TORONTO

STAFF REPORT
ACTION REQUIRED

Overdose in Toronto: Trends, Prevention and Response

Date:	September 1, 2015
To:	Board of Health
From:	Medical Officer of Health
Wards:	All
Reference Number:	

SUMMARY

Drug overdose is a significant public health issue in Toronto, as it is across North America. Between 2004 and 2013 there was a 41% increase in the reported number of people dying from overdose in Toronto – from 146 in 2004 to 206 in 2013, the highest annual number to date. Of particular concern is the increasing role of opioids, such as heroin and fentanyl in these deaths. Recent media attention has highlighted the growing number of deaths caused by fentanyl, a highly potent opioid, in communities across Canada.

The risk for overdose is present for many types of drugs, including prescription drugs, alcohol and illicit drugs. Individuals taking prescribed medications can experience an overdose as well as people who use drugs for non-medical reasons. The Office of the Chief Coroner for Ontario (OCCO) is the main source for data on drug overdose deaths in Ontario. The Coroner investigates each death and records them as accidental (unintentional), suicide (intentional) or undetermined. The main focus of this report is on accidental deaths, as they comprise the majority of drug overdose deaths. Most of these deaths are preventable.

This report highlights public health concerns about overdose in Toronto and outlines action being taken by Toronto Public Health (TPH) and other stakeholders to prevent overdose. The report also recommends additional actions, including urging the provincial government to develop a comprehensive overdose prevention strategy for all drugs informed by the Municipal Drug Strategy Co-ordinator's Network of Ontario (MDSCNO) report, *Prescription for Life,* and to designate a single point of coordination to facilitate action on this issue.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

1. The Board of Health endorse in principle the recommendations in the Municipal Drug Strategy Co-ordinator's Network of Ontario report, *Prescription for Life* (Appendix A);

2. The Board of Health request the Ministry of Health and Long-Term Care to develop a comprehensive provincial overdose prevention strategy for all drugs, informed by the recommendations in the *Prescription for Life* report;

3. The Board of Health urge the Minister of Health and Long-Term Care to designate a lead within the Ministry of Health and Long-Term Care to facilitate short-term action on overdose prevention and response and lead the development and implementation of a comprehensive provincial overdose prevention strategy; and

4. The Board of Health forward this report to the Minister of Health of Canada, the Chief Medical Officer of Health for Canada, Corrections Canada, the Minister of Health and Long-Term Care, the Chief Medical Officer of Health for Ontario, the Ministry of Community Safety and Correctional Services, Public Health Ontario, the Council of Medical Officers of Health, the Association for Local Public Health Agencies, the Ontario Public Health Association, the College of Physicians & Surgeons of Ontario, and the Municipal Drug Strategy Co-ordinator's Network of Ontario.

Financial Impact

There are no financial implications arising from this report.

DECISION HISTORY

At its meeting of April 2, 2012, the Board of Health (BOH) approved a report from the Medical Officer of Health highlighting potential health implications, including overdose and death arising from the removal of OxyContin™ from the market, and outlining action taken by TPH and other stakeholders to help mitigate the impacts of this policy change, including expanding overdose prevention measures.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.HL12.5

On July 10, 2013, the BOH approved a report from the Medical Officer of Health supporting implementation of supervised injection services in Toronto, on a pilot basis, in part to help reduce drug overdose deaths.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.HL23.1

On November 17, 2014, the BOH received a report from the Toronto Drug Strategy Implementation Panel entitled, *Toronto Drug Strategy Status Report 2014*, highlighting action taken to implement the Toronto Drug Strategy recommendations since the previous report in 2012, including action on overdose prevention.
http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.HL34.7

ISSUE BACKGROUND

Drug overdose is a significant public health issue in Toronto with devastating impacts for individuals and families in our community. Overdose deaths are increasing in Toronto, and similar trends have been seen in municipalities across Ontario and Canada. The increasing role of opioids in these deaths is of particular concern.[1] [2] [3] Opioids are a family of drugs which are used medically as pain relievers (e.g., oxycodone, fentanyl). These prescription medications are also diverted to the illicit drug market where other non-prescription opioids, such as heroin, are also present. For the purposes of this report, the term opioids will include both prescription and illicit versions. The number of deaths in Ontario caused by opioids has risen in the last two decades, from 127 deaths in 1991 to 550 deaths in 2010.[4]

In the U.S., drug poisoning deaths involving heroin quadrupled between 2000 and 2013, with most of this increase after 2010.[5] In July 2015, the U.S. Centers for Disease Control reported a doubling in heroin use since 2005 as well as the use of other drugs with heroin.[6] Drugs frequently used with heroin include cocaine, and more recently, prescription opioids. In addition to concerns about prescribed opioids, the rate of heroin initiation following non-medical use of prescription opioid pain relievers has been shown to be 19 times greater than among people with no history of non-medical use.[7] This increase in heroin use has been associated with changes in the availability of prescription opioids, a situation relevant to many jurisdictions, including Ontario.

