



OPIOID OVERDOSE PREVENTION & RESPONSE IN CANADA



Policy Brief Series



Canadian Drug
Policy Coalition

Coalition canadienne
des politiques
sur les drogues

OPIOID OVERDOSE
PREVENTION & RESPONSE
IN CANADA

Policy Brief Series

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Across Canada, far too many people are dying from drug overdoses. Deaths related to drug overdose, whether used medically or non-medically, are now the third leading cause of accidental death in Ontario. A significant proportion of these deaths have been attributed to opioids.¹ Drug overdose is not confined to one group of people but can affect anyone, including people taking prescribed opioids.

The tragedy is that many of these deaths could have been prevented with measures such as training, increased availability of naloxone (an emergency medication that reverses the effects of opioids,) improved efforts to encourage people to call 911 during an overdose event, and better prescribing practices.

The purpose of this policy brief is to discuss the multi-jurisdictional policy barriers that hinder the scale-up of opioid overdose prevention and treatment initiatives in Canada. This brief provides an overview of the scant available data on drug overdoses in Canada and discusses key initiatives and policy changes that could mitigate the high number of injuries and deaths amongst people who use opioids. We close by offering recommendations to both the federal and provincial governments. This brief can be used to advocate for changes to the policy context of overdose. Readers interested in implementing overdose prevention programs are directed to an emerging set of excellent Canadian resources on this issue.²

WHAT IS OPIOID OVERDOSE?

An opioid overdose happens when a person takes an amount of a drug that is more than the body can process. The risk of overdose is higher when a person takes opioids in combination with other drugs. When the opioid drug overwhelms the body, the central nervous system is not able to control basic life functions like breathing and body temperature, and loss of consciousness occurs. In the case of an overdose, an individual's breathing drops below 10 to 12 breaths per minute. Insufficient oxygen levels can result in the lips and/or nails turning blue, strange gurgling/snoring sounds, cool and clammy skin, seizures, and muscle spasms because there is no longer sufficient oxygen in the blood. Without enough oxygen, the heart will stop beating and the individual will die.³ Though death can occur within minutes of taking an opioid, more often there is a longer period of unresponsiveness lasting up to several hours.⁴

The relationship between using opioids and overdose is not necessarily simple or causal. Many people use opioids without suffering ill effects. Use in and of itself does not lead to overdose. Rather, overdose is the result of using opioids

KEY MESSAGES



Rates of overdose from opioids are on the increase in Canada and recent policy changes to contain the supply of opioids may have the unintended effect of increasing overdoses.

Opioid overdose injuries and deaths are preventable, but the scale-up of overdose prevention programs requires key policy and legislative shifts.

As recommended by the UN Commission on Narcotic Drugs, Canada needs a comprehensive overdose strategy that can be enacted at multiple levels.

This comprehensive approach must draw on a harm reduction perspective to overdose and includes five key components:

1. Make the safe and effective medication to reverse opioid overdose (naloxone) more readily available and cost effective by including it in provincial drug plans and making it available over-the-counter.
2. Scale up community-based and other overdose programs that include education and training on how to prevent and respond to overdose. Include peers, family, and first responders in these programs.
3. Reduce the barriers to calling 911 during a drug overdose event by implementing national 911 Good Samaritan legislation.
4. Implement appropriate guidelines for opioid prescription that do not limit access to needed pain medication or result in further discrimination against people who use drugs.
5. Increase the timely collection, analysis, and dissemination of data on drug overdose events.

under risky conditions and sometimes as prescribed. In fact, overdose is more common when risk factors are present, such as when the user is alone, when substances like alcohol and/or benzodiazepines are mixed with opioids, when the user has low or reduced tolerance due to a period of non-use, or when there is a lack of information and training about preventing overdose. People are also at higher risk of overdose if they are initiating or tapering opioid therapy, have difficulty accessing primary care, or when a prescription drug is delisted or suddenly made unavailable, and they are forced by circumstance to seek out other resources for mitigating pain. These risks apply to both medical and non-medical use of opioids. Overdose is also more common among people who are homeless because of the health problems that can stem from lack of safe and stable housing.⁵

When the number of overdoses increases, sometimes the first response is to blame the people who are using these drugs, to characterize them as simply ‘drug-seeking,’ and then to attempt to control and contain the supply. Typically these strategies call for prescription monitoring programs, drug take back events, and limiting the doses of prescribed opioids. But none of these measures has been shown to be effective at reducing accidental overdose deaths.⁷ There may be cases where limiting the supply of prescription opioids is an important component of a prevention strategy, but it is equally if not more important to ensure that strategies to contain the negative effects of opioid use do



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not result in misdiagnosis of illness or ignoring the physical causes of pain.

