

# INFORMATION REPORT

<b>TO:</b>	Mayor and Members Board of Health
<b>COMMITTEE DATE:</b>	September 19, 2016
<b>SUBJECT/REPORT NO:</b>	A Comprehensive Public Health Approach to Drug and Substance Misuse (BOH16035) (City Wide)
<b>WARD(S) AFFECTED:</b>	City Wide
<b>PREPARED BY:</b>	Jessica Hopkins (905) 546-2424, Ext. 3055
<b>SUBMITTED BY:</b>	Elizabeth Richardson, MD, MHSc, FRCPC Medical Officer of Health Public Health Services Department
<b>SIGNATURE:</b>	

**Council Direction:** Not applicable

## Background

### Drug and substance misuse

Drug and substance misuse is the harmful use of drugs or substances for non-medical purposes. Substances can be legal (e.g., prescription medications, over-the-counter medications, alcohol) or illegal (e.g., crack, heroin). A drug is one type of substance and is defined as a “medicine or other substance which has a physiological effect when ingested or otherwise introduced into the body” [1]. Harm can come in many forms, including negative health, social and environmental impacts.

Drug and substance misuse is an important public health issue with significant impacts including illness and death. It can lead to health and social problems at the individual and population level, such as the spread of infectious diseases like hepatitis C virus and human immunodeficiency virus (HIV), death from overdose, the inability to work, family disruption, crime, concerns about neighbourhood safety and injection litter.

A Comprehensive Public Health Approach (the “Approach”) to drug and substance misuse helps guide Public Health Services’ (PHS) work to decrease the risks of drug and substance misuse in Hamilton and optimize health in the community. The Approach is comprised of four pillars:

- 1) Prevention;
- 2) Harm reduction;
- 3) Treatment; and,
- 4) Enforcement.

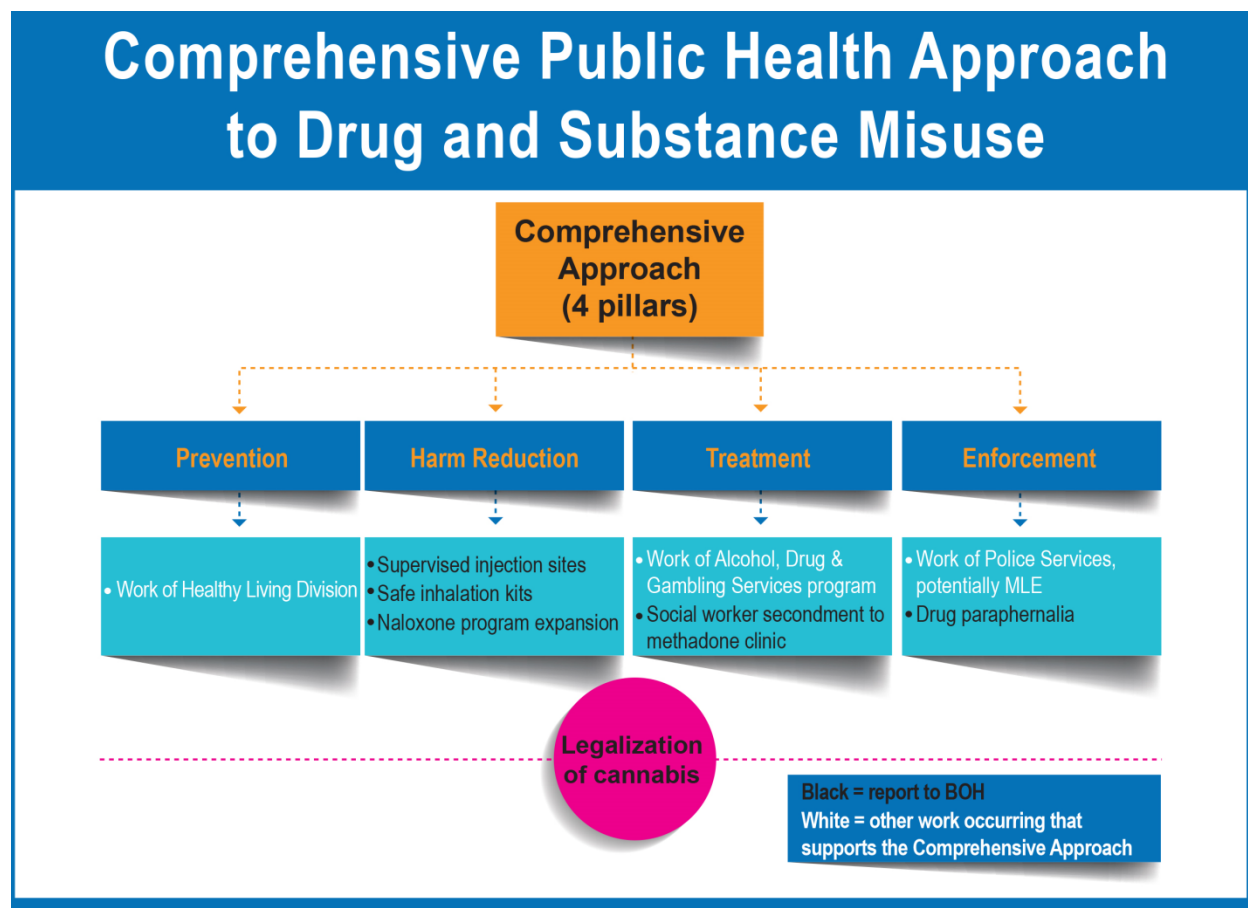
This report will provide an overview of PHS' comprehensive public health approach to drug and substance misuse in Hamilton. Drugs and substances included in this context will refer to prescription drugs that are not used as prescribed or illicit drugs. While the Approach can be applied to tobacco and alcohol, these substances will not be discussed in this report as they are significant issues unto themselves, are legal, regulated substances, and have their own strategies. This report also provide an overarching framework and set the context for the six accompanying reports that more specifically describe and recommend steps the Board of Health can consider to better address the problem of drug and substance misuse in Hamilton.

