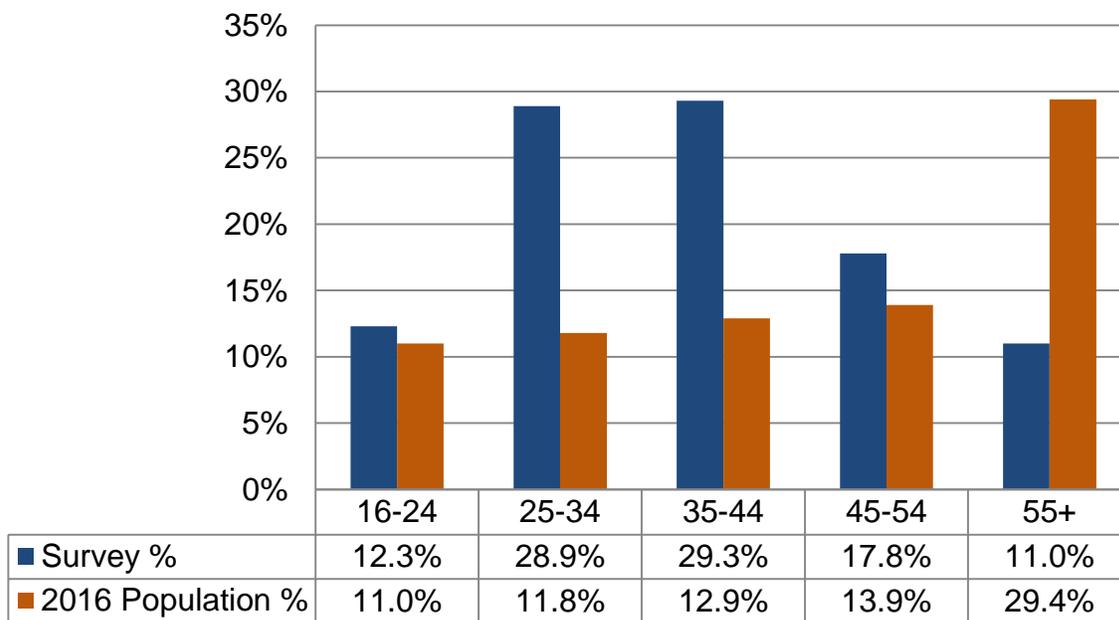
3.5 Community Survey: Community Perceptions of Supervised Injection Services

In the fall of 2017, people who lived, worked or went to school in Waterloo Region were invited to complete an online survey to share their thoughts about supervised injection services. While the survey was brief, taking approximately ten minutes to complete, not all participants answered every question¹².

Who completed the online survey?

Over 3,500 residents participated in the survey. Community members of all ages were represented with the majority of responses coming from the 35 to 44 year age category (See Figure 9). According to 2016 Census population estimates, the survey reached more people from the 25 to 34 and 35 to 44 year age groups than any other age grouping.

Figure 9. Age distribution of survey respondents by distribution of Waterloo Region population (n=3,458)

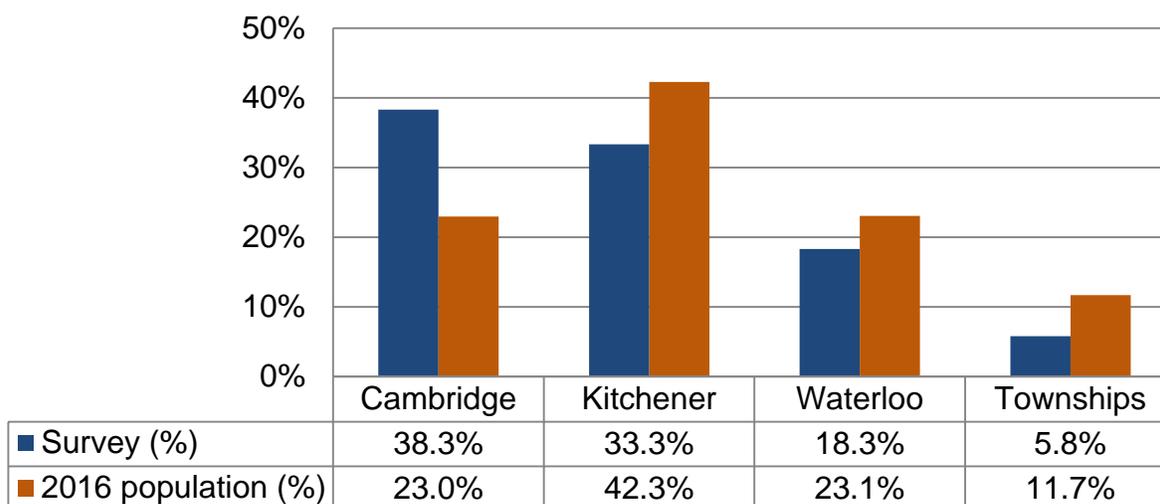


Source: Population and Household Estimates for Waterloo Region (including post-secondary students); Statistics Canada, 2016 Census.