In addition, strategies to address overdoses sometimes fail to acknowledge the gender differences that characterize overdose events. Though men are more likely to experience overdose, overdose deaths due to prescription opioids among women have been increasing at a greater rate than among men in recent years, in part due to the increased prescribing of pain medications to women, often in conjunction with drugs like benzodiazepines.⁸

OPIOID OVERDOSE IN CANADA

With only a few provinces actively reporting overdose fatalities, it is difficult to gauge the extent of opioid related overdose deaths and injuries across Canada.⁹ Nor does data exist to allow us to compare between jurisdictions or to assess the extent or impact of non-fatal overdose related injuries (e.g., brain injury from lack of oxygen.) The lack of data is a disturbing issue in Canada, especially when we look to the US where comprehensive data on overdose is available

from the US Centers for Disease Control.¹⁰ What we do know is that prescription opioid related deaths have risen sharply and are estimated to be about 50 percent of annual drug deaths.¹¹ The annual rate of fatal overdoses for people who inject illegal drugs is estimated to be between 1–3 percent per year.¹²

Out of 2,330 drug-related deaths in Ontario between 2006 and 2008, 58 percent (n=1359) were attributed, either in whole or in part, to opioids.¹³ Between 2002 and 2010 there were 1654 fatal overdoses attributed to illegal drugs in British Columbia, and between 2002 and 2009 there were 2,325 illegal drug-related overdose hospitalizations.¹⁴ Opioid overdose deaths in BC in 2012 numbered 256, somewhat fewer than 2011 when there were 294 deaths. The greater number of deaths in 2011 was due in part to an increase in the purity of heroin on the street.¹⁵ There were also 95 opioid overdose deaths in Quebec in 2011, compared to 51 in 2000.

Overdose is also associated with both the medical and non-medical use of prescription drugs like opioid-based painkillers. Non-medical use of prescribed opioids is now the fourth most prevalent form of substance use in Canada behind alcohol, tobacco, and cannabis, and Canada and the US lead all nations in prescription opioid consumption.¹⁶ In October 2012, the BC-based Interior Health Authority released a warning that overdoses in that region from legally prescribed non-methadone opioid use were about twice the BC provincial rate; most of these overdoses occurred among people who were prescribed other medications.¹⁷ US longitudinal studies have also noted the high risk of overdose when prescribed opioids are used with benzodiazepines and/or alcohol.¹⁸

Similar to the US, alarm about the increasing use of non-medical prescription opioids has increased in Canada in recent years, due to increases in the use of prescribed opioids.¹⁹ Research in the US suggests that there is a strong correlation between increased prescribing of these drugs and an increase in harms such as overdose injury, death, and treatment admissions.²⁰ In Ontario, for example, regions with a high incidence of opioid related deaths per capita had high rates of prescription opioid use.²¹ In response to these concerns, seven provinces removed OxyContin from

WHAT ARE OPIOIDS?



Opioids are a class of drugs that share physiological properties. Opioid drugs are primarily used to relieve pain and can produce a sense of euphoria. As the Centre for Mental Health and Addictions in Toronto states, “Some opioids, such as morphine and codeine (also called opiates,) occur naturally in opium, a gummy substance collected from the seed pod of the opium poppy, which grows in southern Asia. Semi-synthetic opioids, such as heroin, oxycodone (e.g., OxyContin,) hydromorphone (e.g., Dilaudid) or hydrocodone are made by changing the chemical structure of naturally occurring opioids. Synthetic opioids, such as methadone and meperidine (e.g., Demerol) are made from chemicals without using a naturally occurring opioid as a starting material.”¹⁶

provincial drug formularies in 2012. These changes were meant to suppress the widespread use of these drugs by limiting their supply.

As the United Nations Office on Drugs and Crime reports, if the use of one drug is controlled by reducing supply, suppliers and users may move on to another drug with similar psychoactive effects, but of greater potency and purity.²² As Oxy products have been removed from many of the provincial and federal formularies in Canada, some people have switched to equally strong prescribed drugs or are seeking other illegal alternatives. Data and anecdotal evidence suggest that the non-medical use of prescription opioids has become more prevalent than heroin use.²³ With the recent removal of

OxyContin from many provincial drug formularies and the federal drug plan, illegal substitutes such as heroin and fentanyl analogues could be making a resurgence as cheap, available alternatives to OxyContin.²⁴

Since the so-called “abuse-deterrent” formulation of OxyContin was released in August 2010 in the United States, there has been no evidence to show that people using OxyContin ceased their drug use as a result of the reformulation.²⁵ Ultimately those using OxyContin were simply shifting to other opioids; in one study of people entering treatment programs in the US, researchers found that the use of fentanyl increased from 20 percent to 32 percent after Oxy products became more difficult to obtain.²⁶ This is concerning because while many people derive significant benefits from using fentanyl, it is a very strong synthetic opioid which is roughly 100 times more potent than morphine.²⁷

In 2013, the BC Provincial Health Officer released an alert based on the BC Coroners Service’s preliminary findings that there had been 23 deaths related to fentanyl use in the first four months of the year, as compared to 20 related deaths in all of 2012.²⁸ Though fentanyl has similar signs and symptoms as other opioid-based overdoses, the BC Provincial Health Officer warned that it could require significantly higher doses of naloxone, the drug used to reverse an overdose.²⁹ As more opioid users switch from oxycodone to fentanyl and other opioids, we are likely to see more overdoses due to a number of factors including

fentanyl’s higher potency and users’ unfamiliarity with this substance. With limited availability of take-home naloxone programs throughout the country, accidental deaths and injuries from overdoses are more likely.

