

The ongoing opioid crisis has been a trans-national epidemic since the 1990s. This article will focus on a Canadian perspective, but the epidemic is bigger than our country alone. Opioids are used for pain management, but they are highly addictive and no one is immune to opioid addiction. Opioid use also comes with the risk of fatal overdose, particularly when it comes to fentanyl. Additionally, the COVID-19 pandemic has challenged harm reduction and counseling efforts to combat the opioid crisis. Other effects of the pandemic on those already challenged by opioid use have yet to be fully studied.

What are opioids and what do they do?

Opioids, also referred to as narcotics, are used for treatment of moderate to severe pain.

The term “opioids” describes compounds

extracted from the poppy seed (opium) that can interact with opioid receptors in the brain to block pain signals between the brain and the body and to make some people feel relaxed, happy, or “high”. There are also synthetic and semi-synthetic opioids that have been created with similar properties.

Opioids can be consumed in different forms, such as pills, lozenges, lollipops, by injection or IV, through a patch on the skin, with a suppository, or snorted or smoked.

Which drugs are opioids?

There are a variety of drugs classified as opioids, and they can be obtained via prescription for pain management or obtained illicitly.

Common prescription opioids include:

- *Methadone*
- *Oxycodone (OxyContin)*
- *Hydrocodone (Prescribed).*

Methadone and buprenorphine are opioids most commonly used in counseling and addiction treatment programs.

Fentanyl is a synthetic opioid which can be prescribed to patients or acquired illicitly. Fentanyl is very potent and can cause fatality even in trace amounts.

Other opioid drugs include:

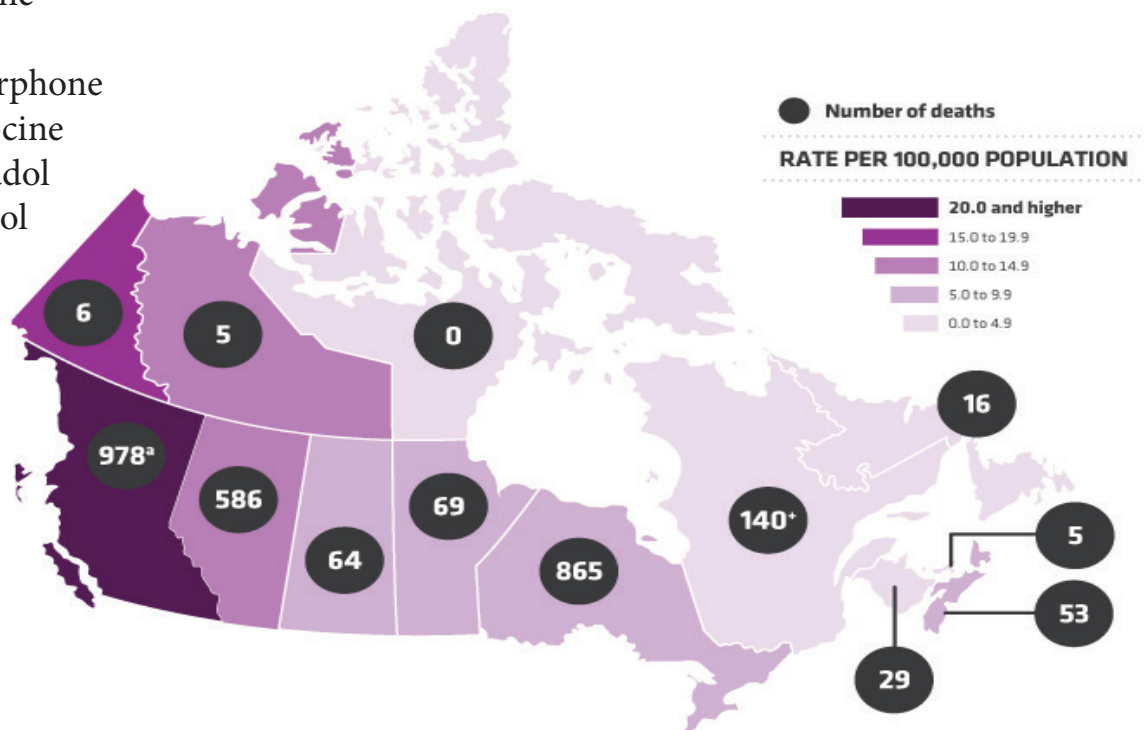
- Amphetamines
- Butorphanol
- Codeine
- Carfentanil
- Diacetylmorphine
- Heroin
- Hydromorphone
- Methamphetamine
- Methadone
- Morphine
- Opium
- Oxymorphone
- Pentazocine
- Tapentadol
- Tramadol

What's the danger?

