Prescription Opioids

Key Points

- Opioid pain relievers are used by 13% of the Canadian population, compared to 15% in 2013..
- Among Canadians who use opioid pain relievers, about 2% reported using them for non-medical purposes, a similar percentage as in 2013.
- The rate of hospitalization due to opioid poisoning has been increasing, with an average of 13 hospitalizations per day in 2014–2015, compared to an average of nine hospitalizations per day in 2007–2008.
- Preliminary data indicate that there were over 2,800 opioid-related deaths in Canada in 2016.

Introduction

Prescription opioids are medications primarily used to treat acute and chronic pain, but they can also be used to control persistent cough or diarrhea. Another accepted medical use for prescription opioids is the treatment of opioid addiction, using methadone or buprenorphine-naloxone, under the supervision of a trained healthcare practitioner.

Pain is one of the most common reasons for seeking health care in North America. A 2012 review indicated that between 15% and 29% of the Canadian population experience chronic pain, with limited access to appropriate and timely treatment: 50% have had to wait six or more months and many areas of Canada do not have any specialist pain treatment services.[1] Prescribers commonly use prescription opioids as one of several approaches to addressing chronic pain. A 2017 report found that in the fiscal year 2015–2016, about one out of every seven people in Ontario (almost two million individuals) filled an opioid prescription.[2]

However, use of prescription opioids can also result in addiction and overdose death. In previous years, prescription opioids have been falsely promoted as low-risk, non-addictive, effective treatments for moderate pain.[3] The 2017 *Canadian Guideline for Opioid Therapy and Chronic Non-Cancer Pain* reports that opioids are associated with a 5.5% risk of addiction, and recommends optimizing non-opioid pharmacotherapy (e.g., nonsteroidal anti-inflammatory drugs) and non-pharmacological therapy over the use of opioids for patients with chronic non-cancer pain.[4]

The non-medical use of prescription opioids[i] has traditionally been defined as use by people other than those to whom the medication is prescribed or use in a manner or for a purpose contrary to what is intended. There are various ways in which prescription drugs can be acquired and used or can result in harm. These ways include obtaining a prescription from a single physician, obtaining

i For the purposes of this document, "prescription opioid use" refers to use of opioids as prescribed. "Non-medical use of prescription opioids" includes using prescription opioids without a prescription written for the individual taking the drug, using prescription opioids provided from multiple doctors, nurses or pharmacists ("double-doctoring"), using them for purposes other than those indicated when prescribed (e.g., for euphoric effect), using them in ways other than prescribed (different form or route), or taking prescription opioids more or less often than prescribed.

prescriptions from multiple physicians without informing them of the other prescriptions ("double doctoring"), prescription fraud and forgery, theft, street drug markets and Internet purchases. A Canadian study found that 37% of opioid-dependent patients admitted to the Centre for Addiction and Mental Health in Toronto reported receiving opioids solely from physician prescriptions, compared to 26% of patients who received opioids from both a prescription and "the street," and 21% from the street.[5]

Opioids are commonly referred to as "pain killers" or "narcotics" and have a variety of generic, trade and street names. Table 1 lists examples of prescription opioids currently marketed in Canada. However, prescription opioids not currently marketed in Canada might be diverted into the country. Prescription opioids are available in various forms in Canada, including tablets, capsules, syrups, solutions, liquid form for injection, skin patches, transmucosal preparations, suppositories and nasal sprays.

Table 1. Common generic, trade and street names for opioids

Generic name	Trade name (examples)	Street names
Buprenorphine	BuTrans®	Bupe, bute
Buprenorphine-naloxone	Suboxone®	Subby, bupe, sobos
Codeine	Tylenol®2,3,4 (codeine + acetaminophen)	Cody, captain cody, T1, T2, T3, T4
Fentanyl	Abstral®, Duragesic®, Onsolis®	Patch, sticky, sticker, nerps, beans
Hydrocodone	Tussionex®, Vicoprofen®	Hydro, vike
Hydromorphone	Dilaudid®	Juice, dillies, dust
Meperidine	Demerol®	Demmies
Methadone	Methadose®, Metadol®	Meth, drink, done
Morphine	Doloral®, Statex®, M.O.S.®	M, morph, red rockets
Oxycodone	OxyNEO®, Percocet®, Oxycocet® Percodan®	Oxy, hillbilly heroin, percs
Pentazocine	Talwin©	Ts
Tapentadol	Nucynta®	Unknown
Tramadol	Ultram® Tramacet® Tridural® Durela®	Chill pills, ultras

Note: OxyContin® is no longer marketed in Canada and was replaced with OxyNEO®. Generic controlled-release oxycodone was approved by Health Canada. Oxymorphone (Opana®) has been approved by Health Canada, but is currently not marketed in Canada.

Effects of Prescription Opioid Use

Opioids can reduce pain and improve function. Opioids can also produce a feeling of well-being or euphoria ("high"). At sufficiently high doses, opioids cause drowsiness, respiratory depression, coma and death. Other physical effects are constricted pupils, nausea, vomiting, constipation, loss of appetite and sweating. Opioids can also cause increased risk of sleep apnea, mood changes, decreased sex hormone levels resulting in decreased interest in sex and menstrual irregularities, physical dependence and addiction. Regular use of large quantities of opioids during pregnancy increases the risk of premature delivery and withdrawal in the infant. In those people who crush and inject oral opioids, certain filler chemicals in the pills can permanently damage veins and organs. Sharing needles or injecting with previously used needles greatly increases the risk of getting certain infections (e.g., HIV, hepatitis C).