¹² The denominator for each question varies. Proportions are presented based on the number of valid responses for each question and not the number of participants that were eligible to complete the survey (n=3,819). The number of valid responses for each question can be found in Appendix G.

All areas of the region responded to the survey (See Figure 10) however Cambridge was over represented and Kitchener, Waterloo, and the Townships were under represented.

Figure 10. Distribution of survey respondents residence by distribution of Waterloo Region population (n=3,463)



Source: Population and Household Estimates for Waterloo Region (including post-secondary students); Statistics Canada, 2016 Census.

The majority (78.5%) of respondents indicated they have never used harm reduction services¹³ however, 16.8 per cent reported that they know someone who has. A small number of respondents (3.9%) reported current or previous use of harm reduction services.

Respondents were asked to indicate statements that describe them. The top three statements indicated by respondents were:

- I am a community member (I live, work or go to school in Waterloo Region) (85.5%);
- I am a parent (59.7%); and
- I am a student (16.1%).

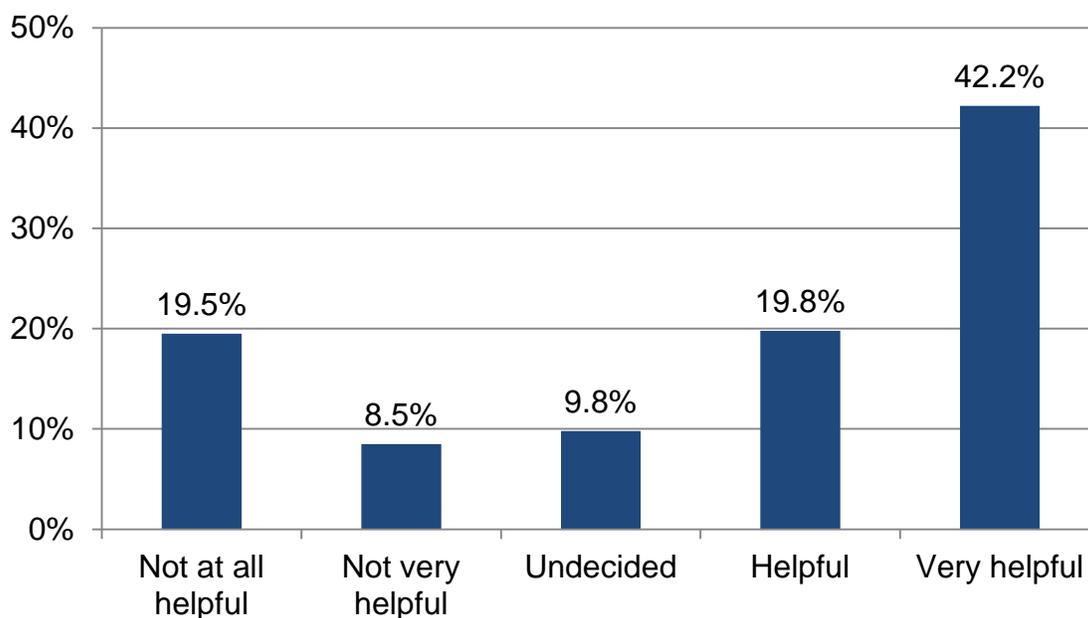
Perceived Helpfulness of Supervised Injection Services in Waterloo Region

Almost two-thirds (62.0%) of respondents reported that supervised injection services would be very helpful or helpful in Waterloo Region (Figure 11). About one in ten (9.8%) were undecided and 28.0 per cent reported that supervised injection services would be 'not very helpful' or 'not at all helpful' in Waterloo Region. When analyzed by place of residence, Cambridge respondents were significantly more likely to report "Not at all

¹³ Harm reduction services include needle syringe programming, teaching about safer drug use, naloxone kits to prevent overdoses from opioids, and overdose prevention training.

helpful” and “Not very helpful” than Waterloo Region as a whole (excluding Cambridge) ($p < 0.05$).

Figure 11. Extent to which supervised injection services would be helpful in Waterloo Region (n=3,568)



Note: Percentages do not add up to 100 due to rounding.

When the data was analyzed by “I am a student”, strong support for supervised injection services was found (61.6% of students indicated ‘very helpful’). One third (32.8%) of parents believed that supervised injection services would be very helpful in the region, while just over a quarter (26.6%) of parent respondents believed they would be not at all helpful.

Respondents were asked which type of supervised injection service would be best for Waterloo Region and were able to select multiple options. Two thirds (62.7%) of respondents reported that an integrated service model (a site that also has other types of services such as food, showers, counselling, and addiction treatment) would be best. Mobile service (a vehicle with supervised injection booths inside that can move to different locations to meet clients) was indicated by 43.3 per cent of respondents. There were 27.2 per cent of respondents who felt that supervised injection services should not be available in Waterloo Region.

