Executive Summary

Problematic substance use, particularly injection drug use, is a growing public health matter across Canada. Injection drug use can lead to serious health consequences, including fatal and non-fatal overdoses and blood borne infections such as HIV and hepatitis C. Opioid related overdose is the number one cause of death for 18-35 year olds in Ontario, and this trend holds true for Canada as a whole (Eibl, Morin-Taus, & Marsh, 2016). An opioid crisis has been declared nationwide.

Region of Waterloo Public Health and Emergency Services (ROWPHE) and their community partners provide a number of services aimed at reducing the harms associated with problematic substance use. These include:

- Needle syringe program;
- Counselling and support;
- Naloxone training and distribution;
- Overdose prevention training initiatives;
- Establishing a system for overdose monitoring and response; and
- Needle disposal planning.

While Public Health and services in the community effectively address a number of harms associated with substance use, gaps in service provision remain. Overdose continues to be a significant public health issue in Waterloo Region, as it is across Ontario. Of particular concern is the increasing role of opioids, such as heroin and fentanyl in these deaths. People who use substances tend to experience more challenges accessing mainstream health and social services and report issues related to stigma and discrimination as a significant factor. Lack of housing options for people who use substances increases their risk of homelessness and further vulnerability. Public substance use and improper needle disposal continue to present ongoing challenges for the community and municipal partners.

There is extensive, peer-reviewed research documenting the positive public health and safety outcomes of supervised injection services (SIS) including a reduction in overdose events and disease transmission. SISs are also shown to reduce community issues such as public drug use and improper disposal of injection drug use equipment (Fischer, Rehm, Kim, & Robins, 2002). The Ministry of Health and Long Term Care describe SISs as one part of a continuum of harm reduction services. Currently, there are over 90 locations offering SISs worldwide, including Canada. In addition to SISs in Vancouver and Montreal, the Ministry of Health and Long-Term Care recently issued a statement announcing funding for the establishment of SISs in Toronto and Ottawa. Other cities across Ontario, including London and Thunder Bay, have done extensive work toward this goal. In addition to injection services, locations typically integrate a comprehensive range of health services including primary care and counselling, referrals to drug treatment, housing, income support, provision of sterile injection supplies, overdose prevention and intervention, and education.

The purpose of this report is to provide an overview of problematic substance use in Waterloo Region, demonstrate the need for enhanced harm reduction services, and present options for addressing the current opioid crisis, including exploring the feasibility of supervised injection services as a strategy for Waterloo Region.
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tr>
<td>ACCKWA</td>
<td>AIDS Committee of Cambridge, Kitchener, Waterloo, and Area</td>
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<td>AIDS</td>
<td>Acquired immunodeficiency syndrome</td>
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<td>BBI</td>
<td>Blood-borne infection</td>
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<td>CDSA</td>
<td>Controlled Drugs and Substances Act</td>
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<td>HCV</td>
<td>Hepatitis C Virus</td>
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<td>HIV</td>
<td>Human immunodeficiency virus</td>
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<td>HRCC</td>
<td>Harm Reduction Coordinating Committee</td>
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<td>MOHLTC</td>
<td>Ministry of Health and Long-Term Care</td>
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<td>NSP</td>
<td>Needle Syringe Program</td>
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<td>OMARS</td>
<td>Overdose Monitoring, Alert, and Response System</td>
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<td>OPHS</td>
<td>Ontario Public Health Standards</td>
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<td>ROWPHE</td>
<td>Region of Waterloo Public Health and Emergency Services</td>
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<td>SDOH</td>
<td>Social Determinants of Health</td>
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<td>SIF</td>
<td>Supervised Injection Facility</td>
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<td>SIS</td>
<td>Supervised Injection Services/Safe Injection Site</td>
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<td>VIDUS</td>
<td>Vancouver Injection Drug Use Study</td>
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<td>WRIDS</td>
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1.0 Introduction

Enhancing harm reduction programs and services in Waterloo Region is of significant importance at this time. Problematic substance\(^1\) use is a growing public health issue. While there are many poor health outcomes associated with substance use, unsafe practices such as sharing of drug paraphernalia or reusing equipment, leads to an increased risk for contracting blood-borne infections (BBI), such as Hepatitis C and HIV (Walji, 2016). Additionally, there are increasing numbers of unintentional overdoses, both fatal and non-fatal, at the regional, provincial, and national levels (Officer of the Chief Coroner of Ontario, 2016).

In addition to the numerous health effects associated with substance use, the social impacts of problematic substance use include stigma, isolation, and poor access to housing, and health and social services. Stigma and isolation can lead to riskier substance use practices, including use in public settings, including alleys, streets and parks, and purchasing or using substances alone. It may also discourage accessing harm reduction services such as needle exchange programs. Consequently, this can also lead to increased community issues including unsafe disposal of drug use paraphernalia and increased social consequences such as violence, trafficking and crime (Walji, 2016).

To address the harms associated with problematic substance use, Region of Waterloo Public Health along with various service providers deliver programs and services that aim to mitigate the health and social risks for people who use substances. These services focus largely on decreasing incidence rates of blood-borne infections through access to sterile equipment as well as decreasing the number of fatal overdoses by improving access to naloxone, a medication that reverses the effects of an opioid overdose. Research shows however, that further enhancing harm reduction services can have compounding positive effects on individuals who access these services leading to better outcomes overall.

This report will describe the current opioid crisis in Waterloo Region, highlight current community initiatives that mitigate risk to those who use substances, and propose evidence-informed enhancements to existing services that would further support those who may be at risk of accidental overdose and other negative health outcomes in Waterloo Region. These enhancements include expanding outreach services and exploring the feasibility of supervised injection services with comprehensive health services in Waterloo Region.