Opioids are highly addictive and can lead to risk of fatal overdose, particularly with fentanyl.

Side effects of using opioids can include tolerance to opioids, physical dependence (withdrawal), increased sensitivity to pain, vomiting, dry mouth, sleepiness and dizziness, depression, low levels of testosterone, and itching and sweating. Additional side effects can include slowed breathing, constipation, nausea, confusion and drowsiness.

Opioid withdrawal symptoms can include: drug cravings, anxiety, insomnia, abdominal pain, vomiting, diarrhea, or tremors (shaking). As the body learns to tolerate the dose, you may need more medication to relieve the pain.



Although psychological, social, and biological risk factors such as genetics, mental health, early life experiences, trauma, poverty, lack of secure housing and other social determinants of health can increase the chances of addiction, anyone can get addicted to opioids.

The CCSA reports that "9.6% of Canadian adults who used opioid medications in 2018 reported some form of problematic use e.g., taking in amounts greater than prescribed, tampering with the product before taking it or using to get high or improve mood". Opioids are highly addictive, and non-medical use, prolonged use, misuse, and use without supervision can lead to opioid dependence (addiction) and other health problems.

Fentanyl and its chemically-similar analogues are particularly potent. Fentanyl is 50-100 times more potent than morphine. For medical uses, it can be prescribed to help

control severe pain (as a tablet, injection, or skin patch), while it is used in non-medical situations to produce a state of euphoria followed by a period of calm lasting 1-2 hours.

The danger with fentanyl is that only a few grains is enough to kill. Its high potency means it is causing high rates of overdose and overdose deaths in Canada. When taking illicit drugs, people may not be aware that the drug they are taking is contaminated with fentanyl, making it even more dangerous. Authorities are finding many illicit varieties of the drug, which can come in many colours and often is laced with other sedative drugs like Valium, which has been shown to be a deadly combination.

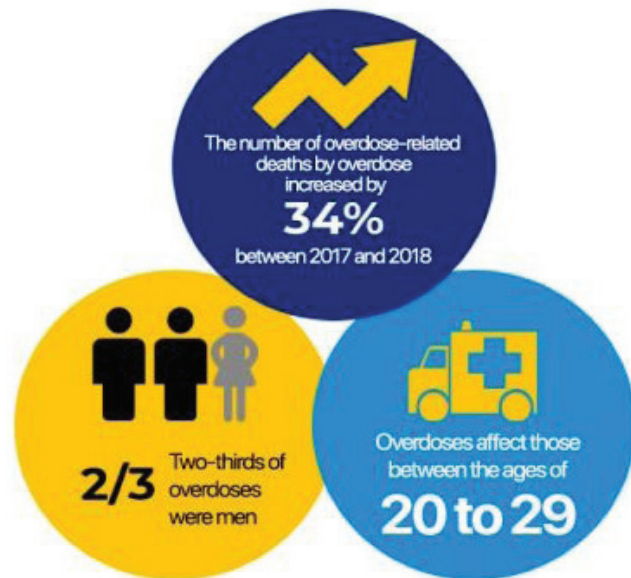


With fentanyl, life-threatening effects can occur within two minutes of use. Buddying up, testing before using, and keeping naloxone nearby is recommended.

Naloxone reverses opioid overdose by kicking opioids off the receptors in the brain and binding to those receptors instead. It only works on opioids, and cannot be used improperly! In Canada, naloxone is available in a nasal spray or injection, though it may wear off in 20-90 minutes before the opioids are gone from the body. Seeking further medical attention will be necessary.

If you suspect an opioid overdose, call 911, administer naloxone or CPR, and stay until emergency services arrive. Naloxone can be accessed at pharmacies, online, or at local harm reduction initiatives. In Canada, some provinces offer free take-home naloxone kits.