### **Related Reports**

- BOH16021 - Public health approach to revising the legal framework for cannabis
- BOH16037 – Supervised injection sites: evidence and proposed next steps
- BOH16038 – Safer inhalation kit distribution
- BOH16036 – Naloxone program expansion feasibility
- BOH16043 – Methadone clinic secondment
- BOH16022 – Sale and display of drug paraphernalia in convenience stores licensed as food premises

Figure 1 shows how the Board of Health reports and other PHS work align with the approach.

**Figure 1 – A Comprehensive Public Health Approach to Drug and Substance Misuse in Hamilton**



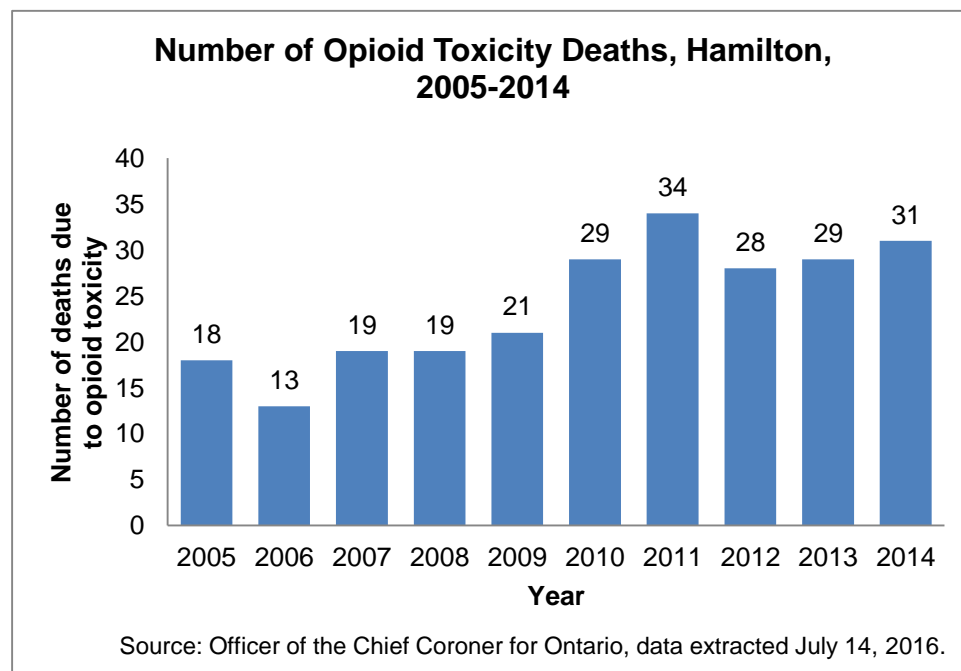
## Information

### What We Know About the Issue in Hamilton

Illicit drug use is relatively common. Based on the most recent data from the 2011/2012 Canadian Community Health Survey, 12.3% of Hamilton residents (18 years and over) used some type of illicit drug in the past 12 months. Marijuana was the most commonly used illicit drug in Hamilton adults with about 41% having used it at least once in their lifetime. Almost 10% of Hamilton adults have reported using stimulants (e.g., cocaine, amphetamines) at least once in their lifetime, followed by hallucinogens (e.g., LSD) and depressants (e.g., heroin). These numbers are similar to the rest of Ontario.