Perceived Benefits of Supervised Injection Services in Waterloo Region

Reduction in public drug use, decreased number of overdoses and a reduction in the spread of blood borne infections were the most commonly mentioned benefits of supervised injections services (Table 7).

Table 7. Ways in which supervised injection services would be helpful in Waterloo Region (n=3,579)

Benefit	(%)
Less public drug use on streets or in parks	62.5
Less risk of injury and death from drug overdose	60.7
Help lower the risk of diseases like HIV, AIDS, and Hepatitis C	59.7
Connect people who use drugs or their family members with health, treatment, and social services	57.9
Safer community	48.3
Less work for ambulance and police services	45.5
Supervised injection services would not help Waterloo Region	26.9

Questions and Concerns about Supervised Injection Services

Less than half of all participants (41.2%) reported having questions or concerns about supervised injection services in Waterloo Region. Respondents reported being most concerned about the safety of their children or dependents (58.5%), effects on property values (57.5%), and the perceived possibility that supervised injection services could lead to more drug use (56.3%).

Table 8. Questions and concerns about supervised injection services in Waterloo Region (n=1,441)

Question/Concern	(%)
I have concerns about the safety of my children or dependents	58.5
Will supervised injection services have an effect on property value?	57.5
Will supervised injection services lead to more drug use?	56.3
Will supervised injection services lead to more drug selling or trafficking in the community?	53.4
Will supervised injection services lead to more people who use drugs in the community?	53.4
Will supervised injection services impact the reputation or image of our community?	49.7
Will supervised injection services impact community cleanliness or quality of life?	46.5
Will supervised injection services have an impact on business or profits?	41.7
Will supervised injection services lead to more crime?	40.0
Will supervised injection services impact personal safety?	39.8
Will supervised injection services lead to more used needles on the street?	36.8

Significantly more participants residing in Cambridge expressed having concerns about supervised injection services compared to Kitchener, Waterloo, and the townships combined ($p < 0.05$). Table 9 shows the number of respondents for each location of residence, the proportion of respondents within each municipality reporting concerns for supervised injection services, and the proportion of all respondents with concerns.

Table 9. Proportion of respondents indicating questions/concerns by location of residence

Location of residence	# of respondents with concerns	% of respondents within location with concerns	% of all respondents with concerns (n=1,445)
Cambridge	1,327	53.4	49.0
Kitchener	1,153	32.7	26.1
Waterloo	634	28.1	12.3
Townships*	198	39.9	5.5

*The townships include North Dumfries, Wilmot, Wellesley, and Woolwich.

Note: 7.1 per cent of respondents with concerns indicated living outside Waterloo Region or did not know which municipality or township they resided in.

Respondents were asked to select strategies to address questions and concerns of the community about supervised injection services. While all strategies presented were supported to some degree (See Table 10), “Evaluate the services to see what’s working and what’s not, share results with the community and take action” was indicated by most (73.2%).

Table 10. Strategies to address questions and concerns of the community (n=3,509)

Strategy	(%)
Evaluate the services to see what's working and what's not, share results with the community and take action	73.2
Have a website with information and contact email and phone number for questions	56.1
Ask for ongoing feedback from the community about supervised injection services	55.2
Give out information about the goals of supervised injection services and how they can help the community	54.2
Have a community group involved in addressing questions and concerns about supervised injection services	49.0
Other*	9.7

*Other strategies included not having supervised injection services and community education.

Of those who indicated that supervised injection services would be ‘not very helpful’ and ‘not at all helpful’, ‘giving out information about the goals of supervised injection services

and how they can help the community” was preferred the most (87.8%) as a strategy to address questions and concerns.

4.0 Discussion

“My impression is that what we’re trying to do is throw a life ring to someone who is drowning. If someone is drowning, you don’t say that we really need to give everyone swimming lessons. People are dying and we recognize this is not where we want to be, but it’s a way to provide some kind of lifeline to folks who are hopelessly trapped in this addiction cycle”

– Information and Consultation Session participant

4.1 Are supervised injection services supported in Waterloo Region?

The majority of respondents¹⁴ are seeing the impact of injection drug use on individuals and the broader community and support supervised injection services. Supervised injection services were seen to prevent overdose related deaths, increase access to services, and create a safer community for all, by providing a safe space for clients to inject their own drugs and properly dispose of injection drug use equipment.

Harm reduction service providers and participants of the information and consultation sessions continually reinforced the importance of creating a safe space for people who inject drugs. This space would create a path to wellness by opening a door for the development of relationships with peers and service providers that would facilitate healthy behaviours and provide connections to treatment and recovery services when clients are ready. Further, there was general consensus that provision of a safe, non-judgemental space would create an environment where people with lived experience would be accepted and included, benefiting the community overall.