A COMPREHENSIVE PUBLIC HEALTH APPROACH TO OVERDOSE

Worldwide, overdose is the leading cause of preventable death among people who inject drugs.³⁰ But unintentional deaths and injury from opioid overdoses are preventable through simple program and policy changes. At 2012 annual meetings of the UN Commission on Narcotic Drugs, members passed a resolution recommending that countries promote measures to prevent drug overdose, in particular opioid overdose.³¹ This resolution recommends that member states include effective elements for the prevention and treatment of overdose in national drug policies. Although the Canadian government was part of the creation of this resolution, to date the government has not acted on this matter.

A comprehensive public health approach to overdose requires a harm reduction perspective. Harm reduction is part of a spectrum of non-judgmental strategies aimed at reducing the harms related to drug use and connecting individuals with health and social services that they might not otherwise access. These strategies do not require people to stop using drugs, but instead meet people where they are at in their drug use, allowing them to identify and address their health and safety needs.

A comprehensive approach to overdose prevention and response includes six key components:

1. *Making naloxone more readily available and cost effective by including it in provincial drug plans and making it available over-the-counter.*
2. *Scaling up community-based and institutional overdose programs and training on how to prevent, recognize, and respond to overdose.*



A comprehensive public health approach to overdose requires a harm reduction perspective. Harm reduction is part of a spectrum of non-judgemental strategies aimed at reducing the harms related to drug use and connecting individuals with health and social services that they might not otherwise access.

3. *Scaling up overdose training programs for first responders.*
4. *Reducing the barriers to calling 911 during a drug overdose event.*
5. *Implementing appropriate guidelines for opioid prescription that do not limit access to needed pain medication or result in further discrimination against people who use drugs.*
6. *Increasing the timely collection, analysis, and dissemination of data on drug overdose events.*


1. Policy Barriers to Accessing Naloxone

Overdose initiatives are most effective when combined with training and education about naloxone hydrochloride (also known as Narcan™,) a safe, highly effective chemical compound that reverses the effects of opioids such as heroin. Naloxone has been approved for use in Canada for over 40 years and is on the World Health Organization List of Essential Medicines. The WHO recommends treating opioid overdose with naloxone.³² Naloxone is an opioid antagonist

that blocks the brain cell receptors activated by heroin, oxycodone, and other opioids, temporarily restoring normal breathing within two to three minutes of administration. Naloxone works by bumping off the opioids from the receptor sites in the brain that control breathing.³³ This medication “tricks” the brain into temporarily (20–30 minutes) thinking there are no opioids in the body. If someone is overdosing on an opioid, administering naloxone can speed up their breathing and temporarily bring them out of an overdose.³⁴

In Canada, naloxone is predominantly used in hospitals and by ambulance services. The BC Ambulance Service, for example, administered naloxone 2,367 times in 2011.³⁵ Between 2004 and 2010 there were a total of 778 overdose events at Insite, Vancouver’s supervised injection facility (SIF.) Of these, 589 involved injected heroin. Naloxone was administered for 256 individual visits. There have been no fatal overdoses at Insite to-date.³⁶

Naloxone has no potential for misuse—in the absence of narcotics it exhibits essentially no pharmacologic activity. The only effect of naloxone is to temporarily reverse respiratory depression resulting from an opioid overdose. In fact, after administration of naloxone, some people experience uncomfortable withdrawal symptoms.³⁷ The effects of naloxone wear off within 30–90 minutes so it is important to seek medical help as soon as possible. Naloxone has no pharmacological effect if administered to a person who has not taken opioids.³⁸


Community-based overdose prevention and response programs have been highly successful at preventing death and injury. These programs provide training on how to prevent overdose, recognize its signs, and respond effectively.

1a. Legal Barriers to the Availability of Naloxone

Efforts to increase the reach of naloxone are hindered by legal and jurisdictional issues. In Canada, naloxone is a Prescription Only Medicine (POM) under Schedule F of the Regulations for Canada's Food and Drug Act and is included in Schedule 1 under the National Association of Pharmacy Regulatory Authorities (NARPA.) Naloxone can only be dispensed with a prescription. Legally, a prescribed drug may only be administered to the person named on the prescription, not a third party. Some physicians (or other prescribers,) considering potential liability issues with prescribing medication that will end up being administered to an unknown third party, express reluctance and fear around prescribing naloxone. However, experience with naloxone administration in the United States and with other drugs administered to third parties, such as epinephrine administered for anaphylactic shock, reveals that providing training about the administration of naloxone helps reduce liability concerns.

