**Official Name**

Heroin

**Street Name**

junk, H, smack, horse, skag, dope, China white

**What is it?**

The opioid family of drugs includes natural, synthetic and semi-synthetic opioids. Opiates, such as morphine and codeine, are natural opioids found in the opium poppy. Synthetic opioids, such as methadone, are chemically made. Heroin is a semi-synthetic opioid: it is made from morphine that has been chemically processed. It enters the brain quickly and produces a more immediate effect.

The most common ways of using heroin are:

- injecting either into a vein ("mainlining," intravenous or IV use), into a muscle (intramuscular or IM use) or under the skin ("skin-popping" or subcutaneous use)
- snorting the powder through the nose (also called sniffing)
- inhaling or smoking ("chasing the dragon"), which involves gently heating the heroin on aluminum foil and inhaling the smoke and vapours through a tube.

**Where does it come from?**

Most heroin is produced in Asia and Latin America, where opium poppies are grown. Morphine is extracted from the opium gum in laboratories close to the fields, and then converted into heroin in labs within or near the producing
country.

**What does it look like?**

In its pure form, heroin is a fine, white, bitter-tasting powder that dissolves in water. When it is sold on the street, its colour and consistency vary depending on how it is made and what additives it has been “cut” with. Street heroin may come in the form of a white powder, a brown and sometimes grainy substance or a dark brown sticky gum. The purity of heroin varies from batch to batch.

Some additives, such as sugar, starch or powdered milk are used to increase the weight for retail sale. Other drugs may be added to increase the effects of the heroin. Fentanyl, a prescription opioid that is 100 times more powerful than morphine, is sometimes used to cut heroin or other street drugs. It may also be made into tablets that look like prescription medication. Many overdoses have occurred because people did not know that what they were taking was contaminated with fentanyl.

If you or someone you know uses opioids, it is a good idea to have a free naloxone kit. Naloxone is a medication that can temporarily reverse the effects of an opioid overdose and allow time for medical help to arrive.

**Who uses it?**

Heroin is used by a range of people from a variety of cultural, social, economic and age groups. First-time users tend to be in their teens or 20s, but most people who use heroin regularly are over 30.

**How does it make you feel?**
When heroin is injected into a vein, it produces a surge of euphoria, or “rush.” This feeling is not as intense when it is snorted or smoked. Following the rush, there is a period of sedation and tranquility known as being “on the nod.”

New users often experience nausea and vomiting. The desired effects include detachment from physical and emotional pain and a feeling of well-being. Other effects include slowed breathing, pinpoint pupils, itchiness and sweating. Regular use results in constipation, loss of sexual interest and libido and irregular or missed periods in women.

The way heroin affects you depends on many factors, including:

- your age
- how much you take and how often you take it
- how long you've been taking it
- the method you use to take the drug
- the environment you're in
- whether or not you have certain pre-existing medical or psychiatric conditions
- whether you've taken any alcohol or other drugs (illegal, prescription, over-the-counter or herbal).

**How long does the feeling last?**

If heroin is injected into a vein, the rush is felt in seven or eight seconds and lasts from 45 seconds to a few minutes. When it's injected under the skin or into a muscle, the effect comes on slower, within five to eight minutes. Someone may be "on the nod" for up to an hour. Regardless of how it is used, the effects of heroin generally last for three to five hours, depending on the dose. People who use heroin daily must use every six to 12 hours to avoid symptoms of withdrawal.

**Is it addictive?**
Regular use of heroin can lead to addiction within two to three weeks. Signs of addiction include:

- using over a longer period or using more than planned
- wanting to quit or cut down, or trying unsuccessfully to quit
- spending a lot of time and effort getting, using and recovering from opioids
- experiencing cravings
- failing to fulfil responsibilities at work, school or home as a result of opioid use
- continuing to use opioids despite the negative social consequences caused by opioid use
- giving up activities that were once enjoyable
- using opioids in dangerous situations
- needing to take more of the drug to get the same effect (tolerance, a sign of physical dependence)
- feeling ill when opioid use suddenly stops (withdrawal, a sign of physical dependence)
- showing signs of opioid intoxication (e.g., nodding off, pinpoint pupils).

Not all people who experiment with heroin become addicted. Some people use the drug only on occasion, such as on weekends, without increasing the dose. However, with regular use, people develop tolerance, and they need more of the drug to achieve the same effects. This leads to physical dependence on heroin.

Once someone is dependent, stopping their use can be extremely difficult. People who have used heroin for a long time often report that they no longer experience any pleasure from the drug. They continue to use heroin to avoid the symptoms of withdrawal and to control their craving for the drug.

**Is it dangerous?**

Heroin is dangerous for a number of reasons. The most immediate danger is overdose. In an opioid overdose, breathing slows down and may stop completely. A person who has overdosed is unconscious and cannot be roused,
and has skin that is cold, moist and bluish.

If someone is overdosing, call 911 immediately. While you are waiting for medical help to arrive, you can use your naloxone kit to temporarily reverse the effects of the overdose.

The risk of overdose is increased by:

- the unknown purity of the drug, which makes it difficult to determine the correct dose
- injection, because the drug reaches the brain more quickly than by other ways of taking the drug, and because the dose is taken all at once
- combining heroin with other sedating drugs, such as alcohol, benzodiazepines or methadone.

Additional dangers of heroin use include:

- Injection: Injection drug use puts a person at high risk of bacterial infections, blood poisoning, skin infections and collapsed veins. Sharing needles increases the risk of becoming infected with, or spreading, HIV and hepatitis B or C.
- Combining heroin with other drugs, such as cocaine (in “speedballs”): When drugs interact inside the body, the results are unpredictable and sometimes deadly.
- Addiction: The constant need to obtain heroin and the repeated use of the drug can result in criminal involvement or other high-risk behaviour, breakdown of family life, loss of employment and poor health.
- Pregnancy: Women who regularly use heroin often miss their periods; some mistakenly think that they are infertile, and become pregnant. Continued use of heroin during pregnancy is very risky for the baby.

What are the long-term effects of using it?

Research using brain scans shows that long-term regular use of heroin results in changes in the way the brain works. While the effect of these changes is not fully understood, this research illustrates that it may take months or years for the
brain to return to normal functioning after a person stops using heroin.

Sources:

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Fundamentals of Addiction: A Practical Guide for Counsellors © 2014 Centre for Addiction and Mental Health
Straight Talk: Fentanyl © 2017 Centre for Addiction and Mental Health
About opioids © 2017 Government of Canada
Opioid crisis in Canada © 2018 Government of Canada
What is fentanyl? © 2017 Royal Canadian Mounted Police

Where can I find help, treatment and support?

- Treatment at CAMH: Access CAMH
- Help for families from CAMH
- ConnexOntario
- Kids Help Phone at 1 800 668-6868

Where can I find more information?

- A free tutorial on addictions is available on the Mental Health 101 page.
- Addiction: An Information Guide PDF (PDF)
- 5 Steps to Save a Life PDF (PDF)
- Making the choice, making it work: Treatment for Opioid Addiction PDF (PDF)
- Opioid Agonist Therapy: Information for Clients PDF (PDF)