Drug and substance misuse can also be deadly. Data from the Ontario Coroner from 2005-2014 shows that the number of deaths due to opioids has increased. Since 2010, approximately 30 Hamilton residents per year have died from opioids (Figure 2).

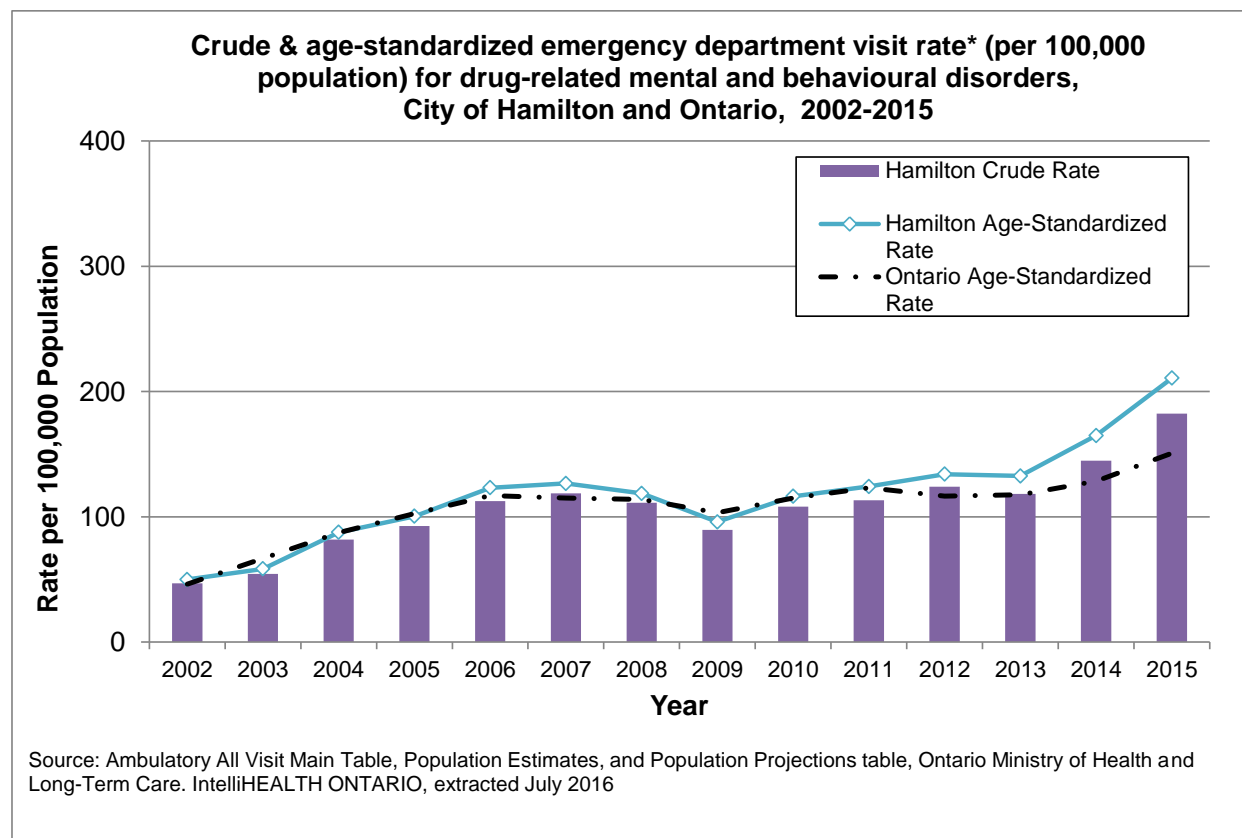
**Figure 2 – Opioid Deaths in Hamilton 2005 - 2014**



Drug misuse also places a burden on the health care system. Emergency department visits for drug-related mental and behavioural disorders have generally been increasing since 2002 for both Hamilton and Ontario. In Hamilton, the 2015 emergency department visit rate for drug-related disorders was 182 per 100,000 (1,011 ambulatory visits). From 2011 to 2015, the rate in Hamilton has increased significantly and is higher than the rest of Ontario (see Figure 3).