If naloxone was re-classified as a NARPA Schedule 2 drug, it could be sold without a prescription and kept behind the pharmacy counter. This would allow people who use drugs, and their family and friends, to have greater access to naloxone, which could help prevent opioid overdose deaths. In

Italy, naloxone is available without a prescription through pharmacies.³⁹

1b. Availability and Cost of Naloxone

In Canada, naloxone is manufactured and distributed by only one company, Sandoz, and is not covered by provincial drug plans. This means that the cost of the drug can be prohibitive for some people, whether prescribed or not.

1c. Methods of Administration of Naloxone

Although naloxone is typically delivered by intramuscular or intravenous injection, it can also be used in the form of an intranasal spray, auto-injector, or a pre-filled syringe. The intranasal form of naloxone simplifies its use as there are no needles used in its administration, making it more appropriate in emergencies and other settings where the number of overdoses is likely high. Intranasal use of naloxone has been shown to have only minimal differences from its intramuscular form.⁴⁰ The liquid form of naloxone (for injection or for inhalation) has a shelf life of at least two years.⁴¹ When compounded into an intranasal form, naloxone has a much shorter shelf life.⁴² Health Canada has only approved the injectable ampoule or vial form of naloxone for use in Canada.

2. Take-away Naloxone Programs

Community-based overdose prevention and response programs have

been highly successful at preventing death and injury. These programs provide training on how to prevent overdose, recognize its signs, and respond effectively. Where arrangements can be made, many of these programs include training on how to use naloxone. Community-based take-away naloxone programs in the US and Europe have been linked with reductions in drug deaths of up to 34 percent.⁴³

The US has over 180 take-away naloxone (TAN) programs, and some US jurisdictions have best practice policies that support co-prescribing naloxone with any opioid. Since the advent of the first opioid overdose prevention program in 1996, these programs have offered training and naloxone distribution to 53,032 persons and have received reports of 10,171 overdose reversals.⁴⁴ Research from the US indicates that community-based naloxone distribution programs can prevent overdose deaths.⁴⁵ Other evidence suggests that training people who use drugs to administer naloxone and/or act as peer educators can have ancillary benefits, including reductions in their own drug use and risk behaviours.⁴⁶

The ability of these programs to make naloxone more widely available, however, is hampered by lack of engaged prescribers and lack of resources at the organizational level to support staff training and train-the-trainer sessions. For these reasons, provinces and other authorities must be prepared to provide resources to community and other agencies to help support on-going training and program implementation.

Even in the absence of a take-away naloxone program, training programs that can help people prevent, recognize, and treat opioid overdoses are still a vital part of an overdose response.

3. Overdose education programs for first responders

A recent report from Ontario found that there is a need for accurate information and education about the signs, symptoms, and methods of responding to an opioid overdose. This applies to doctors, nurses, and other health care providers, including pharmacists, dentists, and emergency department staff, as well as first responders and front-line workers such

as ambulance workers, firefighters, police, shelter workers, and staff in correctional facilities.⁵⁰

In addition to providing training and naloxone to people who use opioids, other jurisdictions have trained a wide variety of first responders, including family, friends, and peers, to deal with opioid overdoses. This training includes information on the prevention, detection, and appropriate response to drug overdose, including the recognition of opioid overdose symptoms, proper technique for administration of naloxone, either by intramuscular injection or by nasal inhalation, correct positioning of the victim, and essential follow-up first aid procedures, including referral to emergency medical services (EMS)—calling 911.

In some jurisdictions police have been trained to administer naloxone. Police are often among the first emergency service personnel on the scene of an overdose. If police and fire departments were trained to better identify and respond to an overdose with the use of naloxone it would not only save lives but would offer an opportunity for these public figures to better understand opioid use. Officers who have spoken about participating in overdose prevention efforts have identified this as contributing to more positive interactions between people who use drugs and police officers. It is also imperative that police receive overdose training given that a recent review of the BC overdose program found that some police officers lacked appropriate information about the role of naloxone in responding to overdose.⁵¹

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4. Reducing the Barriers to Calling 911

Most overdoses occur in the presence of other people. The chance of surviving an overdose, like that of surviving a heart attack, is almost entirely dependent on how fast one receives emergency medical help (EMS.) Though witnesses to heart attacks rarely hesitate to call 911, witnesses to an overdose too often waver on whether to call for help, or in many cases simply do not make the call. Reasons for not calling or reluctance in calling 911 may include fear of arrest, losing custody of children, and fear of judgment from friends and family.⁵² These impediments have been reported in the Ontario region of Waterloo-Wellington where an Overdose Response Survey found that in over half of overdose cases, 911 was not called or the respondents did not know if it was called.⁵³ In addition, recent amendments to the Controlled Drugs and Substances Act stipulate mandatory minimum prison sentences for some drug-related offenses. These provisions will unquestionably intensify fear of prosecution for witnesses of drug overdose and increase rates of preventable overdose deaths.

Canadian 911 Good Samaritan Immunity legislation could help encourage overdose witnesses to seek medical help. Good Samaritan legislation provides protection from arrest

and prosecution for drug use and possession charges if the evidence is obtained as a result of the person calling 911.