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\(^1\) Problematic substance use is a term that refers to the use of substances in potentially harmful ways. It includes both substance misuse, which is the use of substances in ways that are illegal or not recommended medically, and substance abuse, which involves excessive use of substances despite the physical, mental, emotional, social, legal, or economic harm that this may cause to oneself or others (British Columbia Ministry of Health Services, 2004).
2.0 Opioid Crisis

As stated by the Federal Minister of Health, “Canada is facing a serious and growing opioid crisis”. This crisis is 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 which are typically used to treat acute and chronic pain. Examples of prescription opioids include, but are not limited to: codeine, fentanyl; hydrocodone; methadone; and, oxycodone. Prescription opioids are classified as drugs under the Controlled Drugs and Substances Act, and their use is legal when they are prescribed by licenced practitioners (e.g. physician, dentist, nurse practitioner) and used by the person for whom they are prescribed (Harold, 2016).

Over the past several years there have been increasing concerns regarding the misuse of prescription opioids as these medications can appear in the illicit drug market. Risk of overdose and death from prescription opioids is of great concern because there are various ways in which the drugs can be misused or result in harm. These include misusing a prescription from a licensed practitioner, obtaining prescriptions from multiple practitioners without informing them of other prescriptions received, fraud or theft, street drug markets, and purchasing drugs on the internet (Harold, 2016).

The presence of fentanyl in the illicit drug market is of particular concern. Fentanyl is known to enter the market through either diversion of pharmaceutical fentanyl products in pill, powder or patch form, or through importation or smuggling of pharmaceutical grade fentanyl from abroad. In turn, this is used to create illicit products or is 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 small doses. When the person using the substance is unaware that they are taking fentanyl, the risk of overdose, particularly fatal overdose, is increased.

Across Canada, rates of opioid overdose have been steadily increasing, particularly in British Columbia (B.C.) where the number of opioid related deaths increased by 79 per cent from 2015 to 2016 (2015 = 510, 2016 = 914) (CBC News, 2016). Fentanyl has been identified as a major factor responsible for the increase. The number of opioid related deaths that occurred in B.C. in 2016 is three times more than the number of people who died in B.C. from a motor vehicle accident in the same year.

Ontario and Waterloo Region have also seen a rise in opioid toxicity deaths in recent years (Figure 1). According to the Office of the Chief Coroner for Ontario, the number of drug toxicity deaths in Ontario increased from 668 in 2009 to 845 in 2015, an increase of 26.5 per cent over that timespan. Local data shows that the number of drug toxicity deaths in Waterloo Region increased from 16 in 2009 to 31 in 2015. The proportion of drug toxicity deaths related to opioids in Waterloo Region increased from 50 per cent in 2009 to 61 per cent in 2015.
Figure 1 shows the proportion of drug toxicity deaths related to opioids in Waterloo Region and Ontario for the years 2009 through 2015.

Figure 1. Proportion of drug toxicity deaths related to opioids in Waterloo Region and Ontario, 2009-2015

In 2015, fentanyl was involved in 30.6 per cent of opioid-related deaths in Ontario (Office of the Chief Coroner of Ontario, 2016). It is expected that 2016 coroner data will support further increases in fentanyl related deaths in Ontario (Figure 2).

- In March 2016, Waterloo Regional Police Services received confirmation from Health Canada that seized drugs from Waterloo Region contained fentanyl.
- In December 2016, Waterloo Regional Police Services confirmed the presence of carfentanil in the local drug supply after confirmatory testing done by Health Canada.
- Coroner data shows an increase in drug toxicity deaths in Waterloo Region: In 2009 16 deaths were a result of drug toxicity compared to 31 deaths in 2015. Of those deaths in 2015, 61 per cent were opioid-related (n = 19) and of those, fentanyl was identified in 32 per cent of cases.

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2 2015 is the latest data available. 2016 data may be available in the fall of 2017.
3 Carfentanil is an opioid that is significantly more toxic than morphine and is used to sedate large animals such as elephants and is not for human consumption.
2.1 Impact on Local Healthcare System

The evolving crisis has had implications on the health care system including Region of Waterloo Paramedic Services, area Emergency Departments, and prescribing practices of physicians.

Recent anecdotal data from Region of Waterloo Paramedic Services and Waterloo Regional Police Services illustrate the growing severity of opioid use in real time.

- Ending March 2017, Paramedic Services have averaged 42.9 suspected opioid overdose related calls per month, representing a 92 per cent increase since January 2016 or an additional 21 calls per month\(^4\).
- In 2014 and 2015, Paramedic Services administered naloxone 31 times both years\(^5\). In 2016, this number rose to 76. As of May 1, 2017, naloxone has been administered 55 times in 2017 (January to April 2017 data). Naloxone administrations are expected to double for the second year in a row\(^6\).
- On May 11, 2017 Waterloo Regional Police Services reported that there were 28 suspected overdose related deaths in Waterloo Region since the start of the year.

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\(^4\) The moving 12 month average number of calls per month is calculated by averaging the number of calls for the current month and the previous 11 months for each data point. This method reduces the variation from month to month and allows for trends to be seen more clearly.

\(^5\) As of February 2016, all paramedics were given the authority to administer naloxone. Given this practice change, the number of naloxone administrations by year should be interpreted with caution.