4.2 What concerns does the community have regarding supervised injection services and how can they be addressed?

Concerns regarding supervised injection services centred on questions of whether supervised injection services would compromise the safety of dependants, people who may use the services and the surrounding neighbourhood. There was the perception that supervised injection services would negatively impact the neighbourhood in which it is placed, leading to more crime, decreasing property values, and higher rates of improper needle disposal. Concerns were raised about the need for more addiction treatment programs in Waterloo Region and it was felt that if supervised injection services were to become available, more treatment should also be available. Improving access to treatment in a timely manner was seen as a priority if supervised injection services were to move forward. In contrast, people who inject drugs strongly believed

¹⁴ Unless otherwise noted, the discussion reflects findings from all groups engaged using the four methodologies for this feasibility study.

that supervised injection services would decrease improper needle disposal along with public drug use, crime, and street violence. They also believed that people accessing services would learn more about treatment and indicated strong support for access to treatment as part of a supervised injection service integrated model.

Strategies to address the concerns of the community about supervised injection services included improving communication about the process to consider supervised injection services; educating the community on addiction, mental health, and harm reduction to build understanding and reduce stigma; and creating an advisory group to oversee and respond to issues that may arise during implementation of supervised injection services.

A comprehensive, multipronged communication strategy about the feasibility study was identified as being needed and should describe supervised injection services and how they work. A spokesperson for the project was requested along with support from other community leaders who could provide information and dialogue about how these services fit within a broader community approach.

In parallel to the communication strategy, it was felt that an education strategy to reduce stigma and reframe addiction as a health issue is important. The strategy would focus on the complexity of addiction and mental health, and would help to dispel myths and provide a “human face” to addiction and substance use issues. It would also prioritize educating children, teens, and young adults on how to prevent addiction and problematic drug use.

An advisory group made up of community members, people with lived experience of drug use, and service providers was seen to be critical in building trust within the community about supervised injection services and the overall success of this intervention in Waterloo Region.

4.3 What services should a supervised injection service location offer?

In Ontario, supervised injection services must be integrated with other harm reduction services as opposed to being stand-alone sites. This requirement ensures access to services that otherwise may not be available to people with lived experience.

Participants of the study, excluding community survey participants, were asked which services should be integrated alongside injection. Integrated services indicated by participants included:

- Mental Health and Addictions Services (e.g. counselling, referrals to treatment)
- Health Services (including primary care and testing for blood-borne infections)
- Social Services (e.g. housing, income support)
- Basic Needs (e.g. washroom, drop in space, food)

4.4 What geographic areas are most impacted by injection drug use?

While findings indicate that injection drug use occurs in a number of areas throughout Waterloo Region, the downtown cores of Kitchener and South Cambridge (Galt) were identified as being impacted more than other areas. People who inject drugs indicated a preference for a supervised injection service in these locations. Paramedic Services call response data shows a higher number of overdose calls in the downtown cores of Kitchener and South Cambridge (Galt). Having more than one site was considered essential as a means to preventing concentration of services in one area, and to ensure access for people who would use the services.

4.5 Are supervised injection services needed and will they be used?

The primary data collected strongly indicates that supervised injection services are needed in Waterloo Region. This community response is also supported by local opioid related data that shows rising numbers of overdose deaths in the region. It is evident that problematic substance use is affecting Waterloo Region.

Respondents of the injection drug use survey indicated that they would use the site with one in four reporting that they would use it for all their injections. Almost every person expressed a preference that the site is located with other health and social services with access to treatment being requested by 83 per cent. Respondents from all sources unequivocally reported that drug use is unique for each individual and supported a 24 hour a day, 7 days a week operation. Having said that, the preferred operating hours, as identified by people with lived experience are 8am-4pm, and overnight hours were a popular second choice (noting the limitation that 24/7 was not an option in the survey for them to select).

5.0 Appendices

Appendix A. Secondary Data Extraction Data Sources

The table below summarizes the data sources that were used in the secondary data analysis.

Data Type	Description	Data Source
Number of injection drug users	The estimated number of people who inject drugs in Waterloo Region based on unique client ID through needle syringe programming.	Needle Syringe Program Data
Confirmed opioid related deaths	Confirmed opioid related deaths for Waterloo Region.	Office of the Chief Coroner for Ontario
Suspected number of overdose deaths	Number of deaths in Waterloo Region where overdose was suspected (not opioid specific).	Waterloo Regional Police Services
Opioid related paramedic services calls	The number of opioid related Paramedic Service calls in Waterloo Region.	Region of Waterloo Paramedic Services Electronic Patient Care Record (ePCR) Ambulance Dispatch Reporting System (ADRS)
Naloxone kits distributed	The total number of naloxone kits distributed by Public Health and community partners (Sanguen Health Centre, Bridges, oneROOF, and ACCKWA).	Region of Waterloo Public Health Program Data
Opioid related emergency department visits	Number and rate of opioid-related emergency department visits in Waterloo Region and Ontario. Triage time of opioid related visit.	National Ambulatory Care Reporting System (NACRS)
Disease rates (Hepatitis C, HIV/AIDS)	Preliminary counts and rates of Hepatitis C and HIV/AIDS in Waterloo Region.	Integrated Public Health Information System (iPHIS) - January-December 2017, extracted January 15, 2018.

