

## Fact sheets 2021

### What is heroin?

Heroin (diacetylmorphine) is part of the opioid class of drugs. It is the most common illicit opioid. Opioids are naturally or synthetically derived from the opium poppy plant – heroin is synthetic. Other opioids include morphine, codeine, methadone, oxycodone and fentanyl, some of which are prescribed drugs.

Heroin is a central nervous system depressant. Like other opioids, it attaches receptors to the brain, sending signals to block pain and slow breathing. Heroin may be snorted, swallowed or smoked, but is most commonly melted from a powder or rock form and injected (AIHW, 2019).

Heroin is normally sold in 'caps' (a small amount, usually enough for one injection) or grams. It is usually packaged in 'foils' (aluminium foil packaging) or small, coloured balloons. It can be sold cut (mixed) with a range of substances that make it hard to know the purity of what is being taken.

### What are the effects?

Heroin produces a 'rush' within seconds of injecting or smoking it, or up to about five minutes if it's snorted. The effects of heroin can last for approximately three to five hours.

### Short term effects:

- Pain relief (analgesia)
- Cough suppressant
- Euphoria
- Dry mouth
- Nausea and vomiting
- Drowsiness
- Respiratory depression resulting in fatal and non-fatal overdose, especially when used in conjunction with other sedative substances including benzodiazepines and alcohol (AIHW, 2019)

### Long term effects:

- Severe constipation
- Tooth decay (from lack of saliva)
- Irregular menstrual periods in females
- Loss of appetite and weight
- Memory impairment from lack of oxygen in overdoses
- Mental health issues including depression
- Physical dependence and associated withdrawal, which manifest as flu-like symptoms (AIHW, 2019)

# Heroin

hammer, H, smack, junk,  
gear, horse, skag, black  
tar, china white

## Mixing heroin with other drugs

Taking heroin with other drugs – including over-the-counter or prescribed medications – can be unpredictable and dangerous, severely reducing the rate of breathing and may cause enormous strain on the heart and kidneys, and increased risk of overdose (ADF, 2019).

## Toxicity and overdose

According to the Australian Institute of Health and Welfare, the risk of heroin overdose is high, especially when used in conjunction with other drugs. Of the 1,740 drug-induced deaths in Australia in 2018, 438 or 25 percent were due to heroin (Man et al. 2019).

Heroin is a central nervous system depressant, meaning that it slows down the brain functions and, in particular, the control of breathing (which can slow down or even stop). Accidental overdoses are common.

Overdoses can happen if too much heroin is used or if the person also has other drugs in their system (e.g. alcohol, benzodiazepines such as Valium, or other opioids such as morphine and oxycodone). Combining heroin with some kinds of antidepressant (tricyclics) and/or stimulant drugs (e.g. cocaine or methamphetamine) also increases the risk of overdose.

Signs of overdose include:

- Extreme drowsiness or the person may even be impossible to wake
- Small ("pinned") pupils
- Slowed breathing and heart rate
- Heavy snoring

Sometimes a person will also experience:

- Blue or purple coloured skin (cyanosis), usually starting on lips and fingers
- Low blood pressure
- A drop in body temperature to below 35 degrees (hypothermia)

If caught in time, the effects of overdose can be reversed by administering a drug called naloxone (see naloxone fact sheet).

## Dependence and withdrawal

Opioids, and heroin in particular, have the highest dependence liability of all illicit drugs. There is no sex difference with females as likely to become heroin dependent as males. Injecting opioids is associated with the highest risk of dependence.

Opioid withdrawal syndrome has both physical and psychological symptoms. It is generally characterised as a flu-like illness. Symptoms commence eight to 12 hours after the cessation of heroin use and typically on the third day post cessation - the syndrome usually resolves after a week (Darke, Lappin & Farrell, 2019).

Signs and symptoms of opioid withdrawal syndrome:

- Sweating, watery eyes, runny nose, increased urinary frequency, diarrhoea, nausea, vomiting, abdominal cramps
- Muscle spasm resulting in headaches, backaches, leg cramps
- Goosebumps, dilated pupils
- Elevated blood pressure, increased heart rate
- Anxiety, irritability, dysphoria, sleep disturbance
- Craving for opioids (Darke, Lappin & Farrell, 2019)



## What are the risks?

- Heroin is considered to be the most harmful of all illicit drugs. There are many problems that can result from heroin use, especially if it's used heavily or regularly.
- Heroin is commonly injected. Injection comes with a range of additional harms associated with the unsanitary sharing of injecting equipment, such as the transmission of blood borne viruses like Hepatitis C and HIV (AIHW, 2019).

## Mental health

People who use heroin suffer high levels of major depression and anxiety disorders, including post-traumatic stress disorder (PTSD). Suicide rates among people who use heroin are extremely high and estimated at 14 times that in the general population. They also have high rates of borderline personality disorder and antisocial personality disorder (Quick Guide to Drugs and Alcohol, 2017).

## Death

Opioids make the largest contribution to illicit drug-related death and carry the highest mortality risk. Mortality is highest among injecting opioid users, reflecting the higher risks for overdose, blood borne viruses, vascular damage and suicide. The most common cause of premature death is acute drug toxicity (overdose) (Darke, Lappin & Farrell, 2019).

Opioids, including both licit and illicit substances, have been the leading class of drug present in drug-induced deaths in Australia for the last 20 years (Man et al. 2019).

## How many people use heroin?

According to the Australian Institute of Health and Welfare, in 2019, 4.2 percent of Australians had used cocaine in the previous 12 months. This is the highest proportion seen since 2001 and has risen from 2.5 percent in 2016. Increases were seen across all age groups (except 14 to 19 year olds), but the overall rise was mainly driven by men (AIHW, 2020).

## Treatment

One of the more common treatments for heroin dependence is opioid substitution treatment. The evidence demonstrating the effectiveness of opioid substitution treatment for heroin dependence is well established.

Opioid substitution treatment is also called medication-assisted treatment of opioid dependence (MATOD). The most common medicines used in Australia are methadone, buprenorphine and naltrexone.

Other options include residential rehabilitation, a drug-free treatment, requiring residence in the treatment agency subsequent to having undertaken detoxification. Programs may be short (approximately one month) or longer (at least three to six months). Counselling and withdrawal-management are also available.

## Emergency information

If you, or someone around you, is experiencing undesired or distressing psychological or physical symptoms from the intake of alcohol or other drugs please seek immediate medical attention.

If you need urgent help from ambulance services call Triple Zero (000). If a person has been mixing drugs with alcohol or other drugs, tell the paramedic exactly what has been taken.

## Services

For free and confidential advice about alcohol and other drugs, call the National Alcohol and Other Drug hotline on **1800 250 015**.

The hotline will automatically direct you to the Alcohol and Drug Information Service in your state or territory.

## More resources

- > The Illicit Drug Reporting System is an Australian monitoring system that identifies emerging trends of local and national interest in illicit drug markets.
- > The Ecstasy and Related Drugs Reporting System is an Australian monitoring system for ecstasy and related drugs that identifies emerging trends of local and national interest.
- > The Clinician's Guide to Illicit Drugs and Health examines the health effects of each of the major illicit drugs.
- > The Australian Institute of Health and Welfare collects information on alcohol and tobacco consumption, and illicit drug use among the general population in Australia.
- > The Australian Bureau of Statistics is Australia's national statistical agency, providing official statistics on a range of economic, social, population and environmental matters of importance to Australia.

## Sources

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