



**CITY OF HAMILTON**  
*Public Health Services*  
**Clinical & Preventive Services**

<b>TO:</b>	Mayor and Members Board of Health
<b>COMMITTEE DATE:</b>	September 19, 2016
<b>SUBJECT/REPORT NO:</b>	Safer Inhalation Kit Distribution (BOH16038) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
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**RECOMMENDATION**

- (a) That the Board of Health approve the distribution of safer inhalation kits through current Public Health Services Harm Reduction program services.

**EXECUTIVE SUMMARY**

Inhalational drug use (i.e., smoking crack cocaine) has been associated with an increased risk of human immunodeficiency virus (HIV) and hepatitis C virus (HCV) infections (DeBeck et al. 2009; Macias J et al, 2008). As part of a comprehensive public health approach to drug and substance misuse, the harm reduction pillar aims to decrease illness and death without requiring abstinence from drug use (see Report BOH16035 – A Comprehensive Public Health Approach to Drug and Substance Misuse). People who use inhalational drugs often have breaks in the skin of the lips and mouth which can spread HIV and HCV through shared inhalation equipment. Safer inhalation kits aim to decrease the spread of these infections by decreasing the sharing of crack pipes. Although a safer inhalation program will not eliminate all sharing of crack pipes, safer inhalation equipment programs have shown that greater distribution of safer inhalation supplies can reduce equipment sharing and increase service access

for people who smoke crack cocaine (Best Practice Recommendations for Canadian Harm Reduction Programs).

Safer inhalation kit supplies are available from the Ministry of Health and Long-Term Care (MOHLTC) at no cost to public health units. A kit includes pyrex glass stems, brass screens, wooden push sticks, food grade vinyl mouthpieces and alcohol swabs.

Kits could be distributed via the existing needle syringe sites and mobile Van. While this may result in an increase in clients attending needle syringe sites or calling the Van, this is expected to be manageable within current resources as the time required to discuss and distribute a safer inhalation kit to a client will be brief. Kits will require assembly which can be done by The AIDS Network volunteers and Public Health Services (PHS) administrative staff. The majority (30 out of 36) of health units in Ontario currently distribute safer inhalation kits either directly or through a community partner.

### **FINANCIAL – STAFFING – LEGAL IMPLICATIONS**

**Financial:** As of July 2014, the MOHLTC began providing safer inhalation kit supplies at no cost to public health units. Currently the Harm Reduction Program consists of 5.1 FTE public health nurses and 2.0 FTE outreach workers for clinical and outreach services. Any staff and administrative time will be managed within the Council-approved budget for the Harm Reduction program and are expected to be minimal.

**Staffing:** Supplies would be distributed via existing needle syringe sites, outreach staff and the mobile Van program within the current staffing resources.

**Legal:** There are no legal implications to the distribution of safer inhalation kits.

### **HISTORICAL BACKGROUND**

In 2011, staff recommended that the Board of Health approve the distribution of safer inhalation kits (see Report BOH11031 - Harm Reduction Program - Street Health & Van Needle Exchange Situational Assessment). At that time, the recommendation was not approved and much of the concern was around the cost of the safer inhalation kits.

Since the Board of Health considered this issue in 2011, safer inhalation kit supplies are now available from the MOHLTC at no cost to public health units/regions. Currently, 30 of 36 public health units in Ontario distribute safer inhalation kits either directly or through a community partner.

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There is good evidence supporting the effectiveness of safer inhalation programs in decreasing the sharing of inhalational equipment. This is supportive of harm reduction principles to keep persons safe by decreasing the risk of injury and infectious diseases while using substances (Appendix A).

There are client and community partner requests (The AIDS Network, Elizabeth Fry Society) for safer inhalation kits to be made available (Appendix B).

## **POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS**

The Ontario Public Health Standards (2016) require that priority populations have access to harm reduction services to reduce the transmission of sexually transmitted infections and blood-borne infections.

Public health promotes community capacity building by fostering partnerships and collaborating with community partners.

Addressing determinants of health and reducing health inequities are fundamental to the work of public health in Ontario.

Effective public health programs and services consider the impact of the determinants of health on the achievement of intended health outcomes. Effective public health programs and services take into account communities' needs, which are influenced by the determinants of health. As well, an understanding of local public health capacity and the resources required, including collaboration with partners to achieve outcomes, is essential for effective management of programs and services.

## **RELEVANT CONSULTATION**

PHS has consulted with Joanne Lush, AIDS Bureau, MOHLTC to inquire whether safer inhalation supplies can be provided through community partners such as The AIDS Network instead of PHS; this was not possible, given PHS is the lead agency for ordering harm reduction supplies and prior lack of approval for the program.

Tim McClellmont, Executive Director of The AIDS Network supports the distribution of safer inhalation supplies in Hamilton including by his agency.

Nadia Zurba, manager of Ontario Harm Reduction Distribution Program consulted and stated that Hamilton may begin ordering safer inhalation supplies.