Appendix B. Key Informant Interview Questionnaire

1. What do you know about supervised injection services?

- *Probe: So we have a common understanding about what a SIS is (provide definition):*
“Supervised injection sites or services are health facilities where people who inject drugs can inject their pre-obtained illicit drugs under the supervision of nurses or other health professionals. Users are provided with sterile equipment, given information on safer injecting, as well as emergency response in the event of an overdose, and are provided with referrals to external health and social services”.
The MOHLTC has outlined that each SIS funded by the provincial government will have the following core services onsite:
 1. First aid
 2. Education
 3. Disposal
 4. Distribution of naloxone
 5. Referrals to other health and social services

2. Do you think SISs are needed in Waterloo Region?

3. What would the benefits be of having SISs in Waterloo Region?

(Probe: for individual, organizational, and community-level benefits)

4. What do you see as some challenges with having SISs in Waterloo Region?

(Probe for: individual, organizational, and community-level challenges)

5. Do you think SISs will be accepted and used by people who inject drugs? Please explain your answer.

Prompt: Do you think there are any barriers for people to use SISs?

6. What do you think are the concerns of the broader community regarding SISs?

7. How might we address those concerns? Do you have any strategies for addressing those concerns?

8. If you support the idea of having a SIS locally:

- In addition to Public Health, who (individuals, organizations or service providers) do you think should be involved in operating a SIS location in our community?
- How many SISs do you think are needed?
- Where do you think SISs should be located?

- What days and hours do you think SISs should operate?

9. What other programs or services should be offered alongside SIS to ensure the effectiveness of SISs?

10. Do you have any other thoughts or concerns that you would like to share?

Appendix C. Information and Consultation Questions

1. In what ways would supervised injection services be helpful in Waterloo Region?
2. What questions or concerns do you have about supervised injection services in Waterloo Region?
3. Do you have any ideas to address questions or concerns about supervised injection services in Waterloo Region?
4. What areas of Waterloo Region do you think are most impacted by drug use?
5. What services or organizations do you think should be involved in operating supervised injection services or be located in the same facility?
6. What days and hours should a supervised injection site be open?
7. Is there anything else you would like to share about supervised injection services?

Appendix D. Number of valid responses for each question of the survey conducted with people who inject drugs

Question	n
1. Have you injected drugs in the LAST 6 MONTHS?	146
2. Are you 16 years of age or older?	146
3. Do you live, work, or go to school in Waterloo Region?	146
4. Which city/township do you live in?	145
5. What year were you born?	142
6. What sex were you assigned at birth (e.g., on your birth certificate)?	145
7. Some people identify with an ethnic group or cultural background. To which ethnic or cultural group do you feel you belong?	146
8. Please list all the places that you have lived or stayed overnight in the last SIX MONTHS	146
9. Of the places you listed, where did you live most of the time? (DO NOT read out list. Check only ONE response from Question 8)	134
10. Are you living with someone who is a current injection drug user?	145
11. What is the highest level of education that you have COMPLETED ?	142
12. About how much money did you get from all sources LAST YEAR ?	142
13. Over the LAST 6 MONTHS , what were your sources of income?	146
14. In the PAST SIX MONTHS have you exchanged sex (including oral) for any of the following things?	146
15. In the LAST SIX MONTHS , how often did you inject drugs?	138
16. Have you injected drugs in the LAST 30 DAYS ?	138
17. In the last SIX MONTHS , have you re-used a needle for more than one injection?	138
18. On average, what percentage of injections are done with a needle you have already used?	72
19. On a day when you do inject, how many times a day do you usually inject on average?	132
20. In the PAST SIX MONTHS , in which neighbourhoods did you inject?	146
21. Of the neighbourhoods which you have mentioned, in which neighbourhood did you inject most often?	146
Kitchener respondents	74
Cambridge respondents	65
22. In the LAST SIX MONTHS, have you injected in (places)?	146
23. In the LAST SIX MONTHS , how often did you inject in public or semi-public areas like a park, an alley or a public washroom?	135
24. What are some of the reasons you inject in public?	102
25. In the LAST SIX MONTHS , have you used water from a puddle, public fountain or other outside source to prepare your drugs or rinse your needles?	139