Long-term use can lead to the development of physical dependence, which manifests as tolerance to the effects of the drug and prompts those who use prescription opioids to increase the dose to reinstate the desired effects. Those who have developed a physical dependence can also experience withdrawal symptoms when the dose is lowered. The potential for addiction increases with repeated use of higher doses. Addiction to opioids includes behaviours reflecting loss of control over use and significant harms from use, for example, which are usually in addition to physical dependence.

Long-term regular use of these drugs should be reduced gradually with medical supervision. People who are physically dependent on opioids might experience withdrawal symptoms if they stop using

the drug abruptly. The severity of withdrawal symptoms depends on the type of medication used, the amount used, the duration of use and how abruptly the drug was discontinued. Withdrawal symptoms can include agitation, insomnia, muscle aches, abdominal cramping, diarrhea and vomiting. Those who are addicted might also experience craving for the drug and difficulty stopping.

Legal Status of Prescription Opioids in Canada

Most prescription opioids are classified as Schedule I drugs under the *Controlled Drugs and Substances Act* (CDSA). Their use is legal when they are prescribed by licenced practitioners and used by the person for whom they are prescribed. Illegal possession of opioids and "double doctoring" (i.e., obtaining a prescription from more than one practitioner without telling the prescribing practitioner about other prescriptions received in the past 30 days) can result in seven years' imprisonment. Trafficking, importing, exporting or producing opioids can result in life imprisonment.[6]

Past-Year Use of Prescription Opioids in Canada

- **General population (age 15+):** According to the 2015 Canadian Tobacco, Alcohol and Drugs Survey (CTADS),[7] the rate of past-year use of opioid pain relievers among the general population was 13.1%, compared to 14.9% in 2013.[8]
- **Youth (age 15–24):** In 2015, the rate of past-year use of opioid pain relievers among youth aged 15–24 (10.3%[ii]) was lower than that of adults aged 25 and over (13.6%).[7] Among youth aged 15–19, the rate of past-year opioid pain reliever use was 7.4%; the corresponding rate was higher for young adults aged 20–24 at 12.8%.[7]
- **Adults (age 25+):** The rate of opioid pain reliever use among Canadian adults was 13.6% in 2015.[7] The use of opioid pain reliever medications among adults has decreased slightly from 2013, when 14.9%[10] reported using such medications.[8]
- **Older Adults (age 65+):** The rate of opioid pain reliever use among older Canadian adults was 13.2%[iii] in 2015, down from 16.2%[iv] in 2013.[8]
- **Gender:** Data from the 2015 CTADS indicates that the past-year prevalence of use of opioid pain relievers was slightly higher among females (13.9%) compared to males (12.1%).[7] Similar trends were observed in 2013 (15.7% for female and 14.0% for males).[8]

[ii] This analysis is based on the Statistics Canada *Canadian Tobacco, Alcohol and Drugs Survey, 2015*. All computations, use and interpretation of these data are entirely that of CCSA.
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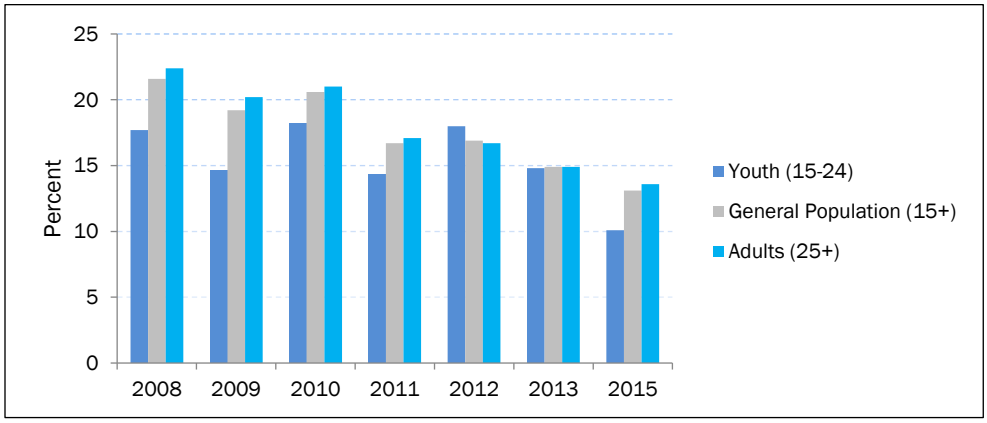
Figure 1. Prevalence of self-reported opioid pain reliever use among Canadians by age category[v]



Source: CADUMS 2008–2012,[9] CTADS 2013,[8] CTADS 2015[7]
Note: Because of methodological differences between Canadian Alcohol and Drug Use Monitoring Survey (CADUMS) and CTADS, comparisons of prevalence estimates between CADUMS (2008–2012) and CTADS (2013, 2015) data should be made with caution. Several of the prevalence estimates included in this summary are qualified because of high sampling variability and should be interpreted with caution.

Past-Year Use among High-Risk Populations

Health Canada's Monitoring of Alcohol and Drug Use among High-Risk Populations Study (HRPS)[10] investigated drug use in seven Canadian cities in three different high-risk groups: recreational drug users, street-entrenched adult drug users and street-involved youth drug users.[vi] The 2013 survey results for past-year use of hydromorphone, morphine, oxycodone and codeine are shown in Figures 2 and 3.[10] Note that the data includes both prescription and illegal sources for these drugs. Data on methadone is available in the reference reports, but not shown below since some survey respondents were on methadone maintenance therapy. Similarly, data on heroin is available in the reports, but not shown below since the focus here is prescription drugs.