In 2012, Purdue Pharma stopped distributing the brand name oxycodone formulation OxyContin™ into the Canadian market and replaced it with OxyNEO™, a tamper-resistant tablet. OxyContin™ was frequently prescribed by physicians and was also diverted into the illicit drug market. Overdose deaths resulting from use of these opioids was a key concern at this time. In 2012, the Government of Ontario took action to better control prescription narcotics, established a prescription monitoring program, and supported naloxone distribution in local communities across the province.

Since 2012, the rate of opioid prescriptions dispensed in Ontario has declined; however, dispensing levels of high dose opioids (e.g., fentanyl) have increased.[8] The rate of drug overdose deaths remains an issue for Ontario with growing concern about deaths related to high dose opioids, especially the non-medical use of these drugs. Recent media attention has highlighted the growing number of deaths from fentanyl in communities across Canada. In Ontario, fentanyl deaths increased from 63 in 2009 to 111 in 2013.[9] Between 2011 and 2013, a death caused by fentanyl occurred about every three to four days in the province.[10]

The risk for non-fatal and fatal overdose is present for many types of drugs, including prescription drugs, alcohol and illicit drugs. Individuals taking medications prescribed by a physician can experience an overdose as well as people who use drugs for non-medical reasons. Mixing drugs or not taking prescription drugs as prescribed creates risk. In the illicit drug market, the content and potency of unregulated drugs is unknown, increasing the risk of overdose. The OCCO is the main source for data on drug overdose deaths in Ontario. The Coroner's Office investigates each death and records them as accidental (unintentional), suicide (intentional) or undetermined.

The main focus of this report is on accidental deaths as they comprise the majority of drug overdose deaths, and they are preventable. This report highlights concerns about overdose deaths in Toronto from a public health perspective, documents action being taken by TPH and other stakeholders, and identifies additional actions required on this issue.

COMMENTS

Substance use in Toronto

As shown in Table 1, alcohol and cannabis are the most frequently used drugs for both youth and adults. Among Toronto students, 29% reported using alcohol in the past year, and 13% had used cannabis. Among adults, 72% reported consuming alcohol in the past year, and 15% had used cannabis. Overall, rates of substance use are higher for youth and adults who are homeless or otherwise street-involved, or incarcerated.

Table 1: Substance use in the past year among various groups in Toronto

Substances used in the past year	Students Grades 7-12[11]	Adults 18+ [12]	Street-entrenched adults[13]	Street-involved youth[14]	Ontario prisoners *(male)* [15]
Alcohol	29%	72%	91%	99%	n/a
Cannabis	13%	15%	92%	96%	n/a
Prescription opioids (non-medical use)	11%	3%	23%-43%	15%-18%	35%
Cocaine (powder)	n/a	1.5%	61%	45%	38%
Cocaine (crack)	n/a	n/a	75%	23%	29%
Ecstasy/MDMA	n/a	n/a	28%	72%	n/a
Crystal methamphetamine	n/a	n/a	30%	54%	6%
Heroin	n/a	n/a	25%	10%	7.4%

Notes: n/a = not asked or no data available. Prison data was collected from a single, male-only correctional facility. Substance use also occurs among women prisoners, but no data sources were available.