Question	n
26. Have you ever injected alone?	140
27. In the LAST SIX MONTHS , how often did you inject alone?	110
28. How often in the LAST SIX MONTHS did you need help when injecting ?	134
29. Why do you need help with injecting?	66
30. Would you be willing to learn how to inject yourself?	66
31. In the PAST have you EVER ...	-
a) Exchanged or obtained needles at a local harm reduction program or another needle syringe program (e.g., the Van, ACCKWA, Public Health)?	136
b) Got NEW STERILE needles from a friend?	137
c) Got NEW STERILE needles from a dealer or someone on the street?	135
d) Injected with needles knowing they had already been used by or were being used by someone else?	134
e) Injected with needles without knowing they had already been used by or were being used by someone else?	134
f) Loaned syringes that had already been used by you or were being used by someone else to inject?	136
g) Used other injecting equipment (e.g., cotton, filter, spoon, cooker) that had already been used by or was being used by someone else including your sexual partner?	135
h) Filled your syringe from another syringe that had already been used or was being used by someone else (back-loading or front-loading)?	133
i) Had drugs and wanted to inject but didn't know where to get a clean needle?	137
j) Reused a cooker with drugs in it for an extra wash?	136
k) Had trouble getting enough new needles from the needle exchange program to meet your needs?	133
l) Had a needle syringe program limit the number of needles they would give you?	132
31. In the PAST 6 months have you...	-
a) Exchanged or obtained needles at a local harm reduction program or another needle syringe program (e.g., the Van, ACCKWA, Public Health)?	108
b) Got NEW STERILE needles from a friend?	109
c) Got NEW STERILE needles from a dealer or someone on the street?	106
d) Injected with needles knowing they had already been used by or were being used by someone else?	106
e) Injected with needles without knowing they had already been used by or were being used by someone else?	106
f) Loaned syringes that had already been used by you or were being used by someone else to inject?	106

Question	n
g) Used other injecting equipment (e.g., cotton, filter, spoon, cooker) that had already been used by or was being used by someone else including your sexual partner?	107
h) Filled your syringe from another syringe that had already been used or was being used by someone else (back-loading or front-loading)?	108
i) Had drugs and wanted to inject but didn't know where to get a clean needle?	108
j) Reused a cooker with drugs in it for an extra wash?	107
k) Had trouble getting enough new needles from the needle exchange program to meet your needs?	107
l) Had a needle syringe program limit the number of needles they would give you?	103
32. Have you injected [drug] in the LAST SIX MONTHS ?	146
33. What is your drug of choice?	146
34. In the LAST SIX MONTHS , which of these drugs did you inject the MOST ?	146
35. Have you EVER gotten a drug that you think was cut with another substance?	141
36. The last time you think you got a drug that was cut with another substance, what were you trying to use at the time?	95
37. What do you think it was cut with?	93
38. Have you heard of supervised injection services (SISs)?	146
39. If supervised injection services were available in Waterloo Region would you consider using these services?	138
40. Why would you use supervised injection services?	119
41. Which ONE of these reasons is the MOST IMPORTANT reason for you?	103
42. For what reasons would you NOT use supervised injection services?	46
43. What reasons would make you change your mind?	46
44. There are a number of guidelines being considered for SISs. For each of the next statements, please let me know if these guidelines would be very acceptable, acceptable, neutral, unacceptable or very unacceptable to you.	-
a) Injections are supervised by a trained staff member who can respond to overdoses	132
b) 30 minute time limit for injection	146
c) Have to register each time you use it	146
d) Required to show government ID	146
e) Required to show client #	146
f) Have to live in the neighbourhood where the SIS is	146
g) Video surveillance cameras onsite to protect users	146

Question	n
h) Not allowed to smoke crack/crystal meth	146
i) Not allowed to have others assist in the preparation of injections	146
j) Now allowed to assist each other with injections	146
k) Not allowed to share drugs	146
l) May have to sit and wait until space is available for you to inject	146
m) Have to hang around for 10 to 15 minutes after injecting so that your health can be monitored	146
45. There are various SERVICES being considered to provide with SIS. I'm going to read out a number of services. I will ask you if they are very important, important, moderately important, slightly important, or not that important to you.	-
a) Nursing staff for medical care and supervised injecting teaching	132
b) Washrooms	135
c) Showers	146
d) Social workers or counsellors	146
e) Drug counsellors	146
f) Aboriginal (Indigenous) counsellors	146
g) Food (including take away)	146
h) Peer support from other injection drug users	132
i) Access to an opiate (methadone or buprenorphone) prescribed by a health professional	146
j) Needle distribution	132
k) Injection equipment distribution	146
l) HIV and hepatitis C testing	132
m) Withdrawal management	146
n) Special times for priority groups such as women, indigenous populations etc.	146
o) Referrals to drug treatment, rehab, and other services when you're ready to use them	132
p) A 'chill out' room to go after injecting, before leaving the SIS	132
q) Preventing or responding to overdose	146
r) Access to general health services	146
s) Assistance with housing, employment and basic skills	133
t) Harm reduction education	146
u) Drug testing (a service to check if your drug may have been cut with another potentially dangerous substance)	146
v) Other	146
46. Would you use SIS if it was located in each of the following locations?	-
a) Community health centre	146
b) Public health clinic	146
c) Walk-in or family doctor's clinic	146