Appendix B includes letters of support from community partners, physicians and clients.

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## **ANALYSIS AND RATIONALE FOR RECOMMENDATION**

### **Crack Cocaine:**

Crack cocaine is an illicit drug that acts as a stimulant. It has been converted from powdered cocaine into a rock crystal. When the rock crystal is heated to a high temperature, it melts and quickly vaporizes, and can be inhaled (“smoked”). It produces a short but intense high. Crack is ranked highly in terms of the harms (physical, dependence and social) associated with its use.

Although there are no specific crack use data for Hamilton, clients of PHS’ Harm Reduction program indicate using multiple drugs, which includes both injecting and smoking substances.

Pipes for smoking crack cocaine can be crudely constructed from items such as glass bottles, soft drink cans, plastic bottles, car aerials or metal pipes. When makeshift pipes are used to smoke crack cocaine, the hot, jagged surface can cause injuries to the hands and mouth, including oral inflammation, cuts, burns and sores. Blood from these injuries may end up on the pipe. Infections including HIV or HCV contained in the blood can then be passed along to the next person using the pipe. (Canadian AIDS Treatment Information Exchange).

Many factors can influence pipe sharing, including smoking in small groups and intimate partner relationships. In addition, allowing others to use a pipe means that the owner can collect the “resin” or residue that collects on the inside of a pipe and smoke it (Boyd et al, 2007). People who smoke crack cocaine who have difficulty accessing pipes are also more likely to share (Ti, L. et al, 2011). There is evidence that HIV, Hepatitis B virus, HCV, pneumonia and tuberculosis can be passed to others when crack smoking sHBVupplies are shared (Boyd et al, 2008; Fischer et al, 2007; Malchy et al, 2011).

### **Risks and Impacts from Sharing Crack Pipes:**

#### *Hepatitis C virus infections:*

- Hepatitis C is a serious liver disease which can lead to cirrhosis (liver scarring), liver cancer, and liver failure. While newer treatments have made it possible to cure many cases of hepatitis C, the treatments are very expensive. Many people with hepatitis C virus have no symptoms, are unaware of having the disease, and can pass the virus on to others.
- Studies across Canada show elevated rates of hepatitis C among people who smoke crack cocaine. Hepatitis C is common among those who smoke crack cocaine. Studies from major cities in Canada have shown a prevalence of hepatitis C virus in people who smoke crack cocaine at 37% in Ottawa, 43% in Vancouver, and 29% in Toronto. These rates are all substantially higher than among the general Canadian population (0.7%) (Public Health Agency of Canada, 2009).

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- In 2015, there were 201 newly diagnosed hepatitis C cases in Hamilton. Hamilton's rates of hepatitis C are slightly higher than the provincial rates.
- Ninety-two percent of Hamilton hepatitis C cases reported to public health between 2011 and 2015 reported at least one risk factor related to drug use, such as injection drug use, inhalation drug use, and sharing needles.
- On average, 11 Hamiltonians die due to chronic hepatitis C infection per year.
- Virus-caused hepatitis has become a leading cause of death and disability in the world, killing more people in a year than Acquired Immunodeficiency Syndrome (AIDS), tuberculosis or malaria (Stanaway et al, 2016).

*HIV Infections:*

- Smoking crack is an independent risk factor for becoming HIV positive among those who use drugs intravenously (DeBeck et al., 2009).
- Studies across Canada show elevated rates (compared to the general population) of HIV among people who smoke crack cocaine. Prevalence rates of HIV reported among people who smoke crack cocaine in Canadian settings range from 19% in Vancouver to 6% in Toronto and 11% in Ottawa. These rates are all substantially higher than among the general Canadian population (0.2%) (Strike et al, 2014)

**Best Practices for Safer Crack Cocaine Smoking:**

Evidence-based recommendations for safer crack cocaine smoking equipment distribution have been developed by a multi-stakeholder working group on Best Practice for Harm Reduction Programs in Canada.

The Working Group recommends that programs distribute safer crack cocaine smoking equipment including:

1. A glass (Pyrex) stem that acts as the pipe due to its high heat resistance and lack of toxic coatings;
2. A mouthpiece, placed at one end of a pipe to help protect the lips from heat and chipped or cracked edges;
3. Push sticks, which help position screens in the pipe; and,
4. Screens composed of steel or brass to help prevent heated or melting drug(s) from being inhaled.

Each piece of equipment plays a role in safer crack cocaine smoking and the Working Group recommends that programs distribute all items in pre-packaged kits and as individual pieces of equipment. The Working Group recommends that programs provide safe disposal options, including personal sharps containers, and encourage clients to return and/or properly dispose of used or broken pipes, educate clients about the proper disposal of used smoking equipment, and provide multiple, convenient locations for proper disposal of used equipment (Strike et al. 2014).