Among the 2013 sample of street-entrenched adult drug users, past-year use of hydromorphone, morphine, oxycodone and codeine ranged from 8.8% to 65.8% across all cities except Winnipeg (Figure 2). Although past-year use of codeine was high in Winnipeg (50%), use of the other opioids was very low (0% or data suppressed due to low numbers).

Of note, the past-year use of Ts and Rs[vii] in Winnipeg and Regina was 25% and 32.5%, respectively (data not shown). For other cities and in the other high-risk populations studied there was either no past-year use of Ts and Rs or the data were suppressed due to low numbers.

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[v] This analysis is based in part on the Statistics Canada *Canadian Tobacco, Alcohol and Drugs Survey, 2013* and *Canadian Tobacco, Alcohol and Drugs Survey, 2015*. All computations, use and interpretation of these data are entirely that of CCSA.

[vi] **Recreational drug users** include individuals of legal drinking age in their provinces who were recruited at an event-specific site (e.g., rave, warehouse party) or a permanent night club site. To be included in the study, they had to have used at least one drug (excluding alcohol and tobacco) at least once in each of the last six months prior to each of the interviews. Proof of age was not asked at the time of recruitment and some respondents younger than the legal drinking age participated in the study.

Street-entrenched adult drug users include individuals 19 years of age or older with no permanent shelter. To be included in the study, they had to have used at least one drug (excluding alcohol and tobacco) at least once in each of the last six months prior to each of the interviews.

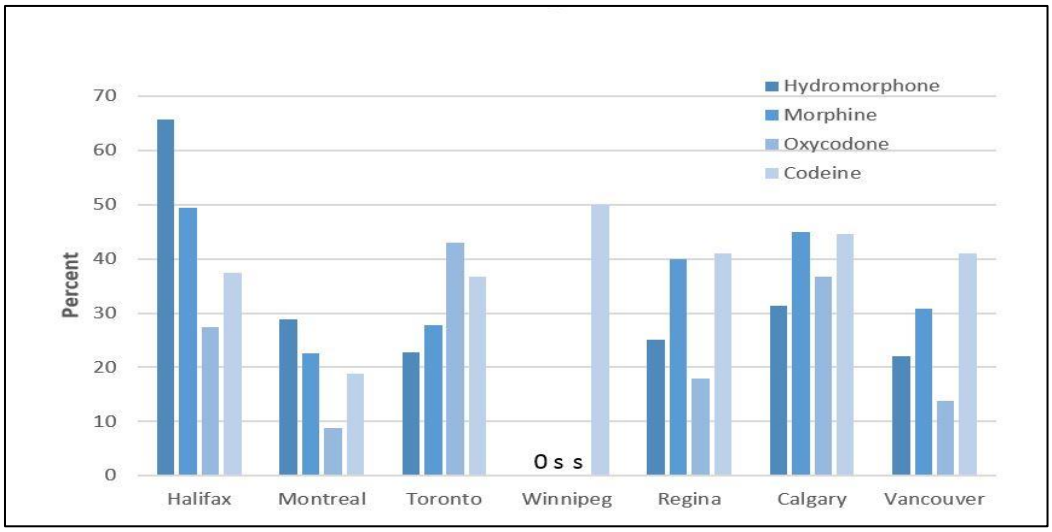
Street-involved youth drug users include individuals 15–24 years of age who might be experiencing total homelessness; have temporary, but not permanent, shelter; use services oriented to street youth; or were identified by local stakeholders as "street-involved." To be included in the study, they had to have used at least one drug (excluding alcohol and tobacco) at least once in each of the last six months prior to each of the interviews.

Note that there is overlap in the age range of the two street populations because most youth services are provided to clients up to the age of 24 years. Respondents aged 19–24 were considered to be adults or youth depending on the site where they were recruited.

[vii] T and R refers to a combination of Talwin® (pentazocine, an opioid) and Ritalin® (methylphenidate), which are mixed and injected together.

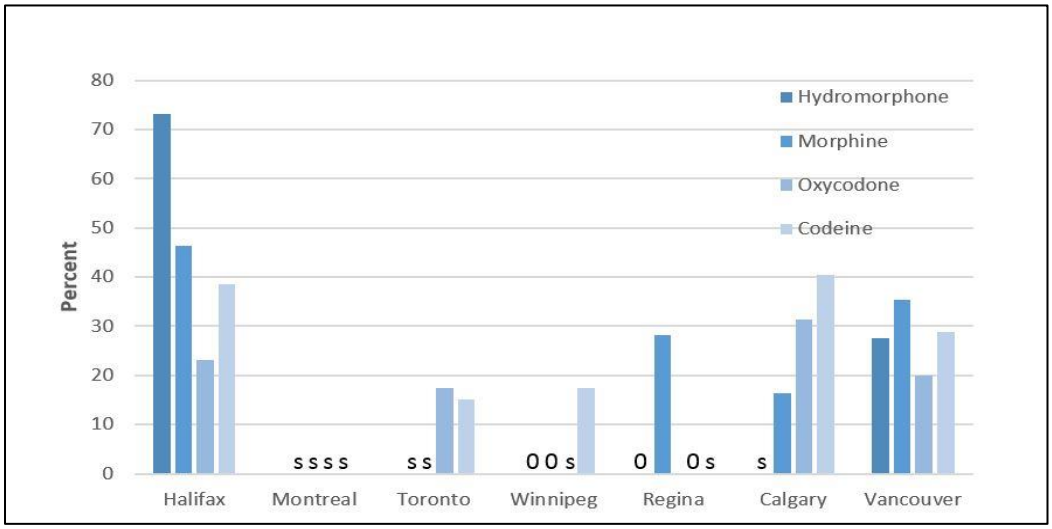
In the 2013 sample of street-involved youth drug users, past-year use of all four opioids (hydromorphone, morphine, oxycodone and codeine) was found only in Halifax and Vancouver with rates ranging from 20.0% to 73.1%. In Calgary, 16.3% to 40.5% of street-involved youth had reported using morphine, oxycodone or codeine during the past 12 months. There was no past-year use of the four opioids in Montreal. In the other cities, past year use of these opioids was variable (Figure 3).