\(^6\) Naloxone is not administered to every overdose patient. Paramedic Services estimates that approximately 25 to 30 per cent of overdose patients receive naloxone.
In addition, the proportion of opioid related emergency room visits have increased by 55.4 per cent in Waterloo Region between 2015 and 2016\(^7\) (Ontario Agency for Health Protection and Promotion (Public Health Ontario), 2017). This increase is not truly reflective of non-fatal overdoses in Waterloo Region.

Opioid prescribing rates continue to increase in Waterloo Region (Ontario Drug Policy Research Network, 2016). However, in October 2016, the MOHLTC announced that high strength formulations of long-acting opioids would be delisted from the Ontario Drug Benefit Formulary starting January 1, 2017 to help prevent addiction and support appropriate prescribing. It is expected that opioid prescribing rates will decrease moving forward. As well a new Canadian guideline for opioid therapy for non-cancer pain has been released with emphasis on the consideration of other modalities when managing chronic non-cancer pain. Sudden cessation for those who currently use opioids can be dangerous and can lead to illicit drug use.

HIV and Hepatitis C treatment are also costly, but preventable when a comprehensive harm reduction strategy is in place. The risk of contracting these blood-borne infections is greatest for those who inject substances using unsterile or previously used injection drug use equipment, including the sharing of crack and crystal methamphetamine pipes.

2.1.1 Hepatitis C

Hepatitis C infection is an infection of the liver caused by the Hepatitis C virus (HCV). Up to 80 per cent of people with HCV become chronically infected. HCV is a slowly progressive infection that may lead to liver cirrhosis (scarring) or liver cancer (MacArthur, 2015).

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 (MacArthur, 2015).

In 2015, the rate of HCV in Waterloo Region was 21.3 cases per 100,000 (N=117), making it the third most common reportable sexually transmitted infection/blood-borne infection in Waterloo Region. Local incidence rates of HCV have fluctuated over the past five years but remain stable overall. Among HCV cases in Waterloo Region that had risk factor information available in 2015 (N=113), the most common risk factors reported included injection drug use (66.4 per cent) and inhalation drug use (49.6 per cent) (MacArthur, 2015).

The cost of HCV treatment for one person is between $60,000\(^8\) and $110,000\(^9\) depending on the drug used and whether or not combination therapies are required. Not

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\(^7\) From January to September 2015, there were 112 opioid related emergency room visits in Waterloo Region. For the same time period in 2016, this number rose to 174.

\(^8\) Wholesale cost of Epclusa (Gilead Sciences) in Canada (CATIE, 2016).

\(^9\) Cost of Harvoni in Canada if a second treatment is required (Ubelacker, 2016).
only is treatment costly on the health care system, some treatment regimes are extremely taxing on the patient both physically and mentally impacting their overall quality of life significantly.

2.1.2 HIV/AIDS

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 (MacArthur, 2015). One of the risk factors for HIV is injection drug use.

In 2014, 13 per cent (n = 335) of all new HIV infections in Canada were linked to injection drug use (CATIE, 2017).

In 2015, there were 16 HIV/AIDS cases in Waterloo Region for an incidence rate of 3.0 cases per 100,000. Local data for years prior to 2014 is not comparable due to a change in case definitions. Provincially, there is a decreasing trend in incidence rates of HIV/AIDS declining approximately 35 per cent over the last 10-year period (MacArthur, 2015). Needle syringe programs may be contributing to this decreasing trend as well as harm reduction outreach programs, which are provided locally in Waterloo Region.

The cost of treating one HIV patient in Canada over their lifetime is approximately $250,000 (Kingston-Riechers, 2011). This is approximately the cost of running ACCKWA’s harm reduction program for five years. In addition to treatment costs, the economic value of productivity loss is $670,000 and quality of life losses account for $380,000 bringing the total economic loss to $1.3 million per person infected with HIV (Kingston-Riechers, 2011).

2.2 Substance Use Trends in Waterloo Region

There is a general understanding that drug use occurs in each area of the region; however, local information about the extent of illicit substance use and the implications of this use is vague, underestimated, and often anecdotal. For these reasons, ROWPHE surveyed substance users in 2008 and 2016 to identify emerging issues and changes in substance use patterns in the region overtime.

In brief, the 2016 study found that patterns of substance use locally have changed since 2008, in particular the use of methamphetamines and fentanyl has increased. Alcohol and cannabis were the most prevalent substances used followed by:

- Party or club drugs, for example Ecstasy/MDMA, LSD;

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10 ACCKWA reported over 4000 harm reduction interactions with service users in their 2015-2016 Annual Report.

11 For full details about the study, please see – Region of Waterloo Public Health and Emergency Services (2017). Waterloo Region Substance Use Study. ON: Adele Parkinson, Grace Bermingham & Andrew Sardella.
• Cocaine;
• Prescription opioids (illicit use);
• Methamphetamine (a.k.a. crystal meth); and
• Benzodiazepines (e.g. valium, lorazepam).

Substance use among youth differed from that of the general population. Cannabis and alcohol are the most commonly used substances followed by substances often associated with recreational events (a.k.a. party drugs; e.g. LSD, MDMA/Ecstasy), benzodiazepines and amphetamines. Of note is that youth who are not students accounted for all prescription opiate, methamphetamine, and cocaine use in this age group.

There are many harms, health issues, and unmet basic needs facing and experienced by people who use substances including, risk of overdose and infections, inadequate housing, food insecurity and poor physical and mental health. Accessing health care services was reported as challenging. These challenges result in people who use substances delaying seeking treatment or treating their health issues themselves which results in worsening physical and mental health.

Several strategies to address the harms and challenges facing people who use substances emerged from study participants. These included:
• Establishing a safe place to use substances;
• Enhanced treatment and mental health services;
• More housing options; and
• Increased access to harm reduction supplies.