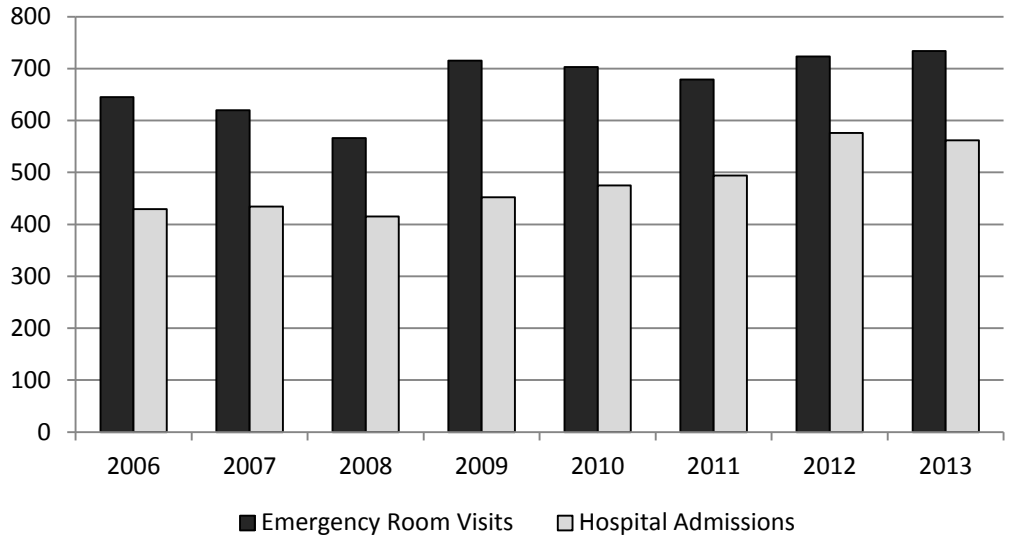
Non-fatal overdose

Data on non-fatal overdoses is limited, and is not collected in a systematic way. Many people who use drugs will experience a non-fatal overdose, but may not seek medical attention. This is especially true of people who use illicit drugs who often experience stigma and discrimination in the health care system.[16] [17] One available indicator of non-fatal overdoses is the number of emergency department visits and hospital admissions for opioid-related issues. Chart 1 presents these data for Toronto for the years 2006-2013. With some fluctuation, overall there has been an increase in both emergency department visits and hospital admissions.

The number of emergency department visits for opioid-related issues has remained consistently high between 2006 and 2013. Further, the number of opioid-related hospital admissions increased in both 2012 and 2013.[18] Each year, people aged 65+ accounted for over 40% of opioid-related hospital admissions.[19]

In 2013 alone, individuals aged 65+ accounted for 47% of total opioid-related hospital admissions, and 14% of opioid-related emergency department visits.[20] These data raise concerns about the risk of overdose among seniors, especially as it relates to prescription medications. It is important to acknowledge the limitations of hospital data for this issue as some people may not disclose illicit drug use as a factor in their reason for seeking medical attention.

Chart 1: Number of opioid-related emergency department visits and hospital admissions among Toronto residents, 2006-2013



Data Source: Ontario Drug Policy Research Network (2015). Opioid Prescribing and Opioid-Related Hospital Visits in Ontario. Supplementary data, personal correspondence from T. Gomes, July 2015.

Overdose deaths in Toronto

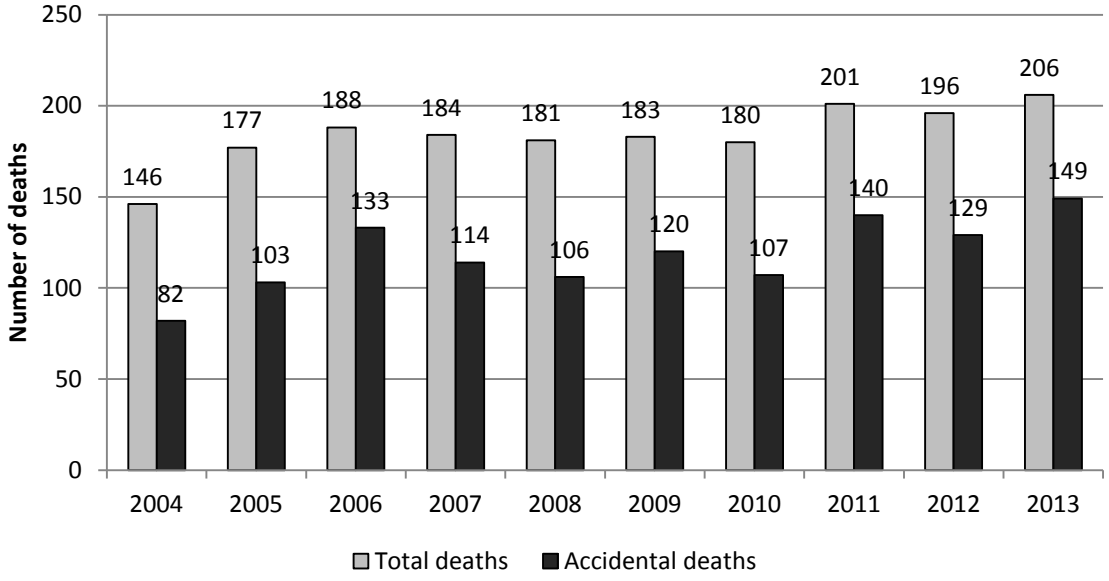
Data about drug overdose deaths in Toronto is obtained from the OCCO. TPH staff have recorded deaths that occurred in Toronto in a drug mortality database, since the late 1980s. The database contains records of over 4,100 drug-related deaths occurring in Toronto between 1986 and 2013. The data is obtained through an annual review of Coroner's toxicology reports. These deaths were the direct result of exposure to a drug either alone or in combination with other drugs or substances.[21] For the purposes of this report, we will use the term overdose.