Figure 2. Past year use of opioids in street-entrenched adult drug users (2013)



Abbreviations: S = data was suppressed when the number of respondents was between 1 and 5. 0 = no drug use
Source: Monitoring of Alcohol and Drug Use among High-Risk Populations Study (HRPS), 2012–2013[10]

Figure 3. Past year use of opioids in street-involved youth drug users (2013)



Abbreviations: S = data was suppressed when the number of respondents was between 1 and 5. 0 = no drug use
Source: Monitoring of Alcohol and Drug Use among High-Risk Populations Study (HRPS), 2012–2013[10]

Past-Year Non-Medical Use of Prescription Opioids

Past-Year Prevalence of Non-Medical Use in Canada

- General Population (aged 15+): Data from the 2015 CTADS revealed that among those who use opioid pain relievers, 2.2% (82,000 Canadians representing 0.3% of the total population) reported using them for non-medical purposes, a rate that remained unchanged from 2013[viii,7,8]
- Students: In the 2014–2015 Canadian Student Tobacco, Alcohol and Drug Survey (CSTADS), 1.6% of Canadian students in grades 7 to 9 and 3.5% of students in grades 10 to 12 reported past-year use of pain relievers to get high and not for medical purposes. A similar proportion of males and females in grades 7 through 12 reported past-year use of pain relievers to get high (2.5% and 2.6% respectively).[11]
    - Data from the spring 2016 National College Health Assessment Survey, which is drawn from a convenience sample of 41 post-secondary institutions in Canada and therefore not representative of all post-secondary students in Canada, indicated that 5.5% of post-secondary students had used prescription pain relievers that were not prescribed to them in the past 12 months (4.9% of male post-secondary students, 5.6% of female post-secondary students).[12]
    - The 2015 Ontario Student Drug Use and Health Survey reported that 10.0% of students in grades 7 to 12 had used a prescription opioid pain reliever for non-medical purposes (9.6% among males and 10.4% among females). Among students in grades 7 and 8, 8.3% reported past-year prescription opioid pain reliever use for non-medical purposes, compared to 10.6% of students in grades 9 to 12.[13]
    - A 2012 survey of Nova Scotia students in grades 7, 9, 10 and 12 reported that 11.7% of students reported non-medical pain pill use in the previous 12 months.[14]
    - Among students in grades 7, 9, Level I and Level III[ix] in Newfoundland and Labrador in 2012, 9.8% reported past-year use of pain-relievers for non-medical purposes.[15]
    - Among students in grades 7 to 12 on Prince Edward Island in 2012–2013, 6.8% reported ever using pain relievers to get high (3.8% reported past-year use). A similar percentage of males and females reported using pain relievers to get high (6.5% and 7.1% respectively).[16]
    - In New Brunswick, 11.1% of students in grades 7, 9, 10 and 12 reported past-year non-medical use of prescription pain relievers in 2012.[17]
- First Nations: Among First Nations individuals aged 18 and older living on-reserve or in northern First Nations communities across Canada, 4.7% reported past-year use of illicit (heroin) or prescription opioids, including morphine, methadone and codeine, without a prescription in 2008–2010 (4.1% among females, 5.2% among males). Among First Nations youth aged 12–17 years, 1.3% reported using illicit or prescription opioids without a prescription during the previous 12 months (1.5% among females, 1.1% among males).[18]

Past-Year Prevalence of Non-Medical Use Internationally

- United States: In 2015, the past-year prevalence of non-medical use of prescription pain relievers was 1.4% among those aged 12 and older.[19]

[viii] This analysis is based on the Statistics Canada *Canadian Tobacco, Alcohol and Drugs Survey, 2013* and *Canadian Tobacco, Alcohol and Drugs Survey, 2015*. All computations, use and interpretation of these data are entirely that of CCSA.
[ix] In Newfoundland and Labrador, Levels I, II and III refer to the last three years of study of a thirteen-year, kindergarten-to-senior-high education system (i.e., grades 10, 11 and 12 in some other provinces).