Having a safe place to use substances was identified as a key strategy that could address many of the identified harms. It was described as a service hub with multiple services co-located on site.

Large community strategies were also identified through the study. Coordination and collaboration among sectors who work with people who use substances was recognized as a way to address the complex needs of people who use substances and increase access to services. Training of staff in multiple sectors was identified as a way for reducing the discrimination and hesitancy to treat or work with people who use substances. A youth strategy was also seen as necessary since their substance use, experiences and needs differ from those of the overall population of people who use substances.

3.0 Harm Reduction Initiatives in Waterloo Region

Harm reduction refers to policies, programs, and practices that aim primarily to reduce the adverse health, social, and economic consequences of substance use. It focuses on the prevention of harm, rather than on the prevention of substance use itself. Harm reduction benefits people who use drugs, their families, and the community. Harm reduction employs a range of different strategies with the goal of minimizing the risk of
the individual contracting blood-borne infections, overdosing, or suffering other consequences related to problematic substance use.

Waterloo Region has been committed to harm reduction for some time. The Waterloo Region Integrated Drugs Strategy (WRIDS) is an initiative started by the Waterloo Region Crime Prevention Council and is now led by a community-based Steering Committee. The recommendations in the strategy are based on four pillars (harm reduction, prevention, recovery and rehabilitation, and enforcement and justice) strategically suited to creating change in Waterloo Region. Public Health, in collaboration with several community partners with experience and expertise in harm reduction, are working to implement the harm reduction-related recommendations in the Strategy. Collectively, the partners developed a harm reduction implementation plan for Waterloo Region. Overseeing implementation of the plan is the Harm Reduction Coordinating Committee.

The Harm Reduction Coordinating Committee (HRCC) consists of community members with lived experience, and representatives from the following agencies: AIDS Committee of Cambridge, Kitchener, Waterloo and Area (ACCKWA), Cambridge Shelter Corporation, the Kitchener Downtown Community Health Centre, House of Friendship, Region of Waterloo Community Services, Sanguen Health Centre, St. Mary’s Counselling Service, Towards Recovery Clinics/Ontario Addiction Treatment Centres, and Public Health.

The purpose of the HRCC is to guide planning related to community harm reduction initiatives including implementation the harm reduction recommendations developed as part of the Waterloo Region Integrated Drugs Strategy (WRIDS). Of the 23 harm reduction-related recommendations, the HRCC prioritized three recommendations for implementation over the next three years. These include:

- **Recommendation #39** – Expand harm reduction programs and services (increase access to services, disposal, initiate a range of harm reduction initiatives that support individuals who inject and/or inhale substances, including supervised injection services.);
- **Recommendation #45** – Increase public awareness of topics related to substance use; and
- **Recommendation #51** – Develop and implement a harm reduction-specific strategy for the health care sector.

Work plans have been developed for recommendations #39 and #45 and have been approved by the HRCC and the WRIDS.

The following harm reduction initiatives are provided in Waterloo Region:
- Community planning through the Harm Reduction Coordinating Committee as part of the Waterloo Region Integrated Drugs Strategy;
- The Needle Syringe Program;
• Overdose prevention initiatives including, awareness events, education, and naloxone training and distribution;
• Improving appropriate disposal of sharps; and
• Peer programs and outreach.

3.1 Needle Syringe Program (NSP)

The needle syringe program (NSP) is a provincial initiative that has been operated by Public Health in Waterloo Region since 1995. The goal of the NSP is to reduce the risk of HIV and hepatitis C transmission by increasing access to harm reduction supplies, sterile needles and syringes, removing used needles and syringes from circulation in the community, and educating individuals about the risks of re-using injection equipment. Individuals can access supplies, counselling, and referrals for testing, treatment, and other community services.

Accessibility is an important successful criterion of the NSP. Coordinated through Public Health, the services of the NSP are provided to the community at:
• ROWPHE at their offices in Waterloo and Cambridge;
• ACCKWA at their Kitchener office;
• Cambridge Self-Help Foodbank;
• St. John’s Kitchen;
• Cambridge Shelter Corporation at their main office/shelter site;
• oneROOF Youth Services; and
• Sanguen Health Centre, including the Community Health Van which began operation in late 2015.

From 2012 to 2016, the needle syringe program has seen a steady increase in the number of needles distributed each year (Figure 3).
3.2 Overdose Prevention

Since 2012, Public Health has partnered with several community organizations to implement and/or offer overdose prevention initiatives. Overdose prevention is an integral component of the broader harm reduction strategy and encompasses education and training, distribution of naloxone to reduce overdoses in Waterloo Region, and overdose reporting and monitoring.

3.2.1 Awareness and Education

In Waterloo Region, work has begun to improve education and training on the risks of opioid use. This includes overdose prevention training for youth, relatives of people who use substances, and service providers. The Overdose Prevention Work Group\textsuperscript{12} is chaired by Region of Waterloo Public Health and has provided three overdose awareness events targeted at various audiences within the last year.

Region of Waterloo Public Health has partnered with a community member to provide overdose prevention training\textsuperscript{13} at Elmira Secondary School and the alternative schools in Waterloo Region. Future plans include an evaluation of the program to support expansion to other secondary schools.

\textsuperscript{12} See Appendix 1 for the Overdose Prevention Work Group membership list.
\textsuperscript{13} This program is offered to students in grade 9 and 12.
3.2.2 Ontario Naloxone Program

Naloxone is a life saving medication available in pharmacies and other facilities, used to temporarily reverse the effects of an overdose of opioid drugs such as heroin and fentanyl. Naloxone is designed to reduce the number of preventable deaths due to opioid overdose and is available as a nasal spray or as an injection.