In the last four years in the United States, eleven state governments, including New York and Florida, have passed some form of Good Samaritan Immunity legislation.⁵⁴ In several states support for these laws was bipartisan and these bills passed nearly unanimously. By creating Good Samaritan laws, government officials throughout the United States have recognized that accidental drug overdose is a health issue, and fear of criminal justice involvement should not be a barrier to calling 911 in the event of an overdose. In Canada, Good Samaritan legislation must be enacted at the federal level because criminal law is a federal responsibility.

5. Guidelines for Opioid Prescription

Given that Canada has one of the highest levels of prescribed opioid use in the world, it is important to acknowledge the role that prescribing practices have had on opioid use and accidental overdoses in Canada, especially in the last 10 to 15 years. In many communities in Canada, opioid-related deaths appear to be concentrated in areas where physicians prescribe opioids more frequently.⁵⁵ As the recent strategy on prescription drugs released by the Canadian Centre for Substance Abuse notes, efforts need to be made to make physicians more aware of the risks of opioid use.⁵⁶

Physician prescribing practices must ensure that patients and their families receive up-to-date information about the potential effects of opioids, including the risks of overdose and dependency associated with these drugs.⁵⁷ As a routine part of their practice, it is also advisable that physicians help patients to identify and respond to overdose symptoms. In several jurisdictions in the United States, Medical Boards have recommended that naloxone be co-prescribed along with opioids to anyone at risk of overdose.⁵⁸ We urge provincial governments and the appropriate professional colleges and associations to consider making similar recommendations to prescribers in their jurisdictions.

Though these efforts are important, concerns about the levels of opioid prescribing and about overdose can lead to unintended consequences, including the under-prescribing of needed pain medications.⁵⁹ Research on the experience of primary care for people who use drugs has also shown discriminatory practices by practitioners can result in misdiagnosis of illnesses. In addition, heightened concerns about over-prescribing can result in patients with legitimate health concerns being viewed as “doctor shopping” and/or scamming for pain medication.⁶⁰ Prescribing guidelines need to be updated to train physicians in proper and appropriate pain management techniques that will ensure that patients are assessed and treated with respect and dignity regardless of their experiences with drug use.

6. Data on Overdose Events

Despite pockets of excellent research, Canada lacks comprehensive national level data on the prevalence of drug overdose injuries and deaths across jurisdictions. Most provinces have not kept detailed records of accidental overdoses, making it difficult to obtain a full picture of what is happening within and between jurisdictions when it comes to drug overdoses. In the US, data on accidental poisoning deaths, including drug overdoses, is documented nationally by the Centers for Disease Control and Prevention. In Canada, however, provincial data varies considerably between jurisdictions and is not always easily comparable.⁶¹ This data is essential information that can impact public policy and program provision. Canada needs a national level effort to collect timely data on overdose events and their outcomes

COMMUNITY-BASED TAKE-AWAY NALOXONE PROGRAMS IN CANADA



Countries like Afghanistan, Australia, China, India, Italy, Kazakhstan, Kyrgyzstan, Tajikistan, Thailand, and the UK also have take-away naloxone programs.⁴⁷ Take-away programs were pioneered in Canada by Streetworks in Edmonton in 2005, where peers are trained to identify signs of an overdose and educated about how to administer naloxone. Since then, similar take-home programs have emerged in other parts of Canada.

Toronto’s public health harm reduction program, The Works, began a program on August 31, 2011. To date, 1000 people have been trained, and over 800 kits have been distributed with 100 opioid overdoses having been reversed.⁴⁸ In 2012, Ontario launched a provincial program to provide naloxone education and kits through harm reduction services although recently the Ontario Minister of Health has halted the distribution of naloxone. Take-away naloxone programs also exist in Ottawa and Thunder Bay.

British Columbia’s pilot initiative was launched on August 31, 2012 and is modeled on pre-existing initiatives in Canada and the US. It requires community partners and prescribers to include information and education on the prevention, identification, and response to opioid overdose, with take-home naloxone kits prescribed for people who are using opioids. These training programs combined with the availability of naloxone help people to be prepared in the event of an opioid overdose. As of July 2013, the BC program has trained 303 clients to respond to overdose, 1156 overdose kits have been distributed to 22 community sites, and 22 overdose reversals have occurred.⁴⁹

as suggested by the recent CCSA strategy on prescription drugs.⁶²

OTHER INITIATIVES

A comprehensive approach to overdose must be part of a larger strategy that offers a continuum of services to attend to the health needs of people who use drugs. A larger strategy must also include other initiatives that have been shown to be effective at reducing overdose incidence, injury, and death. Opioid substitution programs have been demonstrated to be highly effective at reducing the incidence of drug overdose.⁶³ Safer consumption services, including drug injection rooms, have also been demonstrated to prevent death and injury from drug overdose.⁶⁴

RECOMMENDATIONS

Provinces:

- *Develop, promote, and evaluate a comprehensive public health approach to preventing overdose that includes education and training for responding to and treating overdose in a variety of settings, including community-based programs.*
- *Ensure that naloxone is incorporated into all emergency medical services.*
- *Ensure that medical professionals and police officers are made aware of the purposes of naloxone.*
- *Incorporate other health initiatives that have been shown to prevent overdose death and injury, including supervised injection services.*
- *Add naloxone to provincial formularies to ensure that the costs of this drug are not prohibitive.*
- *When an opioid is delisted from a provincial formulary or other plan, create a transition plan that includes enhanced treatment options, accelerated overdose prevention initiatives, and increased capacity links with primary care.*
- *Support prescribers to co-prescribe naloxone to patients at risk of overdose, including pain and opioid substitution patients.*

- *Create and implement overdose and anti-stigma training for medical professionals and emergency service workers such as police, firefighters, and ambulance services.*

Federal:

- *Re-schedule naloxone to make it available over-the-counter in pharmacies and to ensure it can be distributed by medical personnel to people who use drugs, their family and friends, and others who might witness an overdose.*
- *Address the unique difficulties of expanding overdose prevention programs in rural and remote areas. Work with the provinces and territories to establish guidelines for the sale and/or distribution of naloxone that would help get this medication into the hands of those most affected by overdose, including co-prescribing with opioids for persons at risk of overdose.*
- *Reduce the barriers to calling 911 during a drug overdose episode by implementing Good Samaritan legislation to provide protection from arrest and prosecution for drug use and possession charges if the evidence is gained as a result of the person calling 911. Ensure that police are educated about the existence of this legislation.*
- *Work with key partners to standardize the elements of a national data collection system that can measure prevalence of opioid drug use and its harms, including overdose occurrences and fatalities. Ensure that data analyses are reported in a timely manner and are sufficiently robust that they can inform service planning at the local level.*