Question	n
d) Social service agency	146
47. What type of model/building would you prefer for a SIS?	146
48. How long would you be willing to walk to use a SIS in the SUMMER/WINTER?	146
49. Are you willing to take a bus to a SIS?	146
50. How long would you be willing to travel by bus to get to a SIS in the SUMMER/WINTER?	84
51. What other ways do you see yourself accessing SISs?	146
52. In which neighbourhood, or region would be your FIRST CHOICE for seeing an SIS?	146
53. In which neighbourhood, or region would be your SECOND CHOICE for seeing an SIS?	101
54. What time of the day would be your FIRST CHOICE to use SIS?	146
55. Now, what time of the day would be your SECOND CHOICE to use a SIS?	106
56. If SIS was established in a location convenient to you in Waterloo Region how often would you use it to inject?	146
57. What would be the best set-up for injecting spaces for SISs?	146
58. Do you think people who use drugs should be involved in running SISs?	146
59. HOW do you think people who use drugs could be involved?	83
60. If it was possible to check the safety of your drug before injecting at a SIS, how often would you do this?	146
61. How long would you wait to get the results of the drug safety test?	115
62. How many SISs do you think Waterloo Region needs?	146
63. I am going to ask if you think the following would be very likely, likely, neutral, unlikely, or very unlikely to occur in the community if SISs were opened in Waterloo Region.	-
a) The number of people injecting outdoors would be reduced	146
b) The number of used syringes on the street would be reduced	146
c) Injection with used needles would be reduced	146
d) People would learn more about drug use	146
e) Overdoses would be reduced	146
f) Street violence would be reduced	146
g) Crime would be reduced in the area	146
h) Users would visit the area more	146
i) Users would move to the area	146
j) Drug dealers would be attracted to the area	146
64. Have you heard of Narcan/naloxone?	146
65. Have you heard about take-home Narcan/naloxone kits that you can keep with you for an opiate overdose?	123
66. If yes, how did you hear about it?	110

Question	n
67. Are you aware of the Narcan/naloxone Program in Waterloo Region?	112
68. Do you currently have a take-home Narcan/naloxone kit?	110
69. If yes, where did you get it from?	69
70. If no, why not?	41
71. Have you ever administered Narcan/naloxone to anyone?	104
72. If yes, how many times?	49
73. Have you EVER overdosed by accident?	146
74. Have you overdosed in the PAST SIX MONTHS ?	57
75. Altogether, how many times have you overdosed in your lifetime?	55
76. When was the LAST TIME you overdosed?	54
77. The last time you overdosed, do you remember which drugs or substances were involved?	58
78. The last time you overdosed, which drugs or substances were involved? Did you inject them?	49
79. Were other people with you when you overdosed?	58
80. What neighbourhood were you in when you LAST overdosed?	48
81. Could you tell me the type of place where you overdosed?	51
82. Was an ambulance called when you overdosed?	55
83. After the ambulance was called, did the police show-up?	33
84. Were you taken to an emergency department/hospital?	32
85. Were you offered transport to the hospital but Declined?	33
86. If yes, why did you refuse?	7
87. Were you given Narcan/naloxone?	53
88. If yes, who administered it?	28
89. Have you witnessed an overdose in the LAST 6 MONTHS ?	146
90. Who overdosed?	75
91. What happened in response to the overdose you witnessed?	75
92. Have you EVER been afraid of being arrested when you or someone else overdosed?	146
93. Have you EVER in your lifetime been in a drug treatment or detox program?	146
94. Have you in the LAST SIX MONTHS been in a drug treatment or detox program?	66
95. In the LAST SIX MONTHS , which treatment programs have you been in?	25
96. During the PAST SIX MONTHS , have you ever tried but been unable to get into any of the treatment programs?	146

Appendix E. Key Informant Interview Participants by Organization

1. AIDS Committee Of Cambridge, Kitchener, Waterloo and Area (ACCKWA)
2. Grand River Hospital Withdrawal Management
3. House of Friendship
4. KW Counselling
5. oneROOF Youth Services
6. Ontario Addiction Treatment Centres
7. Region of Waterloo Public Health and Emergency Services
8. Ray of Hope
9. Sanguen Health Centre
10. Simcoe House
11. The Working Centre