- **Australia:** Data from 2013 show that 3.3% of those aged 14 and older reported misusing prescription or over-the-counter pain relievers and analgesics[x] in the previous 12 months.[20]

Prescription Opioid-related Harms

Hospitalization due to Opioid Poisoning

From 2007–2008 to 2014–2015, the crude rate[xi] of hospitalizations due to opioid poisonings increased by over 30% (from 10.2 to 13.5 per 100,000 population). There was an average of more than 13 hospitalizations per day in 2014–2015, compared to an average of nine hospitalizations per day in 2007–2008. Across Canada, the rate in 2014–2015 ranged from 9.7 (Quebec) to 20.5 (Saskatchewan) per 100,000 population. During those years females accounted for 53% of opioid poisoning hospitalizations.[21,xii]

In recent years, adults 65 and older have consistently had the highest rates of hospitalization due to opioid poisoning, reaching 20.1 hospitalizations per 100,000 population in 2014–2015. While older adults represented 16% of the population in 2014–2015, they accounted for about a quarter of all hospitalizations due to opioid poisonings in that year.[21]

Emergency Department Visits in Ontario and Alberta

Comprehensive data on emergency department (ED) visits were available for Ontario and Alberta. Between 2010–2011 and 2014–2015, the age-adjusted[xiii] rate of ED visits due to opioid poisoning increased in both Ontario and Alberta, with most of the increase in the rate of opioid poisoning ED visits in Alberta occurring between 2013–2014 and 2014–2015 (36%). This sharp increase was not seen in Ontario.[21]

Table 2. ED visits due to opioid poisoning in Ontario and Alberta

Region	2010–2011 ED Visits	2014-2015 ED Visits
Ontario	14.2 for every 100,000 population	17.4 per 100,000 population
Alberta	17.8 for every 100,000 population	27.3 for every 100,000 population

For both provinces, the rates of opioid poisoning ED visits were higher among males than in females across all years. In 2014–2015, the age-adjusted rate of ED visits due to opioid poisonings in Alberta was 32.4 per 100,000 in males, compared to 23.3 per 100,000 in females, and in Ontario was 20.2 per 100,000 in males and 14.7 per 100,000 among females.[21]

Over the period from 2003 to 2011, adult drivers (18–64 years) in Ontario who were dispensed moderate to high doses of opioids were 21% to 42% more likely to have an emergency department visit related to road trauma compared to drivers who were taking lower doses of these drugs.[22]

From January 1, 2014, to September 30, 2016, there were approximately 19,930 emergency and urgent care visits related to opioids and other substances of non-medical use in Alberta, among approximately 13,970 unique individuals.[23]

[x] Prescription pain relievers and analgesics include prescription-only codeine combinations, oxycodone, pethidine or fentanyl, and other prescription pain relievers and analgesics. Over-the-counter pain relievers and analgesics include paracetamol, aspirin, over-the-counter codeine combinations, and other over-the-counter pain relievers and analgesics.

[xi] The crude rate indicates the overall rate of hospitalizations without taking into account confounding factors (e.g., the age distribution of the population).

[xii] Note that this report includes both prescription opioids (e.g., oxycodone) and illicit opioids (e.g., heroin).

[xiii] The age-adjusted rate accounts for variation in age distribution in the different regions. The age-adjusted rate was calculated using the direct standardization process, with the 2011 Canadian population representing the standard population. Please see the cited report for more detail on the exact methodology.

Driving After Use of Prescription Opioids

There is evidence that opioid use can increase the risk of driving impairment when used in combination with other drugs or alcohol, when used non-medically or when used therapeutically by individuals who are unaccustomed to using opioids.[24,25] While much less prevalent than alcohol or cannabis, opioids are one of the most common classes of prescription drugs found among drivers during roadside surveys, along with benzodiazepines.[24,26] In a road survey of five communities in British Columbia, opioids were detected in 8.7% of drivers in 2012.[25] Between 2000 and 2010, 5.5% of drivers killed in motor vehicles crashes in Canada tested positive for opioids (2.2% of drivers aged 16–24).[xiv,26] Driving while impaired by an opioid is a criminal offence in Canada, with the same penalties as driving while impaired by alcohol.[26]

Neonatal Abstinence Syndrome

Neonatal abstinence syndrome (NAS) affects infants who were exposed to opioids in utero, causing physical dependence on opioids, and often leads to withdrawal symptoms after birth.[27] Between 2000 and 2012, there was approximately a five-fold increase in the prevalence of NAS in Canada and other western countries.[28]

In Ontario, the rate of NAS increased from 0.9 to 5.1 per 1,000 live births from 2002–2003 to 2011–2012, a fourfold increase in prevalence over this ten-year period.[29] Between 2002 and 2014 the number of infants born in Ontario to opioid-dependent women increased 16-fold from 42 to 800.[30]

A recent media article[xv] reported 1,744 hospitalizations for NAS in the 2015–2016 fiscal year in Canada, a 20% increase from 2012–2013. Provincial rates of hospitalizations due to NAS reported in this media article ranged from 3.4 per 100,000 (Newfoundland and Labrador) to 15.5 per 100,000 (Prince Edward Island) in 2015–2016.[31] The numbers included in this media article were provided by the Canadian Institute for Health Information (CIHI). They should be considered preliminary and interpreted with caution.

Opioid-related Deaths

In September 2017, the Government of Canada released a report stating that in 2016 there were at least 2,816 opioid-related deaths in Canada, at a rate of 7.8 deaths per 100,000.[32] Estimated province-specific rates of opioid or illicit drug-related deaths ranged from 0.0 (Nunavut) to 20.6 (British Columbia) per 100,000.[*xvi*,32] The majority of opioid-related deaths occurred among males (73%), and the highest percentage of opioid-related deaths was among those aged 30–39 (28%).[32] There are no national-level data on opioid-related deaths prior to 2016. However, provincial data show that opioid-related deaths have increased, with opioid-related deaths in Ontario more than doubling between 2003 and 2016 (from 366 to 865), and accidental deaths due to opioid overdose in Quebec more than doubling between 2005 and 2015, increasing from 62 to 133.[33,34]

Most opioid-related deaths involved one or more types of non-opioid substances (e.g., cocaine, benzodiazepines, alcohol, W-18).[32] Indeed, a recent study found that in 2013, one in five opioid-related deaths in Ontario involved alcohol, compared to one in three in 1993.[35]

Fentanyl-related Deaths

Between 2013 and 2014, there were at least 525 fentanyl-detected deaths in Canada.[36] In 2016, about 46% (1,295) of all opioid-related deaths involved fentanyl-related opioids (e.g., fentanyl, carfentanil, furanyl-fentanyl), with the rate of deaths ranging from 0.0 (Nunavut) to 13.8 (British

[xiv] Note a driver who tested positive for opioids is not necessarily impaired by opioids.