The Coroner reviews all evidence about a death, including witness statements, location and circumstances, post-mortem toxicology, and other factors, to determine the cause and manner of death. Deaths are recorded as accidental (unintentional), suicide (intentional) or undetermined. A person who dies as the direct result of toxicity from one or more drugs in their body is recorded as a drug-induced death (e.g., a lethal alcohol poisoning is a drug-induced death). Conversely, a death resulting from injuries sustained in an automobile accident involving impaired driving would not be considered alcohol-induced, as alcohol was an indirect cause of death. Deaths caused by illnesses, infections, motor vehicle accidents or chronic conditions that resulted from alcohol or other drug use are not included in the database.

Between 2004 and 2013 (the latest year for which data is available), there were 1,842 drug-induced deaths in Toronto (see Chart 2). These data represent all deaths, including accidental, suicide and those in which the manner of death was undetermined. While there are some fluctuations, overall, deaths have increased over this ten year period. The 206 drug-induced deaths in 2013 represent the highest annual total observed since TPH began monitoring these data. Further, the rise from 146 deaths in 2004 to 206 deaths in 2013 represents a 41% increase.

The majority of drug-induced deaths in Toronto are accidental (as shown in Chart 2), and these deaths have been increasing, from 56% in 2003 to 72% in 2013. Over the same period, the percentage of deaths caused by suicide decreased (from 32% to 22%), as have underdetermined deaths (12% to 5%).

Chart 2: Drug-induced deaths in Toronto, 2004-2013



Data Source: Office of the Chief Coroner for Ontario, compiled by Toronto Public Health.

Among the individuals who died of overdose, about 65% were male and 35% were female. For accidental deaths, the percentage of male deaths is slightly higher at 71% with 29% female. As shown in Table 2, the majority of individuals were older adults, between 40 and 64 years of age.

Table 2: Ages of people whose death was drug-induced in Toronto, 2004-2013

Age group	0-18	19-24	25-29	30-39	40-49	50-64	65+
%	1%	6%	6%	18%	33%	31%	8%

Data Source: Office of the Chief Coroner for Ontario, compiled by Toronto Public Health

Drugs involved in overdose deaths

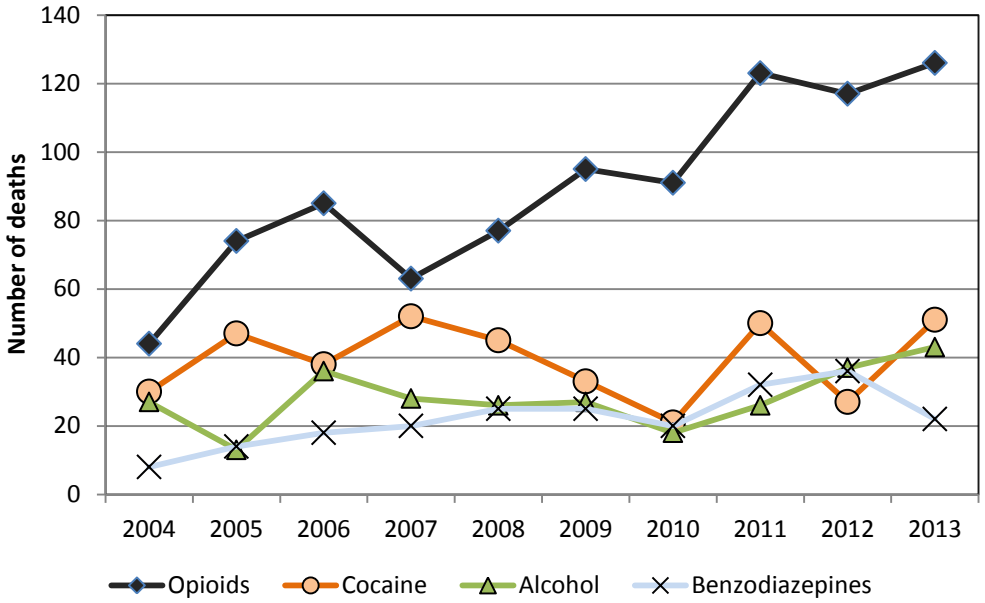
The interpretation of post-mortem toxicology results by a Coroner is complex and is informed by the circumstances and events prior to a person's death, medical history, level of drug tolerance, and other factors .[22] Each person reacts to drugs uniquely, and the same drug may have varying results in different people. Toxicology results determine which substances were lethal, although interpreting these results is challenging due to factors such as the type of drug, the way it is metabolized in the body, the time elapsed since the drugs were used, the individual's substance use history and other considerations. In addition, every drug acts differently. For example, heroin turns into morphine quickly in the body.[23] As a result, post-mortem toxicology may only find morphine in the body when the actual drug used was heroin. In deaths in which multiple drugs (including alcohol) were involved, the determination of which drugs caused the death may be further complicated by these issues.