OPIOID STATS



Who is getting addicted?

Contrary to what popular culture might tell you, those who are susceptible to opioid addiction are simply people dealing with chronic or severe pain. Anyone who takes prescription opioids can become addicted to them. There is no distinction of opioid use between ages, although the American Society of Anesthesiologists report generational differences in acquisition patterns. According to the ASA, baby boomers are more likely than millennials to have used opioids through a prescription to treat pain, though millennials are more likely to obtain opioids inappropriately and/or do not know the best method for disposing of leftover opioids. These acquisition patterns may reflect differences in healthcare coverage (access to prescriptions), as well as a need for access to information about how to dispose of unused opioid drugs.



Where is it coming from?

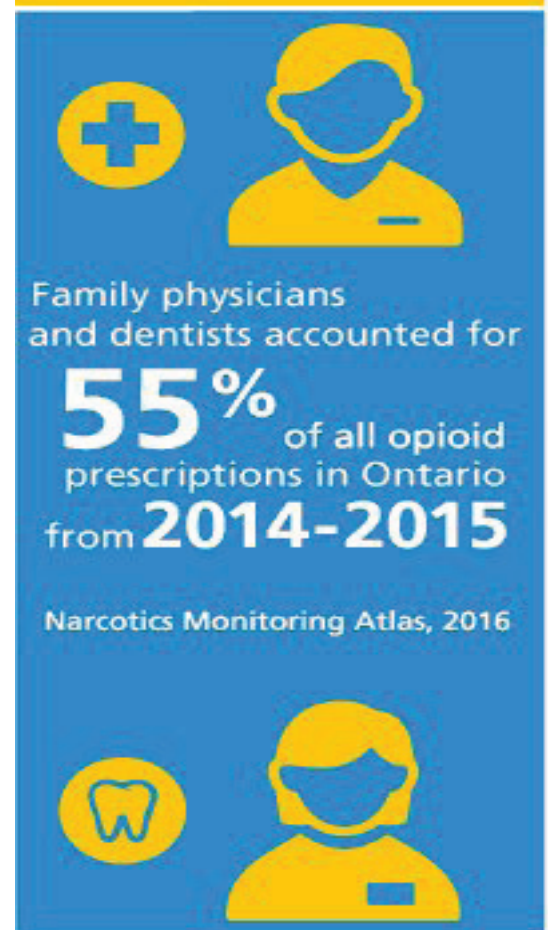
Opioids can be obtained legally by prescription from a doctor for management of moderate to severe pain, or illegally from prescriptions that are stolen or not properly disposed of. Opioids can also be cultivated/manufactured and distributed illicitly. Illicit or counterfeit opioids run the additional risk of possible fentanyl contamination. The lack of access to prescription opioids can lead to illicit opioid use.

While opioids can be effective in managing pain, the American Society of Anesthesiologists recommend watching out for side effects, taking only as directed, and asking about other pain management alternatives. When ending an opioid prescription, physicians will work to taper off the medication, slowly reducing the dosage to avoid withdrawal.

How is the COVID-19 pandemic affecting the opioid epidemic?

The CDC outlines the rise of opioid deaths in 3 distinct waves. The first wave began in the 1990s with increased prescription rates of opioids; the second wave hit in 2010 with increases in overdose deaths involving heroin; the third wave hit in 2013 with significant increases in overdose deaths involving synthetic opioids, particularly with illicitly manufactured fentanyl. Fentanyl, particularly illicitly manufactured and distributed fentanyl, continues to be at the forefront of opioid-related overdose death rates. Additionally, methadone, oxycodone (OxyContin), and hydrocodone (Vicodin) are involved in a high number of opioid-related overdose death rates, especially when mixed with other medications.

COVID-19 has challenged treatment programs in 2020 and 2021. There was a substantial decrease in the availability and capacity of substance use treatment and harm reduction services in the early phase of the pandemic, due to closures and restrictions on capacity at facilities.