[xv] The numbers reported in the media article do not include Quebec or the territories.

[xvi] An opioid-related death is a death caused by poisoning because of drug use, where at least one of the drugs is an opioid. A fentanyl-related death is a death caused by poisoning because of drug use, where one of the drugs is fentanyl. [32]

Columbia) per 100,000 across the country.[32] Recent provincial data on trends in fentanyl-related deaths are available from Alberta, British Columbia and Quebec.[xvii] Numbers and rates of opioid-related deaths involving fentanyl-related opioids in 2016 and the first quarter of 2017 for all jurisdictions in Canada are available in the report from the Government of Canada.[32]

- **Alberta:** Drug overdose deaths related to fentanyl have increased in the past three years (117 deaths in 2014, 257 deaths in 2015, 368 deaths in 2016).[23,32] In 2016, 80% of deaths due to an apparent fentanyl-related drug overdose occurred among males.[23]
- **British Columbia:** Between 2012 and 2016, the number of fentanyl-detected deaths increased almost 55 times from 12 to 656. Males accounted for over 80% of these deaths.[37]
- **Quebec:** Between 2005 and 2015, the number of fentanyl-detected overdose deaths increased more than seven times from four to 30.[38]

Treatment for Opioid Addiction

While all federal, provincial and territorial agencies collect data on their own treatment systems, there are currently no national-level data available for prescription drug-related treatment in Canada. According to the 2016 National Treatment Indicators report,[xviii] in Nova Scotia opioids were the second most commonly reported substance for which treatment was sought, accounting for 22.9% treatment episodes. In Ontario, opioids accounted for 2.4% of treatment episodes. However, in the last six years, Ontario has seen an increase in the number of admissions identifying prescription opioids as the client's primary reason for seeking treatment. In addition, among individuals accessing treatment services during 2013–2014, opioids were the third most common substance used in the past 12 months in Saskatchewan, and the fourth most common substance used in Alberta and Prince Edward Island.[39]

The standard of care for opioid use disorder includes psychosocial treatment and medication-assisted treatment, although these options are not universally accessible across the country (e.g., they tend not be available in rural and remote areas).[3] With regards to medication-assisted treatment, a recent set of guidelines developed in British Columbia provided recommendations for three levels of treatment, from withdrawal management (least intense form of treatment) to agonist therapies, to specialist-led alternative approaches (most intense).[40] In Canada, common agonist therapies for opioid use disorder include methadone or buprenorphine-naloxone. A recent review by the Canadian Agency for Drugs and Technologies in Health found that there are benefits to both drugs in maintenance treatment of opioid use disorder, but that compared with methadone, buprenorphine-naloxone appeared to be a safer, more effective, and cost-effective choice.[41]

Federal Initiatives to Address Non-medical Use of Prescription Opioids

The federal government has recently undertaken the following initiatives to address non-medical use of prescription opioids and the increasing number of opioid-related deaths:

- **Approved making naloxone hydrochloride nasal spray available without prescription**: In March 2016, Health Canada amended the Prescription Drug List to make naloxone available without a prescription. In addition, Health Canada granted temporary authorization of the sale of naloxone nasal spray for use in the emergency treatment of opioid overdoses. Prior to this authorization,

[xvii] Note that these data include fatalities implicating illicit or prescription opioids.
[xviii] The *National Treatment Indicators Report* provides 2013–2014 fiscal-year information on public, specialized substance use treatment from seven provinces (Newfoundland and Labrador, Prince Edward Island, Nova Scotia, Ontario, Manitoba, Saskatchewan and Alberta) one territory (Yukon), one provincial association (Association des centres de réadaptation en dépendance de Québec) and one federal association (First Nations and Inuit Health Branch).

naloxone was available in an injectable form.[42] CCSA has developed a Naloxone Costing Tool to help jurisdictions evaluate how they can make naloxone more accessible.

- **Established the Special Advisory Committee on the Epidemic of Opioid Overdoses**: The federal, provincial and territorial governments established a Special Advisory Committee to focus on opioid-related overdoses and deaths. Established in December 2016, it discusses topics such as prevention and treatment options, improving surveillance, and supporting harm reduction. In February 2017, an Opioids Overdose Surveillance Task Group was created and reports to the Special Advisory Committee.[43]
- **Established the Scientific Advisory Panel on Opioids:** The Scientific Advisory Panel on Opioids provides input and advice to Health Canada. In November 2016, the Scientific Advisory Panel was consulted on the development of content for new opioid warning stickers and patient information handouts, as well as questions about risk management plans for all high-potency opioids and contraindications for approved opioids.
- **Held Opioid Conference and Summit**: The federal Minister of Health Jane Philpott asked the CCSA to partner with Health Canada to organize an Opioid Conference and Summit, which was held on November 18 (Conference) and 19 (Summit), 2016. This two-day event, co-hosted by the Honourable Jane Philpott, federal Minister of Health and the Honourable Eric Hoskins, Ontario Minister of Health and Long-Term Care led to a Joint Statement of Action to Address the Opioid Crisis in Canada, supported by over 40 organizations and nine provinces and territories, to contribute to taking specific concrete actions to address problematic opioid use.[44]
- **Amended the *Controlled Drugs and Substances Act***: Three bills were recently passed in Parliament that amend the *Controlled Drugs and Substances Act*:
  - Bill C-224 (Good Samaritan bill) exempts individuals seeking emergency medical or law enforcement assistance for a drug overdose from charges of possession.[45]
  - Bill S-225 is an Act to amend the Controlled Drugs and Substances Act to regulate certain substances used in the production of fentanyl.[46]
  - Bill C-37 includes a series of amendments to the *Controlled Drugs and Substances Act*, including simplifying the application process for safe injection sites, changing offences and penalties, and amending regulation-making authorities.[47]