Naloxone distribution in Waterloo Region is growing. Since late 2013, Region of Waterloo Public Health and Sanguen Health Centre have offered naloxone kits to service users that have identified a history of past or current opioid use. As of late, the program has been expanded to include family and friends of a person at risk for an opioid overdose. So far in 2017\textsuperscript{14}, Public Health has distributed almost twice as many kits than what they distributed in all of 2016.

Naloxone distribution in Waterloo Region is growing. Currently, naloxone is dispensed in Waterloo Region through ROWPHE, Sanguen Health Centre, and select pharmacies. Between January and April 2017\textsuperscript{15}, 1268\textsuperscript{16} naloxone kits were dispensed in Waterloo Region.

From January to March 2017, 50 per cent of people who used a take home naloxone kit in Waterloo Region reported not calling 9-1-1\textsuperscript{17}\textsuperscript{18}. This is in line with national statistics where 9-1-1 is not called in 30 to 65 per cent of overdose related events where naloxone was administered (Canadian Community Epidemiology Network on Drug Use, 2017).

3.2.3 Partnership with Pharmacists’ Association and the University of Waterloo School of Pharmacy

The Ontario Naloxone Pharmacy Program began in June 2016 to increase access to naloxone. The Ministry of Health and Long-Term Care (MOHLTC) announced that through the program, pharmacies were permitted to dispense free naloxone kits to Ontarians without a prescription. Individuals seeking naloxone kits are trained by a pharmacist on how to use naloxone and the proper medical follow-up required if naloxone is administered (i.e. calling 9-1-1). A valid Ontario health card is required\textsuperscript{19} and can sometimes be a barrier for service users.

In 2016, Public Health partnered with Region of Waterloo Pharmacists’ Association and the University Of Waterloo School Of Pharmacy to support pharmacists to implement the program with the goal of increasing access to naloxone in pharmacies in Waterloo Region.

\textsuperscript{14} Public Health distributed 214 naloxone kits and 407 so far in 2017 (as of May 19, 2017).
\textsuperscript{15} Does not include kits distributed by all pharmacies.
\textsuperscript{16} Includes data from Ontario Towards Recovery Clinic – Kitchener; Ontario Addiction Treatment Centres – Kitchener, Kitchener East, and Cambridge; and Canadian Addiction Treatment Pharmacy – Kitchener.
\textsuperscript{17} Data retrieved from internal naloxone data collection system, 2017.
\textsuperscript{18} The main reason for not calling 9-1-1 was concern that the police would become involved.
\textsuperscript{19} If no health card is present, a kit can be obtained for approximately $70.00.
3.2.4 Overdose Monitoring, Alert, and Response System (OMARS)

In October 2015, the Waterloo Region Integrated Drugs Strategy Steering Committee agreed to develop and oversee an ad-hoc committee to develop a risk strategy as a result of recent fentanyl overdoses in the community and a lack of standardized data regarding overdose events in Waterloo Region. This ad-hoc committee, which is referred to as OMARS (Overdose Monitoring, Alert, and Response System) is a collaborative community initiative and aims to provide ongoing access to locally relevant, timely data on overdoses in Waterloo Region. The purpose of OMARS is twofold: to inform the public, service providers, and health care partners on issues of overdose, opioid use, and harm reduction measures; and to alert service providers who work with people at risk for overdose when there are confirmed cases of tainted substances in circulation in Waterloo Region.

Data is provided through bulletins and alerts and shared with a range of stakeholders including service providers who work with people who use substances, health care providers and community members.

3.3 Disposal of injection (and other) drug use equipment

Since March 2016, Public Health has worked with community partners to determine how to improve disposal of harm reduction equipment in Waterloo Region (refer to Appendix 1 for a full list of organizations represented on the Harm Reduction Disposal Work Group). An assessment of current disposal options and local data informed five recommendations for implementation. They are:

1. Increase disposal options by installing outdoor, tamper-proof disposal units in Cambridge, Kitchener, and Waterloo;
2. Explore opportunities to enhance existing outreach services to increase education on safe disposal practices and to provide mobile disposal service;
3. Increase awareness of disposal options available in Waterloo Region among individuals who use substances, service providers, and members of the public;
4. Increase the number of agencies providing harm reduction disposal supplies (e.g. sharps containers) and education on proper disposal practices; and
5. Develop coordinated data collection measures to monitor inappropriate disposal of harm reduction equipment throughout Waterloo Region.

Recommendation 1 is complete and 3 and 5 are in progress. The final two recommendations (2 and 4) are dependent upon funding. Implementing outreach services will be particularly important as this can introduce an education and prevention component to disposal (i.e. avoiding the problem from occurring rather than focusing all efforts on clean-up). This is considered an essential element of a comprehensive strategy to address disposal challenges in Waterloo Region.
3.4 Peer programs and outreach

Both Sanguen Health Centre and ACCKWA use peer led programs to help at-risk individuals’ access support and clinical services in Waterloo Region. Peer education is the teaching or sharing of health information, values and behavior in educating others who may share similar social backgrounds or life experiences. Peer programs and outreach services have been proven to be an effective method in connecting with hard-to-reach and/or priority populations and improving health behaviour (Sokol & Fisher, 2016). Peer to peer connection has been shown to not only connect individuals with immediate harm reduction needs, but also serve to link people to deeper engagement in formal health and social services.