Using data from the Acute Care Enhanced Surveillance (ACES) system for the first half of 2016, showed that 846 drug-related emergency department visits were made to Hamilton hospitals. Of these, 15 visits (1.8%) were related to opioid overdose or misuse. Of these visits, 127 resulted in admission to hospital with a higher proportion (13%) of these visits related to opioids.

**Figure 3 – Emergency Department Visit Rates For Drug-related Mental and Behavioural Disorders in Hamilton and Ontario**



Similarly, Hamilton's hospital admission rates for mental and behavioural disorders related to drug and substance use has generally been increasing since 2002, (e.g., intoxication, withdrawal, misuse). In 2015, the admission rate was 16.2 per 100,000 (354 hospital admissions). This rate is similar to the rest of Ontario.

#### Four Pillars Approach

The four pillars approach to drug policy emerged in Europe in the 1990s. This approach represented a significant shift in thinking and action on drug and substance misuse to incorporate more prevention measures targeted at young people, helping people overcome addiction without requiring abstinence, increased health and social supports, increased research and evaluation, and new harm reduction activities [2,3]. Canada's current drug strategy, which has not been updated since the 2015 federal election, only incorporates three of the four pillars (prevention, treatment and enforcement) [4]. However, many other jurisdictions in Canada and globally, use all four pillars based on the supporting scientific evidence (e.g., Vancouver, Wellington Guelph, Toronto, Ottawa).

### ***Prevention***

Activities under the pillar of prevention generally aim to decrease the number of people starting substances, the number of people with substance misuse, and the impact harmful substance misuse can have on the individual, family, and community [2,3].

Public Health Nurses work in Hamilton's schools to support the curriculum on drug education and advocate with schools to create policies and environments that discourage drug use. This is accomplished through the promotion of mental wellness, healthy eating, active living, creating a positive school environment, and positive parent/guardian support. Key community partners in the area of prevention include the school boards and Hamilton Police Services.

### ***Harm Reduction***

Instead of focusing specifically on stopping drug use, the harm reduction pillar shifts attention to preventing the harms caused by drug and substance misuse [2,3]. Even if people are misusing drugs and substances, there are interventions to decrease the health effects and keep individuals, families and the community safer [2,3]. Supporting harm reduction is not the same as condoning or promoting drug use. Immediate goals of harm reduction include saving lives, decreasing disease and improving public order (e.g., decreasing public injection and injection litter), while long-term goals may help clients to better engage in the health or social service system (e.g., addiction treatment programs) leading to the potential to decrease or stop drug misuse.

PHS activities that support harm reduction include:

- Providing free condoms to prevent the spread of sexually transmitted infections;
- A needle syringe program (safe injection supplies for intravenous drug users);
- Community Points (needle retrieval program);
- Take-home naloxone program to treat opioid overdose; and,
- HIV and hepatitis C testing.

These services are available through fixed sites, (e.g., needle exchange sites, Street Health Centre) and the mobile Van.

Key community partners supporting harm reduction activities include The AIDS Network, Shelter Health Network, Hamilton Urban Core Community Health Centre, Elizabeth Fry Society, and Wesley Urban Ministries.

### ***Treatment***

The treatment pillar supports people using drugs and other substances to decrease or stop their problematic use of drugs and substances, and strengthen coping and supports to prevent further harm. Interventions to support the treatment pillar include counselling and other specific treatments (e.g., methadone) [2,3].

PHS activities that support treatment largely occur through the Alcohol, Drug and Gambling Services (ADGS) program (e.g., counselling, referral to residential treatment programs and methadone case management).

Key community partners include the Hamilton Family Health Team, Ontario Works, Children's Aid Society of Hamilton, Catholic Children's Aid Society of Hamilton, Wesley Urban Ministries (Wesley Centre, Special Care Unit) and Good Shepherd (Masterminds Dialectical Behaviour Therapy group co-provided with ADGS).