Drug-induced deaths may be caused by a single substance or by multiple substances as toxic combinations. The substances that are found to have been lethal are recorded as the cause(s) of death or contributing cause. A deceased person may have multiple drugs in their body that did not cause death, and these are also recorded in the toxicology report. (References to "drug-detected deaths" include all substances recorded from toxicology reports whether or not they were a cause of death.)[24]

Each year in Toronto, about half (51%) of all drug-induced deaths were caused by a single drug, the other 49% were caused by two or more drugs in toxic combinations. In a study of Toronto suicide deaths, opioids were the drugs most frequently causing death.[25] Other frequently lethal drugs among suicide deaths were benzodiazepines and barbiturates (sedatives), over-the-counter drugs such as diphenhydramine, and antidepressant drugs.

As shown in Chart 3, opioids were also the most frequently lethal drug among accidental deaths in Toronto. The number of deaths caused by opioids increased between 2004 and 2013, from 44 to 126. Cocaine (in any form) was the next most frequently lethal drug type, followed by alcohol and benzodiazepines. In the toxicology report, no distinction is made between crack and powder cocaine.

Chart 3: Accidental deaths in Toronto caused by the most frequently lethal drugs/drug types, either alone or in toxic combinations of 2+ drugs, 2004-2013.



Note: As deaths are frequently caused by more than one lethal drug, these are not unique individuals. Source: Office of the Chief Coroner for Ontario, compiled by Toronto Public Health.

As noted in Table 4, some opioids are more frequently lethal than others. Between 2004 and 2013, the largest number of opioid deaths were due to heroin/morphine toxicity (alone or with other drugs also contributing to death), with these numbers rising, in particular, since 2009. The number of deaths caused by oxycodone (alone or with other toxic drugs) rose between 2004 and 2009, with decreases from 2009 and 2011 levels. The number of deaths caused by fentanyl (alone or with other toxic drugs) increased in 2009 and has risen since then. Of note, the number of deaths caused by hydromorphone, alone or with other drugs, increased from under 5 in 2012 to 13 in 2013.

Table 4: Accidental deaths in Toronto caused by the most frequently legal opioids, alone or in toxic combinations of 2+ drugs, 2004-2013.

Select opioids	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Morphine/heroin	16	27	25	24	24	25	13	37	15	24
Heroin (confirmed)	<5	<5	7	<5	5	<5	25	8	21	27
Oxycodone	8	14	21	19	25	35	17	34	23	27
Methadone	11	18	16	10	12	9	13	15	26	20
Fentanyl	<5	<5	5	<5	<5	10	14	16	11	12
Hydromorphone	<5	<5	<5	<5	<5	<5	5	5	5	13

Notes: These are not unique cases, as individual may have had more than one opioid in their body. In the body, heroin breaks down quickly to become morphine. As a result, it is unknown how many of these deaths were caused by morphine, and how many by heroin.
Data Source: Office of the Chief Coroner for Ontario, compiled by Toronto Public Health.

While the drugs most frequently lethal in accidental deaths were opioids, at least half the time at least one other drug was also found at toxic levels in the deceased person's body.

The other drugs most frequently found at toxic levels with opioids were cocaine, alcohol and/or benzodiazepines.

Accidental deaths in which both opioid(s) and cocaine acted together to cause death have fluctuated, but have increased overall rising from 12 in 2004 to 28 in 2013.[26] Accidental deaths in which both opioids and alcohol acted together to cause death have also increased, from 9 deaths in 2004 to 22 in 2013.[27] Among accidental deaths, benzodiazepines are not frequently lethal on their own.[28] However, when combined with other depressant drugs they can be fatal. Accidental deaths in which opioids and benzodiazepines acted together to cause death increased from 5 in 2004 to 15 in 2013, with a peak of 23 in 2012.[29]

In interpreting the above data, it is important to note that the circumstances surrounding each individual death are unknown. However, a report reviewing opioid-related deaths among Ontarians between 2006 and 2008 found that these deaths were more likely to be accidental (compared with suicide or undetermined).[30]

Risk factors for overdose

Research has identified several factors that place individuals at risk for overdose. Switching from one opioid drug to another is a risk factor. For example, risk may increase when switching from one prescription opioid (e.g., oxycodone) to a more potent prescription opioid (e.g., fentanyl), or from prescription opioids to illicit drugs such as heroin.[31] [32] Higher dose opioid prescriptions (200mg or more of morphine or equivalent daily) are associated with a three-fold increase in the risk of overdose death among patients being treated for pain.[33]