Additional Resources

- First Do No Harm: Responding to Canada's Prescription Drug Crisis
- Joint Statement of Action to Address the Opioid Crisis
- Opioids, Driving and Implications for Youth (Topic Summary)
- Deaths Involving Fentanyl in Canada, 2009–2014
- Misuse of Opioids in Canadian Communities
- The Effects of Psychoactive Prescription Drugs on Driving
- Hospitalizations and Emergency Department Visits Due to Opioid Poisoning in Canada
- The Availability of Take-Home Naloxone in Canada
- Naloxone Costing Tool

[1] Fischer, B., & Argento, E. (2012). Prescription opioid related misuse, harms, diversion and interventions in Canada: a review. *Pain Physician, 15*, ES191–ES203.

[2] Health Quality Ontario. (2017). *9 million prescriptions: what we know about the growing use of prescription opioids in Ontario.* Toronto, Ont.: Author.

[3] Centre for Addiction and Mental Health. (2016). *Prescription opioid policy framework.* Toronto, Ont.: Author.

[4] Busse, J. (2017). *2017 Canadian guideline for opioids for chronic non-cancer pain.* Hamilton, Ont.: McMaster University.

[5] Sproule, B., Brands, B., Li, S., & Catz-Biro, L. (2009). Changing patterns in opioid addiction: characterizing users of oxycodone and other opioids. *Canadian Family Physician, 55*(1), 68–69. e65.

[6] *Controlled Drugs and Substances Act*, S.C. 1996, c. 19 (2017).

[7] Statistics Canada. (2017). *Canadian Tobacco, Alcohol and Drugs Survey: Summary of results for 2015.* Ottawa, Ont.: Author.

[8] Statistics Canada. (2015). *Canadian Tobacco, Alcohol and Drugs Survey: Summary of results for 2013.* Ottawa, Ont.: Author.

[9] Health Canada. (2012). *Canadian Alcohol and Drug Use Monitoring Survey.* Ottawa, Ont.: Author.

[10] Health Canada. (2014). *Monitoring of Alcohol and Drug Use among High-Risk Populations Study: street-entrenched adult drug users, street-involved youth drug users and recreational drug users — Prevalence results 2012–2013.* Ottawa, Ont.: Author.

[11] Health Canada. (2016). *Canadian Student Tobacco, Alcohol and Drugs Survey: Summary of results for 2014–2015.* Ottawa, Ont.: Author.

[12] American College Health Association. (2016). *National college health assessment II: Canadian reference group data report spring 2016.* Hanover, Md.: Author.

[13] Boak, A., Hamilton, H.A., Adlaf, E.M., & Mann, R.E. (2015). *Drug use among Ontario students, 1977–2015: OSDUHS highlights* (CAMH Research Document Series No. 42). Toronto, Ont.: Centre for Addiction and Mental Health.

[14] Asbridge, M., & Langille, D. (2013). *2012 Nova Scotia Student Drug Use Survey: technical report.* Halifax, N.S.: Nova Scotia Department of Health and Wellness and Dalhousie University.

[15] Newfoundland and Labrador Department of Health and Community Services. (2013). *2012 Student Drug Use Survey: highlights report.* St John's, N.L.: Author.

[16] Prince Edward Island Department of Health and Wellness. (2015). *Prince Edward Island Student Drug Use 2004–2013.* Charlottetown, P.E.I.: Author.

[17] Gupta, N., Wang, H., Collette, M., & Pilgrim, W. (2013). *New Brunswick Student Drug Use Survey Report 2012.* Fredericton, N.B.: Province of New Brunswick Department of Health.

[18] First Nations Information Governance Centre. (2012). *First Nations Regional Health Survey (RHS) 2008/10: national report on adults, youth and children living in First Nations communities.* Ottawa, Ont.: Author.

[19] Center for Behavioral Health Statistics and Quality. (2016). *Key substance use and mental health indicators in the United States: Results from the 2015 National Survey on Drug Use and Health (HHS Publication No. SMA 16-4984, NSDUH Series H-51).* Rockville, Md.: Substance Abuse and Mental Health Services Administration.

[20] Australian Institute of Health and Welfare. (2014). *National Drug Strategy Household Survey detailed report 2013* (Drug Statistics Series no. 28. Cat. no. PHE 183). Canberra, Australia: Author.

[21] Canadian Institute for Health Information & Canadian Centre on Substance Use and Addiction. (2016). *Hospitalizations and emergency department visits due to opioid poisoning in Canada.* Ottawa, Ont.: Canadian Institute for Health Information.