ACCKWA and Sanguen Health Centre operate outreach services at fixed sites in Kitchener and Cambridge (St. John’s Kitchen, Cambridge Self-Help Food Bank, and a Waterloo Region Housing location). Additionally Sanguen operates a mobile van which has improved access to harm reduction services for hard-to-reach individuals. Service users can access a number of supplies from the van including food, clothing, supportive counselling, referrals to community agencies and supports, and harm reduction supplies including naloxone. A Public Health Nurse provides support to the van Thursday evenings and provides health education, well-being assessment, and support20.

ACCKWA operates a peer engagement program which aims to reduce HIV-related stigma and discrimination, and influence behaviour change among groups at risk for HIV infection. The peer engagement program also provides opportunities for leadership from communities most at risk.

4.0 Identified Gaps

While Public Health and community services effectively address a number of harms associated with substance use, gaps in service provision remain. Overdose continues to be a significant public health issue in Waterloo Region, as it is across Ontario. Of particular concern is the increasing role of opioids, such as heroin and fentanyl in these deaths. People who use substances tend to experience more challenges accessing mainstream health and social services and report issues related to stigma and discrimination as a significant factor. Lack of housing options for people who use substances increases their risk of homelessness and further vulnerability. Public substance use and improper needle disposal continue to present ongoing challenges for the community and municipal partners.

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20 Services provided by the Social Determinants of Health Nurse include testing of sexually transmitted infections and BBIs, pregnancy testing, emergency contraception, and providing birth control information.
4.1 Stigma

Stigma refers to negative attitudes (prejudice) and negative behaviour (discrimination) toward people with substance use and mental health problems. Stigma includes having fixed ideas and judgements about a person’s situation and fearing and avoiding what is not understood. The result of stigma in our community could involve limiting people’s access to employment, housing, health care, acceptance by some family, friends, and the community, making friends, and taking part in social activities otherwise available to others (Centre for Addiction and Mental Health, 2012).

Stigma towards people who use substances has been observed for many years in Waterloo Region. The Baseline Study (2008) reported that some individuals feel judged and rejected when seeking health care services (Taylor, 2008). They also fear arrest and other repercussions. For these reasons, they do not seek services that they need to address health issues or illness. In 2017, people who use substances in Waterloo Region continue to feel stigma. As reported in the Substance Use Study (2017), 27 per cent of respondents indicated they cannot get the services they need. Of those respondents, 12.8 per cent indicated it was because they felt unsupported, judged, and/or disrespected by health service providers (Parkinson, Bermingham, & Sardella, 2017).

Community partners sitting on the Harm Reduction Coordinating Committee confirmed that stigma continues to impede the ability of people who use substances to access health care services and social supports. Improving knowledge and increasing awareness among health care providers and the general public about substance use may reduce stigma in our area.

4.2 Public Substance Use

Public substance use and improper disposal of harm reduction equipment represent ongoing challenges for residents and municipalities in Waterloo Region. Research indicates that individuals tend to resort to using substances in public areas when they have no other options. Policies prohibiting substance use in housing or shelters21 are reported to influence such behaviours. The Substance Use Study (2017) reported that 28 per cent of respondents use substances in public places. The likelihood of improper disposal of harm reduction equipment increases with public substance use because of the distance to safe disposal options. While there is no formal tracking system for the number of times harm reduction equipment is found in public spaces, Public Health and their community partners are aware of ongoing challenges. While sharps disposal bins have been installed in areas with higher rates of improperly discarded equipment, improper disposal of needles and other equipment is expected to continue where there is public substance use.

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21 Substance use is not permitted in shelters in Waterloo Region.
4.3 Health and Social Supports

Accessing mainstream health and social supports can be difficult for people who use substances. Issues related to long wait times for services, lack of awareness about the complexity of substance use among health care and social service practitioners, and lengthy wait times for treatment are among the most commonly reported impediments to both seeking and receiving health care and social services.

Substance use, addictions, and harm reduction are specialized areas in the health care system. General health care practitioners may not have the training, skill set, or resources to effectively support patients with substance related issues as well as individuals with concurrent diagnoses. With the recent increase in the number of individuals visiting the emergency room for overdose/drug related issues, the demand for specialized care has also increased.

Addiction treatment is an effective strategy used to reduce drug-related harm. Timely access to evidence-based addictions treatment however is challenging in Ontario. In Waterloo Region, wait times for treatment, as reported by our community partners, are lengthy. Individuals can expect to wait up to 3.5 months for residential services in Waterloo Region. This is a profound limitation for our community partners who work with people who use substances that are ready for treatment. Research shows that this waiting period can be detrimental for those who use substances, especially youth and those entrenched in severe drug addiction.

In a Canadian study with street-involved youth, 21 per cent initiated injection drug use while on a wait list for addition treatment (Debeck, Kerr, Nolan, Dong, Montaner, & Wood, 2016). Moreover, 16.5 per cent of adults involved in the Vancouver Injection Drug Use Study (VIDUS) reported having sought addiction treatment in the past six months and were ultimately unsuccessful (Prangnell, et al., 2015). Factors that impeded their ability to access treatment included homelessness, time since initiating injection drug use, having previously accessed drug or alcohol treatment, binge drug use, and being a victim of violence. Participants of the Substance Use Study reported that when a substance user indicates a willingness to enter treatment, entry needs to be timely or they could change their minds while waiting.

In addition to timely treatment, there is a need for standardized protocols for service providers to support those who use substances who are seeking out health services in Waterloo Region. This protocol could include training for health services staff in harm reduction and addiction.