### ***Enforcement***

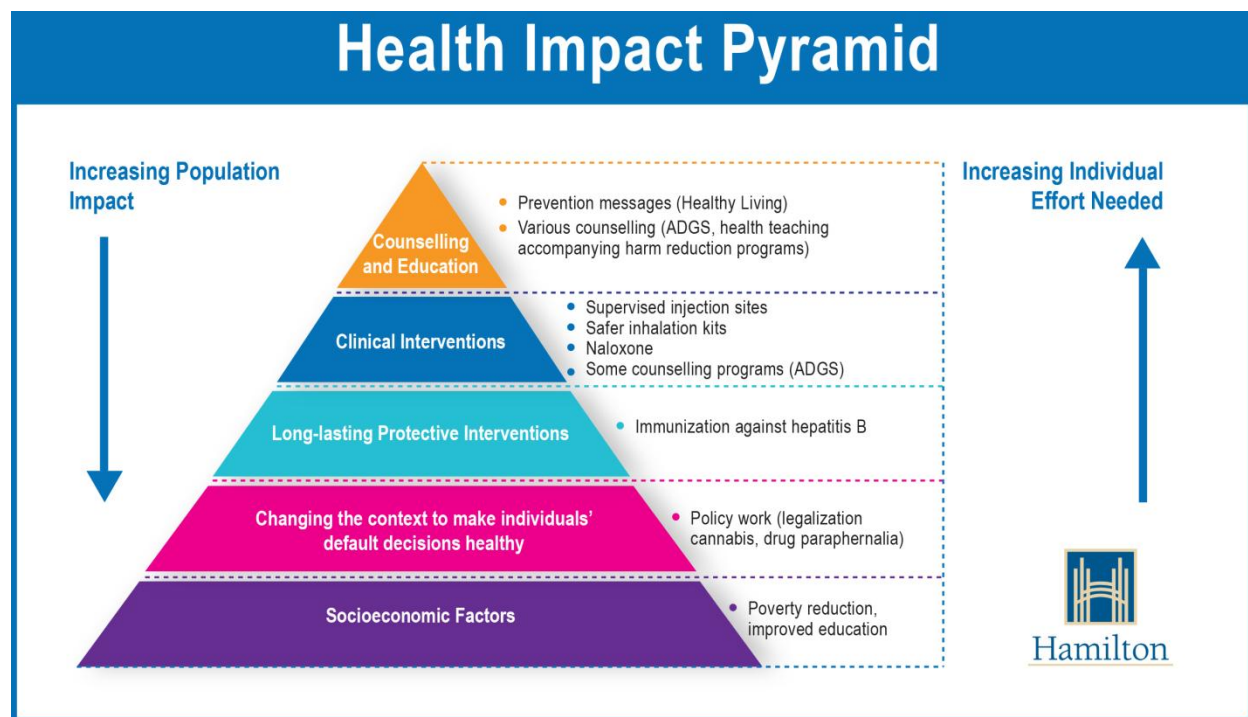
The enforcement pillar supports law, order, and public safety. While policing alone is not effective in preventing or controlling drug and substance misuse, it can contribute to an overall comprehensive approach [2,3].

Municipal by-law development, such as regulating sale and display of drug paraphernalia in convenience stores, is an activity that falls within this pillar.

### ***Summary***

The comprehensive public health approach to drug and substance misuse based on the four pillars supports the City's vision to be the best place to raise a child and age successfully, along with the priority of healthy and safe communities. It also supports requirements under the Ontario Public Health Standards related to infectious diseases, harm reduction, substance misuse, and health equity. Drug and substance misuse is a complex issue requiring a multifaceted strategy. PHS has adopted Frieden's health impact pyramid as a framework to support public health action (see BOH15002 - Board of Health orientation presentation February 19, 2015). Figure 4 shows the comprehensiveness of the Approach mapped to the health impact pyramid.

**Figure 4 – The Comprehensive Approach to Drug And Substance Misuse Is Aligned with PHS’ Use of The Health Impact Pyramid Framework for Public Health Action**



## REFERENCES

- [1] Oxford English Dictionary. “Drug.” <http://www.oxforddictionaries.com/definition/english/drug> [accessed 2 Aug 2016].
- [2] City of Vancouver. Four pillars drug strategy. Available at: <http://vancouver.ca/people-programs/four-pillars-drug-strategy.aspx> [accessed 19 Jul 2016].
- [3] Collin C. Parliament of Canada. Switzerland’s drug policy. 14 Jan 2002. Available at: <http://www.parl.gc.ca/Content/SEN/Committee/371/ille/library/collin1-e.htm> [accessed 19 Jul 2016].
- [4] Government of Canada. National anti-drug strategy – about the strategy. 30-Sep-2014. Available at: <http://www.healthycanadians.gc.ca/anti-drug-antidroque/about-a-propos/index-eng.php> [accessed 19 Jul 2016].