Combining drugs such as opioids with alcohol, benzodiazepines, cocaine or heroin, in particular, is a significant risk factor for overdose, as the depressant drugs reduce cardiorespiratory function.[34] [35] [36] [37] [38] The route of drug use also plays a role. The risk of overdose is higher for injection drug use than for other routes of drug use, such a smoking.[39] Overdose risk is also higher for people who are homeless and/or who are injecting in public places (e.g., alleyways, stairways).[40] In this situation, individuals may fear exposure or arrest by police and inject their supply of drugs all at once. In addition, people who have recently been released from prison are at significant risk of overdose as their tolerance may have decreased while incarcerated, and they overestimate how much they can take.[41] [42] [43] This reduced tolerance effect is similar for people leaving drug treatment programs.[44] [45]

Approaches to overdose prevention

As noted, the risk for non-fatal and fatal overdose is present for many types of drugs, including prescription drugs, alcohol and illicit drugs. Individuals taking medications prescribed by a physician can experience an overdose as well as people who use drugs for non-medical reasons. Mixing drugs or not taking prescription drugs as prescribed creates risk. Further, the content and potency of drugs in the illicit drug market is unknown, contributing to the potential for overdose.

Knowing which drugs people are using, including drug combinations, is important as it informs the types of prevention strategies employed. While all overdoses are of concern,

the high number of opioid deaths in Toronto (alone or in combination with other drugs) is of particular concern. Further, the fact that the majority of overdose deaths are accidental, and therefore preventable, is also critical to informing our response. Suicide deaths are also preventable and TPH led development of a suicide prevention strategy, which was endorsed by the BOH in November 2014 and City Council in December 2014. Implementation of this strategy is underway.

Much of the action on overdose prevention to date has focused on opioid overdose, although strategies such as education can be tailored to any drug. Key overdose prevention strategies include the following:

- **Health Promotion and Education**
  Health care workers play an important role in educating people who are prescribed drugs or who use drugs for non-medical reasons with information about the risk of overdose as well as how to prevent and respond to an overdose. This information is also important for family members and others who may be in a position to respond in a medical emergency.

  Overdose prevention education is an integral part of most harm reduction programs for people who use drugs. These efforts focus on helping people recognize the symptoms of an overdose (which vary with the drug used), and what can be done in the event of an overdose. Harm reduction staff work with clients to develop a plan to avoid overdose as well as how to respond if they witness an overdose. Prevention education can and should be integrated into primary health care settings as well as other services in the community that work with people who use drugs, including methadone treatment programs, emergency shelters, drop-ins, housing, etc.

- **Naloxone**
  During an opiate overdose, administration of naloxone can be lifesaving. Naloxone reverses the effects of overdose immediately if used within a short period following an opioid overdose. Naloxone is on the World Health Organization's list of Essential Medicines. In Canada, naloxone is most commonly used by paramedics and hospital health care providers. Following concerns about rising opioid deaths in the early 2010s, the Province of Ontario supported delivery of peer-based naloxone distribution programs through core needle exchange programs and hepatitis C programs. In 2011, TPH became the first public health unit in Canada to deliver such a program, details of which are provided in the next section of this report.

  British Columbia also has a province-wide naloxone program, out of the B.C. Centre for Disease Control (BCCDC), in which naloxone is prescribed to people using opioids at 40 locations across the province. The BCCDC also engaged the College of Registered Nurses of British Columbia so that nurse practitioners may prescribe naloxone, in addition to general nurses dispensing, to any person using opioids.[46]

  In the United States there are a growing number of states that provide first responders with naloxone to respond in case of medical emergency. As of July 2015, a total of 613 law enforcement agencies across 28 states are carrying naloxone.[47] A further 38

law enforcement agencies are exploring this option. The agency with the most frequent use of naloxone is the Quincy Police Department in Massachusetts where police have used naloxone 419 times, resulting in 402 opioid overdose reversals.

- **Good Samaritan Legislation**
  A key harm reduction strategy for people who use drugs is not to use alone or behind locked doors. This helps to ensure that someone is available to help in the event of a medical emergency such as overdose. Peer-based naloxone programs work from this premise by training people who use drugs how to administer this medicine. As part of the training, it is recommended that individuals call 911 after they administer the naloxone to ensure proper medical follow up.

  Many people who use illicit drugs are reluctant to call 911 for fear they may be arrested if police attend the call. A majority of states in the United States have amended legislation to encourage people to call 911 at the scene of a drug overdose without fear of prosecution, known as Good Samaritan 911 laws. As of July 2015, a total of 30 states have enacted Good Samaritan legislation.[48] The legal approaches vary state by state, but the intention is the same – to save lives. In Canada, this type of legislation would have to be created at the federal level.