4.4 Housing

Housing options for people experiencing persistent homelessness\(^\text{22}\) who are actively using substances is limited in Waterloo Region (Social Planning, Policy and Program

\(^{22}\) People who do not have a fixed address.
In 2011, the Region of Waterloo Social Planning, Policy and Program Administration program reported that of those experiencing homelessness, 85-90 per cent have a mental health and/or substance use issue. Currently in Waterloo Region, there remains a significant gap in programs for people who are actively using substances. A locally generated continuum of substance use services (Social Planning, Policy and Program Administration, 2011), includes six levels of housing where Levels 1-4 focus on the needs of people with substance use issues related to alcohol and drugs; Level 5 focuses primarily on the needs of people with alcohol-related substance use issues; and Level 6 primarily addresses the needs of people with drug-related substance use issues (e.g., inhalant, injection or prescription).

Currently, there are no Level 5 or 6 housing options in Waterloo Region. Implications of this gap include increased demand on the shelter system and the potential for people to be housed in locations that do not match their needs and therefore increase their risk for eviction and health risks due to unsupported substance use issues.

Reports from local emergency shelter staff indicates that overdoses are on the rise. This is compounded by the barriers that exist to shelters obtaining life-saving naloxone kits.

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23 (Social Planning, Policy and Program Administration, 2011)
for staff to administer to a person experiencing an overdose. The primary barrier is that the current naloxone distribution program, guided by provincial policy, does not extend to agencies such as shelters. Waterloo Region and other communities in Ontario have identified this as a priority area that the province must address. Agencies like shelters need the province to create policy direction regarding naloxone use in shelter settings and to fund naloxone distribution to these groups.

5.0 Enhancing Harm Reduction Services in Waterloo Region

In November 2016, the HRCC reviewed their terms of reference and harm reduction recommendations of the WRIDS. While the workgroup had made progress on HR39 in seven project areas, the timely announcement of the Provincial Opioid Strategy and the opioid crisis nationwide provided rationale to the HRCC to move forward on increasing the range and scope of harm reduction services offered in Waterloo Region. The workgroup unanimously agreed to prioritize stakeholder consultations and feasibility of supervised injection services in Waterloo Region.

5.1 Program Initiation

In 2016, the Federal Minister of Health and the Ontario Minister of Health provided a joint statement of action to address the opioid crisis. This statement reflects combined commitment to action by Health Canada, ministries, departments, provinces, colleges of physicians, surgeons, pharmacies, and associations, who are aware of the crisis and are committed to improving prevention, treatment and harm reduction associated with problematic opioid use (Health Canada, 2016).

The statement includes support for a range of tools and harm reduction measures for communities, including supervised injection services. Specifically, the statement addresses removing undue legislative barriers, support for the application process, and keeping the public up to date on the status of applications that have been submitted.

5.1.1 Supervised Injection Services

Supervised injection service and supervised injection site (SIS) are used interchangeably to describe a legally-sanctioned, medically-supervised facility where individuals are able to consume illicit recreational drugs intravenously. Depending on the location, additional services may be offered that can include provision of sterile injection supplies, education on safer injection, overdose prevention and intervention, medical and counselling services, and referrals to drug treatment, housing, income support and other services (Walji, 2016). The main goal of SISs is to save lives.

Currently in Canada, SISs are operating in Vancouver (Insite, est. 2003) and three locations in Montreal will be operational this spring. In January 2017, Dr. Eric Hoskins, Ontario Minister of Health and Long Term Care, issued a statement identifying that

24 Project 1 of HR39: Increase the availability of harm reduction programs and services.
supervised injection services are part of a broader harm reduction strategy for the province. In that statement financial support was committed to the City of Toronto for their proposal to establish three safe injection sites. The statement from the Minister further reports that “given the importance of this issue, a provincial framework (is being developed) in order to respond to the supervised injection services proposals from Toronto and Ottawa, as well as other municipalities or other applicants that may request similar programs for their cities in the future”. Currently there are over 90 SIS locations operating worldwide in the Netherlands, Germany, Switzerland, France, Spain, Luxembourg, Denmark, Norway, Australia, and Canada.

In 2016, ROWPHE completed a comprehensive literature review on SISs. The literature showed considerable support for the implementation of SISs in areas where drug use is problematic. The review shared that SISs accomplish the following objectives:

- Engage high-risk, marginalized drug users – those who inject substances, experience frequent housing insecurity and/or unemployment; and individuals who are lacking care or who do not access the health care system;
- Decrease fatal and non-fatal overdoses\(^{25}\);
- Reduce high-risk behaviours that lead to HIV and hepatitis C infection;
- Decrease unsafe injection practices (e.g. syringe sharing, reusing equipment);
- Decrease public drug use and improve disposal of used equipment;
- Increase access to health and social services, including referrals to addiction treatment centres and initiation of withdrawal management programs or opioid substitution therapy;
- Reduce the number of opioid related visits to the emergency department; and are
- Cost-effective for the health care system.

To operate legally in Canada, SISs require an exemption under Section 56 of the Controlled Drugs and Substances Act (CDSA). These exemptions are granted by the Federal Minister of Health. For jurisdictions interested in seeking a Section 56 exemption, the Respect for Communities Act, passed in 2015, outlines the process and criteria for applicants (Walji, 2016). Currently, in Canada, the following cities are awaiting exemption: Toronto (three sites), Ottawa (one site), Vancouver (two additional sites), and Surrey (two sites). An additional twelve cities in Canada are in the planning stages of SIS development including London and Thunder Bay in Ontario.

Exploring the feasibility of operating supervised injection services in Waterloo Region has been identified as a priority by the Harm Reduction Coordinating Committee and Public Health.