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### **Evidence of Effectiveness of Safer Smoking Supplies Distribution**

A literature review completed by the Ontario Harm Reduction Distribution Program in April 2014 (Appendix A) highlighted a number of findings related to the effectiveness of safer smoking programs:

- There was a decrease in sharing previously-used supplies and an increase in using safer supplies;
- The frequency of re-using a stem decreased from 288 times down to 40 times (11 months after implementation);
- Use of metal pipes (as opposed to glass stems) decreased by 29%, the use of inhalers (as opposed to mouthpieces) by 27%, the use of pop cans (as opposed to glass stems and mouthpieces) by 27%, and the use of car antennae (as opposed to wooden push sticks) from 7% - 1%. All declines were highly statistically significant;
- The proportion of study participants sharing pipes 'every time' decreased from 37% to 13%; and,
- Offering safer smoking supplies created opportunities to teach people who use crack about safer smoking and crack use practices, and to engage those who use crack in services such as income assistance, addiction treatment and health care.

### **Benefits to Supplying Safer Smoking Supplies**

Supplying safer smoking supplies provides benefits at both the individual and population levels. At the individual level, there is generally a decrease in risky health behaviours (such as sharing supplies) and an increase in positive health behaviours. There is some evidence that the availability of safer smoking supplies may reduce the frequency of injecting drugs. Following implementation of safer smoking supplies in Ottawa, a significant decrease in injecting was observed (Leonard, L. et al, 2008). At a population level, preventing disease transmission through the distribution of safer smoking supplies may reduce costs to the healthcare system.

Offering safer smoking supplies can:

- Create the opportunity to connect those who use crack to existing services such as income assistance, addiction treatment, and health care;
- Decrease the sharing of drug smoking paraphernalia; and,
- Provide opportunities to teach people who use crack about safer smoking and crack use practices.

It is expected that there would be minimal impact on neighbourhoods, as it is less alarming to find a discarded glass stem than a discarded needle. Clients will be instructed to discard their glass stem in a sharps container due to the risk of blood contamination.

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A safer inhalation program will be rolled out through education and rapport building with service users through existing sites for needle exchange and PHS Harm Reduction outreach programs such as the Van, Street Health Centre, The AIDS Network, Hamilton Urban Core Community Health Centre, Elizabeth Fry Society and outreach staff. Mechanisms of distribution will be adjusted by staff as needed within the context of harm reduction programs and services to reach those who need safer inhalation kits and maximize efficiencies. Service users will be provided training on new methods of safer smoking practices as well as dialogue to discuss practices and recommendations during visits to the exchange and on outreach. The key messages for service users will focus on the risks of crack smoking, when to replace and dispose of equipment, and the safe disposal of equipment.

It is estimated that staff could distribute 50,000 to 100,000 pyrex stems for safer smoking per year, based on 2015 distribution in neighbouring health units (Ontario Harm Reduction Distribution Program).

#### **ALTERNATIVES FOR CONSIDERATION**

Council could choose not to approve this report which poses a risk of blood borne infections in our community related to a lack of safer inhalation supplies.

#### **ALIGNMENT TO THE 2016 – 2025 STRATEGIC PLAN**

##### **Community Engagement & Participation**

*Hamilton has an open, transparent and accessible approach to City government that engages with and empowers all citizens to be involved in their community.*

##### **Healthy and Safe Communities**

*Hamilton is a safe and supportive city where people are active, healthy, and have a high quality of life.*

#### **APPENDICES AND SCHEDULES ATTACHED**

Appendix A to Report BOH16038 - Literature Review  
Appendix B to Report BOH16038 - Letters of Support

#### **REFERENCES:**

Best Practice Recommendations for Canadian Harm Reduction Programs.  
[http://www.catie.ca/sites/default/files/BestPractices\\_SaferCrackSmokingEquipmentDistribution\\_July2013.pdf](http://www.catie.ca/sites/default/files/BestPractices_SaferCrackSmokingEquipmentDistribution_July2013.pdf) (accessed 2016-July 28)

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[http://www.health.gov.on.ca/en/pro/programs/publichealth/oph\\_standards/docs/ophs\\_2008.pdf](http://www.health.gov.on.ca/en/pro/programs/publichealth/oph_standards/docs/ophs_2008.pdf)

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Stanaway et al. The global burden of viral hepatitis from 1990 to 2013: findings from the Global Burden of Disease Study 2013. Retrieved from: [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(16\)30579-7/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(16)30579-7/abstract) (accessed 2016-July 29)

Strike, C., Gohil, H., Watson, T. (2014) Safer Crack Cocaine Smoking Equipment Distribution: Comprehensive Best Practice Guidelines. [http://www.catie.ca/en/pif/fall-2014/safer-crack-cocaine-smoking-equipment-distribution-comprehensive-best-practice-guideli#footnote35\\_g0baltw](http://www.catie.ca/en/pif/fall-2014/safer-crack-cocaine-smoking-equipment-distribution-comprehensive-best-practice-guideli#footnote35_g0baltw) (accessed 2016-July 29)

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