[22] Gomes, T., Redelmeier, D.A., Juurlink, D.N., Dhalla, I.A., Camacho, X., & Mamdani, M.M. (2013). Opioid dose and risk of road trauma in Canada: a population-based study. *JAMA Internal Medicine, 173*(3), 196–201.

[23] Alberta Health. (2017). *Opioid and substances of misuse: Alberta report, 2016 Q4.* Edmonton, Alta.: Alberta Government.

[24] Canadian Centre on Substance Use and Addiction. (2017). *The effects of psychoactive prescription drugs on driving.* Ottawa, Ont.: Author.

[25] Beasley, E.E., & Beirness, D.J. (2012). *Alcohol and drug use among drivers following the introduction of immediate roadside prohibitions in British Columbia: Findings from the 2012 Roadside Survey.* Victoria, B.C.: B.C. Ministry of Justice.

[26] Canadian Centre on Substance Use and Addictions. (2015). *Opioids, driving and implications for youth.* Ottawa, Ont.: Author.

[27] Dow, K., Ordean, A., Murphy-Oikonen, J., Pereira, J., Koren, G., Roukema, H., . . . Turner, R. (2012). Neonatal abstinence syndrome clinical practice guidelines for Ontario. *Journal of Population Therapeutics and Clinical Pharmacology, 19*(3), e488–506.

[28] McQueen, K., & Murphy-Oikonen, J. (2016). Neonatal abstinence syndrome. *New England Journal of Medicine, 375*(25), 2468–2479.

[29] MHASEF Research Team. (2015). *The mental health of children and youth in Ontario: a baseline scorecard.* Toronto, Ont.: Institute for Clinical Evaluative Sciences.

[30] Brogly, S.B., Turner, S., Lajkosz, K., Davies, G., Newman, A., Johnson, A., & Dow, K. (2017). Infants born to opioid-dependent women in Ontario, 2002–2014. *Journal of Obstetrics and Gynaecology Canada, 39*(3), 157–165.

[31] Young, L. (2017). More Canadian babies born with opioid addiction and withdrawal. *GlobalNews.* Retrieved from globalnews.ca/news/3207195/more-canadian-babies-born-with-opioid-addiction-and-withdrawal/.

[32] Government of Canada. (2017). *National report: Apparent opioid-related deaths in Canada (January 2016 to March 2017).* Ottawa, Ont.: Author.

[33] Public Health Ontario. (2017). Opioid-related morbidity and mortality in Ontario. Retrieved from www.publichealthontario.ca/en/dataandanalytics/pages/opioid.aspx.

[34] Office of the Coroner. (2017). *Deaths by accidental opioid overdose, Quebec, 2005–2015.* Quebec, Que.: Author.

[35] Gomes, T., Juurlink, D.N., Mamdani, M.M.,Paterson, J.M., & van den Brink, W. (2017). Prevalence and characteristics of opioid-related deaths involving alcohol in Ontario, Canada. *Drug and alcohol dependence*, *179*, 416–423.

[36] Canadian Centre on Substance Use and Addiction & Canadian Community Epidemiology Network on Drug Use. (2015). *Deaths involving fentanyl in Canada, 2009–2014.* Ottawa, Ont.: CCSA.

[37] B.C. Coroners Services. (2017). *Fentanyl-detected illicit drug overdose deaths, January 1, 2012 to May 31, 2017.* Burnaby, B.C.: Ministry of Public Safety and Solicitor General.

[38] Office of the Coroner. (2017). *Deaths by accidental fentanyl overdose, alone or in combination with other substances, 2005–2015.* Quebec, Que.: Author.

[39] Pirie, T., Wallingford, S.C., Di Gioacchino, L.A., McQuaid, R.J., & National Treatment Indicators Working Group. (2016). *National treatment indicators report: 2013–2014 data.* Ottawa, Ont.: Canadian Centre on Substance Use and Addiction.

[40] Adams, E., Badenhorst, C., Skuridina, N., Sharifi, N., Mathew, N., Vipler, S., . . . Rothon, D.A. (2017). *A guideline for the clinical management of opioid use disorder.* Vancouver, BC: British Columbia Ministry of Health & British Columbia Centre on Substance Use.

[41] Canadian Agency for Drugs and Technologies in Health. (2016). *Buprenorphine/naloxone versus methadone for the treatment of opioid dependence: a review of comparative clinical effectiveness, cost effectiveness and guidelines*. Ottawa, Ont.: Author.

[42] Health Canada. (2016). Notice - Availability of naloxone hydrochloride nasal spray (NARCAN) in Canada. Retrieved from www.hc-sc.gc.ca/dhp-mps/prodpharma/activit/announce-annonce/notice-avis-nasal-eng.php.

[43] Pan-Canadian Public Health Network. (2017). Special Advisory Committee on the Epidemic of Opioid Overdoses. Retrieved from www.phn-rsp.ca/sac-opioid-gcs-opioides/index-eng.php.

[44] Government of Canada. (2016). Opioid Conference. Retrieved from www.canada.ca/en/health-canada/services/substance-abuse/opioid-conference.html.

[45] Bill C-224: An act to amend the Controlled Drugs and Substances Act (assistance — drug overdose). Assented to May 4, 2017 (2017).

[46] Bill S-225: An act to amend the Controlled Drugs and Substances Act (substances used in the production of fentanyl), 3rd Reading, June 16, 2016 (2016).

[47] Bill C-37: An act to amend the Controlled Drugs and Substances Act and to make related amendments to other acts. Assented to May 18, 2017 (2017).

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