Appendix F. Information and Consultation Session Group Participants

1. A Clean Cambridge
2. Cambridge Outreach Task Force
3. Canadian Mental Health Association
4. City of Cambridge
5. City of Kitchener
6. City of Waterloo
7. Downtown Kitchener BIA
8. For a Better Cambridge
9. Galt BIA
10. Hespeler BIA
11. Housing Outreach Workers
12. Housing Support Managers
13. Joint Emergency Services Operations Advisory Group
14. Kitchener SIS Advocacy Groups
15. Lutherwood
16. Municipal Councillors
17. Paramedic Services
18. Postsecondary Stakeholders
19. Preston BIA
20. Region of Waterloo Housing Staff
21. Township of North Dumfries
22. UpTown BIA
23. Waterloo Region Crime Prevention Council
24. Waterloo Region Integrated Drugs Strategy
25. Waterloo Regional Police Service
26. Waterloo Wellington Local Health Integration Network

Appendix G. Number of valid responses for each question of the community survey

Question	Number
1. Are you willing to do the survey about supervised injection services in Waterloo Region?	3,879
2. Do you live, work, or go to school in Waterloo Region?	3,829
3. Are you 16 years of age or older?	3,829
4. To what extent do you think supervised injection services would be helpful in Waterloo Region?	3,576
5. In what ways would supervised injection services be helpful in our community?	3,579
6. Do you have any questions or concerns about having supervised injection services in Waterloo Region?	3,550
7. What questions or concerns do you have about supervised injection services in Waterloo Region?	1,441
8. Do you have any ideas to address questions or concerns from the community about supervised injection services?	3,509
9. What type(s) of supervised injection services do you think would be the best for Waterloo Region?	3,491
10. Do you have any other comments or suggestions about supervised injection services in Waterloo Region?	1,339
11. Describe your connection to harm reduction services.	3,321
12. Which of the following describes you?	3,483
13. What age group are you in?	3,458
14. Where do you live?	3,463
15. Where do you work?	3,446
16. Where do you go to school?	3,087

Works Cited

- Centre for Addiction and Mental Health. (2002). *CAMH and Harm Reduction: A Background Paper on its Meaning and Application for Substance Use Issues*. Retrieved January 28, 2018, from Centre for Addiction and Mental Health: http://www.camh.ca/en/hospital/about_camh/influencing_public_policy/public_policy_submissions/harm_reduction/Pages/harmreductionbackground.aspx
- Cotter, J. (2017, October 19). Health Canada approves safe injection sites in Edmonton, Lethbridge. Toronto, Ontario, Canada.
- Fitzgerald, P., & Gruenwoldt, E. (2017). *CAPHC Response to Joint Statement of Action to Address Opioid Crisis*. Ottawa, Canada: Canadian Association of Paediatric Health Centres.
- Folkema, A. (2017). *Infectious Diseases in Waterloo Region - Surveillance Report 2016*. Waterloo: Region of Waterloo Public Health and Emergency Services.
- Health Canada. (2016, November 29). *Joint Statement of Action to Address the Opioid Crisis*. Retrieved April 7, 2017, from Health Canada: https://www.canada.ca/en/health-canada/services/substance-abuse/opioid-conference/joint-statement-action-address-opioid-crisis.html?_ga=1.213458205.869414053.1491572721
- Health Canada. (2017, November 15). *Government of Canada Actions on Opioids: 2016 and 2017*. Retrieved February 13, 2018, from Government of Canada: <https://www.canada.ca/en/health-canada/services/publications/healthy-living/actions-opioids-2016-2017.html>
- Kudhail, R. (2018, January 25). *Starting on Opioids*. Retrieved January 25, 2018, from Health Quality Ontario: <http://startingonopioids.hqontario.ca/>
- Levy, I. (2016). *Enhanced Harm Reduction Services in Ottawa - Data, Guiding Principle and Next Steps*. Ottawa: Ottawa Health Unit.
- National Institute on Drug Abuse. (2016, August). *Understanding drug use and addiction*. Retrieved January 25, 2018, from National Institute on Drug Abuse: <https://www.drugabuse.gov/publications/drugfacts/understanding-drug-use-addiction>
- Notarandrea, R. (2018, January 19). Fighting opioid addiction requires a sea-change in attitudes. Vancouver, British Columbia, Canada.
- Potier, C., Laprevote, V., Dubois-Arber, F., Cottencin, O., & Rolland, B. (2014). Supervised Injection Services: What has been demonstrated? A systematic literature review. *Drug and Alcohol Dependence*, 1-21.

Statistics Canada. (2018, January 9). *Results of the Survey on Opioid Awareness*.

Retrieved January 9, 2018, from Statistics Canada: The Daily:

<http://www.statcan.gc.ca/daily-quotidien/180109/dq180109a-eng.htm>

Stone, K. (2016). *The Global State of Harm Reduction 2016*. United Kingdom: Harm Reduction International.

Taylor, A. (2008). *Baseline Study of Substance Use, Excluding Alcohol, in Waterloo Region*. Kitchener: Centre for Community Based Research.