References and Notes

- ¹ Follett, K., Piscitelli, A., Munger, F. & Parkinson, M. 2012. *Between life and death: The barriers to calling 9-1-1 during an overdose emergency*. Waterloo Region Crime Prevention Council. Available at: <http://www.preventingcrime.ca/documents/OverdoseReport.pdf>
- ² BC Provincial Harm Reduction Program. 2012. *Take-Home Naloxone: Background-er*. Available at: <http://towardtheheart.com/naloxone/> See also: Ontario Harm Reduction Distribution Program for materials on overdose prevention and response: <http://www.ohrdp.ca/>
- ³ See: International Overdose Awareness Day. *Overdose Basics*. Available at: <http://www.overdoseday.com/facts-stats/overdose-basics/>
- ⁴ Nations Office on Drugs and Crime (UNODC). 2013. *Opioid Overdose: Preventing and Reducing Opioid Overdose Mortality*. New York: United Nations.
- ⁵ Braggett, T.P., et al. 2013. "Mortality among homeless adults in Boston: Shifts in causes of death over a 15-year period." *JAMA*, 173(3), 189-195.
- ⁶ Centre for Addiction and Mental Health. 2013. *Do you know? Opioids*. Available at: http://www.camh.ca/en/hospital/health_information/a_z_mental_health_and_addiction_information/Prescription-Opioids/Pages/default.aspx
- ⁷ Rastegar, D.A., Walley, A.Y. 2013. "Preventing prescription opioid overdose deaths." *Journal of General Internal Medicine*, DOI: 10.1007/s11606-013-2390-8.
- ⁸ Currie, J. 2004. *Manufacturing addiction: The over-prescription of benzodiazepines and sleeping pills to women in Canada*. Vancouver: BC Centre of Excellence for Women's Health. Available at: <http://www.cwhn.ca/en/node/39526>.
- ⁹ Fischer, B., & Argento, E. 2012. "Prescription opioid related misuse, harms, diversion and interventions in Canada: A review." *Pain Physician*, 15, ES196.
- ¹⁰ See for example: Centres for Disease Control and Prevention. 2013. *Morbidity and Mortality Weekly Report*. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6226a3.htm?s_cid=mm6226a3_w
- ¹¹ Fischer, B. and Keates, A. 2012. "Opioid drought', Canadian style? Potential implications of the 'natural experiment' of delisting Oxycontin in Canada." *International Journal of Drug Policy*, 23, 495-497.
- ¹² Milloy M.J.S. et al. (2008) "Estimated drug overdose deaths averted by North America's first medically-supervised safer injection facility." *PLoS One*, 3(10), e3351.
- ¹³ Maladi, P., Hildebrandt, D., Lauwers, A.E., Koren, G. 2013. "Characteristics of opioid-users whose death was related to opioid-toxicity: a population-based study in Ontario, Canada." *PLoS One*, 8(4), E60600.
- ¹⁴ Vallance, et al., 2012. *Overdose Events in British Columbia: Trends in Substances Involved, Contexts and Responses*. Victoria: Centre for Addiction Research of BC. Available at: http://www.carbc.ca/Portals/o/propertyagent/558/files/180/carbc_bulletin8.pdf
- ¹⁵ Toward the Heart (BCCDC). 2013. *Opioid use and overdose in British Columbia*. Available at: http://towardtheheart.com/assets/naloxone/opioid-use-in-bc-final_99.pdf
- ¹⁶ Fischer, B., & Argento, E. 2012, p. E193; Fischer, B., Bibby, M., Bouchard, M. 2010. "The global diversion of pharmaceutical drugs non-medical use and diversion in North America: A review of sourcing routes and control measures." *Addiction*, 105, p. 2063.
- ¹⁷ See BC Interior Health Authority: http://www.interiorhealth.ca/AboutUs/MediaCentre/PublicationsNewsletters/Documents/MHO_Update_October_9_2012.pdf
- ¹⁸ Calcaterra, S., Glanz, J., Binswaner, I. 2012. "National trends in pharmaceutical opioid related overdose deaths compared to other substance related overdose deaths: 1999-2009." *Drug and Alcohol Dependence*, 131, 263-270.
- ¹⁹ Fischer, B. Jones, W., Rehm, J. 2011. "Differences and over-time changes in levels of prescription opioid analgesic dispensing from retail pharmacies in Canada, 2005-2010." *Pharmacoepidemiology and Drug Safety*, 20, 1269-1277.
- ²⁰ Fischer, B., Rehm, J., Goldman, B., Popova, S. 2008. "Non-medical use of prescription opioids and public health in Canada: an urgent call for research and interventions development." *Canadian Journal of Public Health*, 99(3), 182-184.
- ²¹ Maladi, et al., 2013, p. 1.
- ²² Count the Costs. 2012b. *The alternative world drug report: Counting the costs of the war on drugs*. Available from: <http://www.countthecosts.org/>; Van Hout, M.C., Brennan, R. 2012. "Curiosity killed the M-Cat: A post legislative study on methedrone use in Ireland." *Drugs: Education, Prevention and Policy*, 19(2), 156-162.
- ²³ Davis, W & Johnson, B. 2008. "Prescription opioid use, misuse, and diversion among street drug users in New York city." *Drug and Alcohol Dependence*, 92, 267-276; Fischer, B, Rehm, J, Patra, J, & Firestone Cruz, M. 2006. "Changes in illicit opioid use profiles across Canada." *Canadian Medical Association Journal*, 175, 1-3.
- ²⁴ Ontario Health Promotion E-Bulletin. 2013, Feb. "Opioid overdose prevention training and community-based naloxone distribution in Ontario." Available at: <http://www.ohpe.ca/node/14023>
- ²⁵ Maladi, et al., 2013.
- ²⁶ Cicero, T.J., and Ellis, M. 2012. "Effect of abuse-deterrent formulation of OxyContin." *New England Journal of Medicine*, 367, 187-189
- ²⁷ New Zealand Medicines and Medical Devices Safety Authority. 2012. *New Zealand fentanyl data sheet*. Available at: <http://www.medsafe.govt.nz/profs/datasheet/ff/fentanylinj.pdf>
- ²⁸ See BC Office of the Provincial Health Officer. 2013. *Information bulletin: Health workers urged to watch for suspicious overdoses*. May 30. http://www.health.gov.bc.ca/pho/media/pdf/1B_fentanyl_May%2029.pdf
- ²⁹ Ibid.
- ³⁰ UNODC, 2013.
- ³¹ See Commission on Narcotic Drugs, Resolution 55/7, 2012. Available at: <http://www.unodc.org/unodc/en/commissions/CND/09-resolutions.html#2012>
- ³² UNODC, 2013.
- ³³ Drug Policy Alliance. 2009. *Preventing overdose, saving lives: Strategies for combatting a national crisis*. Available at: www.drugpolicy.org/overdose
- ³⁴ See North Carolina Harm Reduction Coalition for more information: <http://www.nchrc.org/harm-reduction/overdose-prevention/>
- ³⁵ BC Provincial Harm Reduction Program. 2012. *Take-Home Naloxone: Background-er*. Available at: <http://towardtheheart.com/naloxone/>
- ³⁶ Vallance, et al., 2012, p. 4.
- ³⁷ Drug Policy Alliance, 2009. See also: Maxwell, S. Bigg, D. Stanczykiewicz, K.

Carlberg-Racich, S. 2006. "Prescribing naloxone to actively injecting heroin users: A program to reduce heroin overdose deaths." *Journal of Addictive Diseases*, 25.

³⁸ Drug Policy Alliance, 2009; See also: Maxwell, et al., 2006 and Burris, S. Norland, J. Edlin, B.R. 2001. "Legal aspects of providing naloxone to heroin users in the United States." *International Journal of Drug Policy* 12, 237-248.

³⁹ UNODC, 2013, p. 13.

⁴⁰ Doe-Simkins, M, and others. 2009. "Saved by the nose: Bystander-administered intranasal naloxone hydrochloride for opioid overdose." *American Journal of Public Health*, 99(3).

