



Opioids

background information for educators

What are opioids?

- Opioids belong to a category of substances known as Central Nervous System (CNS) depressants. This means they slow down the parts of the brain that control vital functions such as breathing and heart rate.
- They are medications that are mainly prescribed to help relieve pain.
- Opioids are also known as narcotics, meaning 'sleep-inducing' or 'numbness-inducing'.
- They can produce euphoria (feeling high) which makes them prone to use for non-medical purposes.
- Examples include codeine (in Tylenol #2, #3, #4), oxycodone, morphine, and fentanyl.

References:

[Prescription Opioids | CAMH Educators Guide](#)

Types of opioids

There are three main categories of opioids:

- **Natural:** these are made from the poppy sap or fibers of the poppy seed pod. They are also called opiates. Examples include opium, morphine and codeine.
- **Semi-synthetic:** these are made in a laboratory by modifying the chemical structure of natural opioids and include heroin, oxycodone and hydrocodone.
- **Synthetic:** These opioids are synthesized from chemicals in the lab with no natural ingredients, such as fentanyl, carfentanil, Demerol and methadone.



Legal vs illegal

- Legal access to opioids is only through prescribed medication including codeine, fentanyl, morphine, and oxycodone. The composition of these is highly controlled.
- Opioids that are obtained illegally without a prescription, often referred to as 'street drugs', are riskier to use as it is impossible to know their strength or composition. These substances may be illegal in the way that they are created, sold, or used. They are often unknowingly mixed in with other substances such as ecstasy, cocaine, fentanyl, benzodiazepines (sedatives) or animal tranquilizers (e.g., carfentanil, xylazine).



References:

Prescription Opioids: CAMH; <https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/street-fentanyl> Opioids: CCSA
Communicating about Substance Use in Compassionate, Safe and Non-Stigmatizing Ways: Health Canada; Opioids: Health Canada
Opioids and Painkillers: Ontario

Why is youth opioid use a concern?



- Using any substance that can alter brain function is a concern for youth because their brains are still developing.



- Extremely potent synthetic opioids like fentanyl and carfentanil can be fatal in very small amounts (just a few grains).



- Because substances like fentanyl are odourless and tasteless, youth may unknowingly consume them when they are mixed into other street drugs or counterfeit pills.
- Youth may use non-prescribed opioids to experience the rush of euphoria and subsequent feeling of calmness. However, regular use quickly leads to:
 - Tolerance – Needing more of the substance to get the same effect.
 - Dependence – The body physically needs the substance drug to function normally and avoid withdrawal symptoms.
 - Substance Use Disorder – A medical condition where an individual cannot stop using despite negative consequences.
- The risk of overdose is high when mixing opioids with other depressants (e.g., alcohol) or stimulants (which can mask the opioid's effects).

Health effects of opioids

How rapidly opioids produce the desired effects (pain relief, euphoria) varies depending on how opioids are taken.

Orally: The effects are gradual and usually felt in about 10 to 20 minutes.



Injected into a vein: Effects are most intense and felt within one minute.

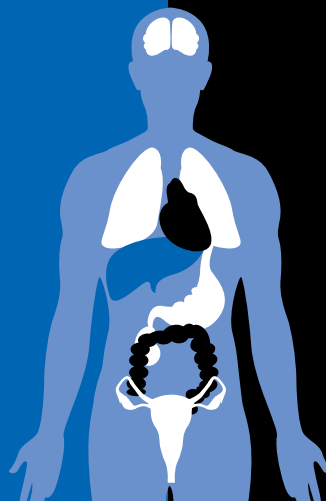


For many opioids, a single dose can provide pain relief for 4-5 hours.



Short term effects

- Drowsiness and relaxation
- Euphoria (feeling high)
- Difficulty concentrating
- Constipation
- Nausea and vomiting
- Difficulty breathing
- Headaches
- Dizziness and confusion



Long term effects

- Increased tolerance
- Dependence
- Substance or opioid use disorder
- Liver damage
- Infertility
- Worsening pain (known as "opioid-induced hyperalgesia")

References:

[Prescription Opioids | CAMH Educators Guide](#)
[Opioids: Health Canada](#)

Emergency response: Overdose



Signs of an opioid overdose include:

- Difficulty staying awake
- Unable to walk or talk clearly
- Breathing slowly, breathing loudly or not at all
- Not responding to noise or shaking of shoulders
- Pale or bluish skin (check lips, nails) and they feel cold
- Tiny pupils (pinpoint) or their eyes are rolled back
- Vomiting



Use of naloxone

- Naloxone is a medication that can temporarily reverse the effects of an opioid overdose and allow time for medical help to arrive.
- Naloxone does not reverse the effects of sedatives or tranquilizers. However, if you don't know what has been taken, using naloxone will not harm the person.

Types of naloxone kits available

1. Naloxone nasal spray is sprayed directly into the nose, where it is absorbed.
2. Naloxone injectable is injected into any muscle in the body, such as arm or thigh.



Always call 911 if a person is experiencing or suspected to be experiencing an overdose.

References:

[Naloxone - Canada.ca](http://Naloxone-Canada.ca)

Myths and facts

Myth	Fact
"If you use prescribed opioids, you will become addicted."	There is little risk of addiction when opioids are used under medical supervision for a short time and strictly as prescribed for acute pain. However, long-term use, especially without proper monitoring, carries a higher risk.
"Addiction and physical dependence are the same thing."	Dependence is a physical adaptation where the body needs the substance to function normally and experiences withdrawal if the substance is stopped. Addiction is a compulsive, psychological need for the substance characterized by inability to stop using the substance despite harm (job loss, health issues, relationship breakdown).
"You can only overdose if you use a large amount."	Overdose can occur even with small amounts if using a stronger opioid, using more often, using illegal opioids as they vary in strength and type, or mixing opioids with other depressant substances like alcohol, benzodiazepines, or sleeping pills.
"Naloxone will work for other depressant drugs like benzodiazepines or sedatives."	Naloxone only reverses the effects of opioids. It will not reverse the effects of other depressants. However, if you don't know what has been taken, using naloxone will not harm the person.

References:

[Prescription Opioids: CAMH](https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/street-fentanyl)

<https://www.camh.ca/en/health-info/mental-illness-and-addiction-index/street-fentanyl>

[Opioids: CCSA](#)

[Communicating about Substance Use in Compassionate, Safe and Non-Stigmatizing Ways: Health Canada](#)

[Opioids: Health Canada](#)

[Opioids and Painkillers: Ontario](#)

Statistics on opioid use

- [Ontario Student Drug Use and Mental Health Survey \(OSDUHS\) – Centre for Addiction and Mental Health \(CAMH\)](#)
- [Peel Public Health: Health Status Data - Region of Peel](#)
- [Balancing Act: An All of Society Approach to Substance Use and Harms \(2023 Annual Report of the Chief Medical Officer of Health of Ontario to the Legislative Assembly of Ontario\)](#)

Related resources and supports

- [Educators Guide](#) (resource type(s): Guide and videos) - Canadian Centre on Substance Use and Addiction (CCSA)
- [Kids Help Phone](#) - Kids Help Phone provides confidential support and counseling with various issues such as substance use and more.
- [ConnexOntario](#) - Connex Ontario provides confidential mental health and addictions support and information.
- [Where to get a free naloxone kit](#) - Search the map to find the closest pharmacy or community organization where to pick up a naloxone kit.