- **Supervised Injection Services**
  A supervised injection service (SIS) is a health service that provides a supervised and hygienic environment where people can inject pre-obtained drugs under the supervision of trained staff. SIS services vary but can include the provision of sterile injection supplies, supervised injection, education, overdose prevention and intervention, medical and counselling services, and referrals to drug treatment, housing, income support and other services. SIS goals include reducing overdose deaths and the spread of infectious diseases such as HIV and hepatitis, bringing people into contact with other health and social services, and reducing community issues such as public drug use and discarded needles.[49]

  One of the main reasons SISs were introduced as a health intervention was to help prevent deaths due to drug overdose. There are over 90 SISs worldwide, and no deaths have occurred at any of these services. Rather, there been a reduction in the number of overdose deaths following implementation of these services.

- **Opioid Substitution Treatment**
  In Opioid Substitution Treatment (OST), physicians prescribe long acting opioid medications (e.g., methadose, buprenorphine) that are taken orally. These medications do not cause euphoria but rather prevent withdrawal symptoms, which can be severe and even life threatening, and reduces the effects of other opioid use. It is the most effective treatment available for opioid dependency.[50] Research has found that OST reduces overdose deaths, the transmission of HIV, hepatitis B and C, and other public health risks associated with drug use.[51] With respect to overdose, OST reduces risk by almost 90 per cent.[52]

Overdose prevention initiatives in Toronto

TPH is working in a number of program and policy areas to help prevent drug overdoses in Toronto, in partnership with community, institutional and academic partners. Below is an overview of key actions in this area:

- **The POINT Program**
  The Works program in TPH started the first public health operated naloxone distribution program in Canada on August 31, 2011, International Overdose Awareness Day. This peer-based program, called POINT (Preventing Overdose in Toronto) involves the provision of overdose prevention and recognition training as well as training on how to administer naloxone in an overdose situation. Since its inception, the POINT Program has provided almost 2000 kits and training to people who use opioids and are at risk of overdose in Toronto. As of August 2015, the POINT kit has been used in over 300 overdose situations with a positive outcome. In addition to saving lives, training people on how to save a life with naloxone enhances self-esteem and self-efficacy for individuals in the program.

  Staff at The Works, and in many other harm reduction programs across Toronto, provide regular education for people who use all types of drugs about overdose and overdose prevention. They stress the importance of having a plan to avoid overdose as well as how to respond if an overdose occurs.

- **Toronto Paramedic Services Administration of Naloxone**
  Toronto Paramedic Services (TPS) administers naloxone in opioid overdose situations, which may involve illicit or prescription drug use. In order to help TPH monitor overdose trends, TPS has been providing data on their use of naloxone.[53] This data shows an increase in the frequency of naloxone administrations over the last two years. In 2013, TPS administered naloxone 83 times, rising to 115 times in 2014, an increase of 38%. Between January 1 and July 31, 2015 there were 93 naloxone administrations, indicating that TPS may be responding to more opioid overdose situations than in the previous two years.

- **Opioid Substitution Treatment**
  Opioid Substitution Treatment (OST) is available across Toronto delivered through a variety of mechanisms. Private practice physicians deliver OST to individuals and groups, family physicians provide this treatment in hospital-based clinics, family health teams and community health centres, and there are also comprehensive treatment services that offer OST along with other addiction services. The Works, in TPH, also delivers OST to approximately 100 clients.

- **Overdose Coordinating Committee**
  Over the last few years, community members in Toronto have been concerned about an increase in heroin use, and the increase in overdoses among people who use drugs.

In response, TPH formed an Overdose Coordinating Committee with a mandate to collaborate on strategies to address local overdose issues. As part of this work, the group worked with the Toronto Drug Strategy Implementation Panel to have the City of Toronto proclaim International Overdose Awareness Day in Toronto, as occurs in other jurisdictions around the world. As a result of this proclamation, the City honoured International Overdose Awareness Day for the first time on August 31, 2015. Communities across the city held memorial services for friends, family and community members lost to overdose, as they have done in previous years. However, this time these commemorations were held with the City's recognition of the importance of this issue. The Overdose Coordinating Committee also held an educational event to promote the importance of planning for overdose among a range of agencies and sectors, and this educational and advocacy work continues.

- **Monitoring and Surveillance**
  Across jurisdictions there is limited information available about fatal and non-fatal overdoses. It is difficult to obtain real-time data about overdose deaths due to the length of the coroner's investigative process.

  An innovative project monitoring overdose incidents across Ontario is underway out of Kingston, Frontenac and Lennox & Addington Public Health. This project, called ACES (Acute Care Enhanced Surveillance), is a hospital data system that assists with infectious disease surveillance, and is being piloted to track overdose-related data in 'real-time' to monitor trends across the province and share information locally, including in Toronto. The system is able to map overdose incidents, and is closely monitored for changes. This information will help to identify emerging issues, and inform local prevention strategies.