Delivery of care for substance use treatment has shifted to virtual platforms, but this ability is not equitably distributed and cannot completely replace the need for in-person treatment options. Growing wait times for services has led to many clients returning to or engaging in higher risk substance use. In the first 15 weeks of the pandemic, the CCSA reported a rapid increase of opioid-related deaths in Ontario, Alberta, and British Columbia compared to the previous 15 weeks. In response, the Government of Canada has pledged an additional \$66 million over the next two years to support community-based organizations responding to substance use issues, including help providing frontline services in the COVID-19 context.



As the pandemic rages on, significant litigation cases have been launched against prescription opioid manufacturers. In October 2020, OxyContin maker Purdue Pharma pled guilty to 3 criminal charges, including conspiracy to defraud the US (false representation and reporting misleading information) and violating federal anti-kickback laws (encouraging doctors to write more prescriptions for the company's opioids). The company is to declare bankruptcy and become a public benefit company, and the settlement of more than \$8 billion is to aid medication-assisted treatment and other drug programs to combat the opioid epidemic. In November 2020, Johnson & Johnson and the "Big Three" distributors reached a tentative \$26 billion settlement in the largest federal court case in American history. The settlement will also funnel money to the communities devastated by the opioid crisis.

Formal studies of the relationship between COVID-19 and the opioid epidemic have yet to be conducted, but some medical professionals have expressed concerns about the effect of opioids in depressing the respiratory drive and the immunosuppressive effect of long-term opioid use. This means that not only do long-term users of opioids need to manage dependencies through COVID-19 restrictions, they may also need to be considered high-risk for COVID-19.

Becker & Fiellen have expressed concern that COVID-19 will increase opioid overdose rates as infection epidemics disproportionately affect socially marginalized persons with medical and psychiatric comorbid conditions. They recommend methadone delivery via mobile teams for quarantined patients, and that opioid treatment programs increase use of buprenorphine because of its safer pharmacologic properties and telemedicine (and allocated funding to support this) when appropriate. Additionally, Becker & Fiellen recommend temporarily removing limits on the number of patients that an individual prescriber may treat concurrently.

What can we do?

Destigmatizing and medicalizing opioid addiction involves putting compassion and science at the forefront of efforts. Efforts are multi-pronged and both short and long-term, and need to address how drugs are manufactured and distributed, how drugs are accessed, reduction of fatal overdoses, supporting programs that provide counseling and the treatment of addiction, increasing the public understanding of what the drugs do, and increasing studies of opioids and alternative ways to manage pain.

These efforts include:

- Studying and providing information on opioids (data collection, research, and marketing to increase both scientific and public understanding)
- Advocating for better pain management programs and access to them
- Advocating for treatment program funding
- Increasing the accessibility of life-saving medication assisted treatment
- Harm reduction for when overdoses do occur
- Funding of syringe exchange services and naloxone

Laws, regulations, and policies can make a difference in combating the opioid epidemic. The Government of Canada has been approaching the epidemic as a complex issue, involving prevention, treatment, harm reduction, and enforcement. Programs, data collection, marketing, enforcement, and public funding are all part of a concentrated effort to curb the opioid epidemic in Canada.



Recent significant legal changes in this effort include the introduction of the Good Samaritan Overdose Act in 2017, and amendments to the Controlled Drugs and Substances Act in 2019. The new regulatory amendments control specific chemicals (precursors) from being imported and used in illegal production of fentanyl's and amphetamines.

The Good Samaritan Act is significant as it provides some legal protection for individuals who seek emergency help during an overdose. This Act is intended to encourage those who witness an overdose to stay and call 911 or a local emergency number and to administer naloxone if they have it, even if they have taken drugs or have drugs on them.

For more immediate efforts, naloxone distribution, syringe programs, and supervised consumption services can reduce fatal overdose rates and help manage the costs of addiction.

In counseling and addictions programming, the approach is to slow down the addiction rather than quitting cold turkey, which can be dangerous to the body. Naloxone distribution can help reduce fatal overdose rates.

And finally, education on how opioids and overdoses work are crucial to overcoming the stigma. Responding to an opioid overdose won't lead to violence, but grogginess due to lack of oxygen. Opioid addiction has very little to do with the person, but stems from pain management and requires a physician's help. And of course, normalizing counseling and seeking help for mental health can help deal with the emotional side of pain management before (and after!) addiction becomes a problem.

By Freyja Catton January 10, 2020