⁴¹ Anex Australia. "Lifesavers - access to naloxone to reduce opioid overdose-related deaths and morbidity." Available at: <http://www.anex.org.au/wp-content/uploads/2010/10/Australian-Drug-Policy-Lifesavers-access-to-naloxone-to-reduce-opioid-overdose-related-deaths-and-morbidity.pdf>

⁴² Kelly, A.M., Kerr, D., Dietze, P., Patrick, I., Walker, T., Koutsogiannis, Z. 2005. "Randomized trial of intranasal versus intramuscular naloxone in prehospital treatment for suspected opioid overdose." *Medical Journal of Australia*, 182(1), 24-7.

⁴³ Scottish Drugs Forum. *Take-home naloxone: Reducing drug deaths*. Available at: www.sdf.org.uk/index.php/download_file/view/132/108/. Scotland introduced a National Patient Group Directive in August 2010 to ease the development of take-home naloxone programs. Patient Group Directives (PGD) allow naloxone to be prescribed by appropriately qualified nurses and pharmacists. In Scotland, any person released from prison at risk of OD, is given training and a naloxone kit.

⁴⁴ Wheeler, E., Davidson, P.J., Jones, T.S., Irwin, K.S. 2012. "Community-based opioid overdose prevention programs providing naloxone - United States, 2010." *Morbidity and Mortality Weekly*, 61(6), 101-105. Available at: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6106a1.htm?s_cid=mm6106a1_w

⁴⁵ Kim, D., Irwin, K.S., Khoshnood, K. 2009. "Expanded access to naloxone: Options for critical response to the epidemic of opioid overdose mortality." *American Journal of Public Health*, 99(3), 402-407.

⁴⁶ Kerr, T., Douglas, D., Peeace, W., Pierre, A. & Wood, E. 2001. *Responding to an emergency: Education, advocacy and community care by a peer-driven organization of drugs users: A case study of Vancouver Area Network of Drug Users. Report prepared for Health Canada*. Available at: www.phac-aspc.gc.ca/hepc/pubs/vandu/pdf/vanduStudy.pdf; Maxwell, et al., 2006; Mackesy-Amiti M.E., et al. 2011. "Predictors and correlates of reduced frequency or cessation of injection drug use during a randomized HIV prevention intervention trial." *Addiction*, 106, 601-8.

⁴⁷ UNODC, 2013.

⁴⁸ Personal Correspondence with Shaun Hopkins, June 28, 2013.

⁴⁹ BC Provincial Harm Reduction Program. 2012. *Opioid use and overdose in British Columbia*. Available at: http://towardtheheart.com/assets/naloxone/opioid-use-in-bc-final_99.pdf

⁵⁰ Expert Working Group on Narcotic Addiction. 2012. *The Way Forward: Stewardship for Prescription Narcotics in Ontario – Report to the Minister of Health and Long-Term Care*, p. 21. Available at: http://www.health.gov.on.ca/en/public/publications/pub_mental.aspx

⁵¹ BC Provincial Harm Reduction Program, 2013.

⁵² Follett, et al., 2012. See also: Tobin, K.E., Davey, M.A., Latkin, C.A. 2005. "Calling emergency medical services during drug overdose: An examination of individual, social and setting correlates." *Addiction*, 100(3), 397-404.

⁵³ Follett, et al., 2012.

⁵⁴ *The Law Atlas: Policy Surveillance Portal*, 2013. Available at: <http://www.lawatlas.org/preview?dataset=good-samaritan-overdose-laws>

⁵⁵ Maladi, P. et al., 2013.

⁵⁶ National Advisory Council on Prescription Drug Misuse. 2013. *First do no harm: Responding to Canada's prescription drug crisis*. Ottawa: CCSA, p. 23. Available at: http://www.ccsa.ca/2013%20CCSA%20Documents/Canada-Strategy-Prescription-Drug-Misuse-Report-en.pdf?utm_source=NR&utm_medium=NewsRelease&utm_campaign=Rx2013

⁵⁷ Webster, L. 2013. "Eight principles for safer opioid prescribing." *Pain Medicine*, 14, 959-961.

⁵⁸ See North Carolina Medical Board. 2008. *Drug overdose prevention*. Available at: http://www.ncmedboard.org/position_statements/detail/drug_overdose_prevention

⁵⁹ Rastegar and Walley, 2013.

⁶⁰ VANDU Women Care Team. 2009. *'Me I'm Living It': The primary care experiences of women who use drugs in Vancouver's downtown eastside*. Vancouver: BC Centre for Excellence in Women's Health. Available at: www.straight.com/files/pdf/VanduClinic.pdf See also: Fischer, et al., 2010, p. 2070.

⁶¹ Fischer and Argento, 2012, p. ES196.

⁶² See: CCSA. 2013.

⁶³ UNODC, 2013.

⁶⁴ BC Centre for Excellence in HIV/AIDS. 2010. *Insight into insight*. Available at: <http://uhri.cfenet.ubc.ca/content/view/57/92/#SEOSI>

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