\(^{25}\) Vancouver Coastal Health reported that more than 4,900 overdose interventions without any deaths have occurred at Insite since 2003 (Walji, 2016).
5.2 Program Expansion

In addition to exploring the feasibility of supervised injection services in Waterloo Region, ROWPHE and their community partners plan to further develop integrated and comprehensive harm reduction programs and services by:

1. Improving access to naloxone through pharmacies and agencies. This will include further recruitment and training related to naloxone administration for pharmacies in accordance with the Ontario Naloxone Program for Pharmacies. Additionally, work is being done at the provincial level to expand the availability of naloxone to shelters, outreach programs, Community Health Centres, AIDS Service Organizations, and other agencies who work with people who use substances. Once naloxone availability has expanded, the role of Public Health will be explored to support implementation.

2. Expanding overdose prevention training and education. In addition to exploring the effectiveness and expansion of overdose education and awareness in secondary schools in Waterloo Region, Public Health along with community partners will explore opportunities to reach more parents, teachers, relatives, and friends of those who are at risk for opioid overdose to provide overdose prevention training.

3. Promoting the use of sharps disposal bins in Waterloo Region and explore the feasibility of adding additional sharps disposal bins in other areas of Waterloo Region, specifically our rural communities.

Other enhancements in consideration are listed below but require financial resources and will not be initiated until funding is secured.

- Working with health care providers to improve their knowledge of harm reduction and capacity to serve individuals who use substances. This would include providing training and support to physicians regarding opioid prescriptions and naloxone;
- Identifying new community partners to provide harm reduction services; and
- Expanding outreach/mobile initiatives in the community (e.g. peer programs and the Sanguen Van) to better reach priority populations and our rural communities.

6.0 Community and Policy Support

In addition to local data and peer-reviewed literature that provide support for and encourage the exploration of enhanced harm reduction services in Waterloo Region, community and policy support are in place to move forward.

Enhancing harm reduction services is supported by the Ottawa Charter for Health Promotion, an international health promotion framework. The charter states that health promotion strategies and programs should be adapted to the needs of the community (World Health Organization, 1986).
At the national level, support for enhanced harm reduction services is current as per the Joint Statement of Action to Address the Opioid Crisis. Provincially, boards of health are working within their scope of practice through the Ontario Public Health Standards exploring other evidence informed harm reduction strategies in response to local surveillance (Ministry of Health and Long-Term Care, 2009). The Ministry of Health and Long-Term Care supports supervised injection services as part of a comprehensive harm reduction strategy.

Exploring the feasibility of SISs in Waterloo Region would be done in partnership with those agencies residing on the HRCC which is overseen by the Waterloo Region Integrated Drugs Strategy Steering Committee. The HRCC voted unanimously to support moving forward with an enhanced harm reduction strategy for Waterloo Region prioritizing stakeholder consultations, and exploring the feasibility of operating supervised injection services in our region.
Appendix 1
Harm Reduction Coordinating Committee and Work Group Membership
(By Organization)

Harm Reduction Coordinating Committee
AIDS Committee of Cambridge, Kitchener, Waterloo & Area
Cambridge Shelter Corporation
House of Friendship
Kitchener Downtown Community Health Centre
Region of Waterloo Community Services
Region of Waterloo Public Health (Sexual Health and Harm Reduction)
Sanguen Health Centre
St. Mary’s Counselling Service
Towards Recovery Clinics/Ontario Addiction Treatment Centres
There are also four community members on the Coordinating Committee.

Harm Reduction Disposal Work Group
AIDS Committee of Cambridge, Kitchener, Waterloo & Area
Cambridge Shelter Corporation
City of Cambridge
City of Kitchener
City of Waterloo
Downtown Kitchener Business Improvement Area
Region of Waterloo Licensing and Enforcement
Region of Waterloo Public Health
Sanguen Health Centre
Waterloo Regional Police Services

Harm Reduction Overdose Prevention Work Group
AIDS Committee of Cambridge, Kitchener, Waterloo & Area
House of Friendship
Kitchener Downtown Community Health Centre
oneROOF
Ray of Hope
Region of Waterloo Public Health
Sanguen Health Centre
Towards Recovery Clinics/Ontario Addiction Treatment Centres
Waterloo Regional Police Services
YWCA
There are also two community members on the work group.
Appendix 2

Supervised Injection Service Policy Framework
(Ministry of Health and Long-Term Care, 2017)

The policy framework outlines the policy goal and objectives, key elements of focus, and anticipated outcomes guiding the development and implementation of the provincial SIS program.

1. Need and Community Engagement
   - Reduce the rates of infectious diseases associated with injection drug use
   - Reduce the risk of overdose morbidity and mortality associated with injection drug use
   - Expand access to provincial harm reduction programs
   - Link vulnerable populations to other health and social services as appropriate
   - Decrease public consumption of illicit drug use

2. Capacity
   - Local health organizations that operate SIS have the capacity to provide supervised injection services effectively and efficiently
   - Increased number of injection drug users entering treatment
   - Increased number of injection drug users connected to integrated health services
   - Safer injecting behaviours

3. Integration
   - Supervised Injection Services (SIS) are integrated with other harm reduction and health services
   - Decreased incidence of injection drug-related overdose
   - Decreased burden on health care services
   - Reduced drug-related transmission of infectious diseases

4. Accessibility
   - SIS are accessible to those who need them based on prevalence of injection drug use and accessible to those with disabilities
   - Hospital data
     - Overdose-related ER visits
     - Hospital admissions related to overdose
   - EMS callouts
     - For injection drug overdose
   - Drug and crime data
     - Public licit sale
     - Crimes against the activity of SIS
   - Key Indicators

Outcomes

Opportunities
Bibliography


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