- **Research Group on Drug Use**
  Local substance use issues, including overdose, have been raised for years at Research Group on Drug Use meetings, which are chaired by TPH staff. Bringing together front-line workers from diverse sectors, people who use drugs and other stakeholders has been an effective tool for identifying local trends and issues related to substance use. The group has initiated several research projects, including projects about drug overdose.

Additional action on overdose prevention

As noted in this report, TPH is working in a number of ways to prevent overdose. However, much of the policy action that is required on this issue rests in the hands of other governments and professional bodies. Many of the actions needed on this issue are outlined in a report entitled, *Prescription for Life*, which was released by the MDSCNO in June 2015.

The MDSCNO represents more than 155 municipalities, counties, townships and First Nations communities across the province. TPH staff in the Toronto Drug Strategy Secretariat are members and one of the founders of the network. This group includes communities across Ontario that are developing or implementing local drug strategies.

These strategies are multi-sectoral in nature, and focus on reducing the harms of alcohol and other drugs, including prescription drugs. Strategies are tailored to each community, and based on the integrated components of prevention, harm reduction, treatment and enforcement.

The *Prescription for Life* report was developed in response to concerns about the rising number of accidental opioid overdose fatalities and injuries occurring across Ontario, and the lack of attention to this issue. The report calls on the provincial and federal governments and others to take action on overdose prevention. The report is focused on preventing opioid deaths, as this is the issue of most concern at this time. However, several recommendations also apply to other types of drug overdose.

The report highlights the significant increases in opioid prescribing in Ontario. Deaths due to opioid overdoses have risen sharply in recent years, and are more than double the number of drivers killed in motor vehicle crashes.[54] Since 2000, more than 5000 Ontarians have died of an opioid overdose, the vast majority unintentionally.[55] These overdoses are occurring among people who have been prescribed opioids by a physician as well as people who are taking them non-medically.

The report calls for urgent action on the issue of opioid overdose with interventions targeted at people who are taking opioids as well as potential bystandards. The main emphasis of the recommendations is on expanding access to the naloxone, in particular, take-home naloxone to enable administration in the community (similar to an Epi-pen).

Key areas for action recommended in *Prescription for Life* include the following:

- Adding naloxone to provincial, federal and veteran affairs formularies to allow greater access to people receiving income support;
- Increasing onsite access to naloxone, including patients receiving Opiate Substitution Therapy, at hospitals, correctional facilities and in First Nations communities. Currently, "take home" naloxone is only available through public health units;
- Broadening the list of health professionals who can prescribe naloxone (e.g., nurses and pharmacists) as well as training police and staff in correctional facilities on how to administer naloxone;
- Developing real time and online monitoring and surveillance of overdoses to facilitate faster and more effective responses to any increased overdose rates;
- Developing broad overdose and prevention plans for Ontario and Canada;
- Rescheduling naloxone to allow provision of naloxone without a prescription (On July 24, 2015, Health Canada announced it has begun a process to explore this option, which may take 18 months);
- Encouraging additional naloxone formulations beyond the current injectable form (e.g., intra-nasal); and,
- Creating Good Samaritan legislation at the federal level to reduce barriers for people calling 911.

These recommendations represent a comprehensive strategy for increasing access to the naloxone and saving lives. Health providers across Ontario are supporting these actions,

and are advocating for action on this issue through their associations and networks. In June 2015, the Association of Local Public Health Agencies (alPHa) endorsed *Prescription for Life* at its annual conference.

Staff in TPH are working with other public health and community stakeholders across Ontario on the issue of overdose prevention, and will continue to do so. Supporting action on the *Prescription for Life* recommendations is part of this effort. It is therefore recommended that the BOH endorse, in principle, the recommendations in the MDSCNO report, *Prescription for Life* (Appendix A).

Policy change on this issue in Ontario will require dedicated leadership and resources. Overdoses are preventable, and action is needed that addresses the full range of drugs that people use, including opioids. It is therefore recommended that the BOH urge the Ministry of Health and Long-Term Care (MOHLTC) to develop a comprehensive provincial overdose prevention strategy for all drugs, informed by the recommendations in the *Prescription for Life* report. Further, to ensure action and accountability on this issue, it would be helpful to have a single point of coordination at the provincial level to facilitate action across ministries and governments as well as with the range of professional and community partners needed to make change. Several recommendations in the *Prescription for Life* report can be implemented quickly, and a designated lead would help ensure action is taken. It is therefore recommended that the BOH urge the MOHLTC to designate a lead within the MOHLTC to facilitate short-term action on overdose prevention and response and to lead development and implementation of a comprehensive provincial overdose prevention strategy

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ATTACHMENTS

Appendix A: Municipal Drug Strategy Co-ordinator's Network of Ontario, *Prescription for Life*, June 2015.

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