

Heroin belongs to the opioid drug group, and like opium, morphine, and codeine, it comes from the opium poppy. Pethidine and methadone are synthetically produced opioids. Street or slang names for heroin include dope, gear, h, hammer, harry, horse and smack.

Heroin has been used for centuries for its pain-relieving properties.

Forms of the drug

Heroin can be injected, snorted or smoked by heating and inhaling the fumes (chasing the dragon). It usually comes in powder form and in different colours.

Before being sold on the street, heroin is 'cut' or mixed with a cheap substance such as glucose, lactose or sucrose. It is rare (in Australia) for heroin to be cut with harmful contaminants.

Drug effects

The effects of heroin depend on the amount taken, the person's experience with the drug, their expectations, the mood they are in and the way in which the drug is taken. Effects also depend on the quality and purity of the drug.

Heroin and other opioids are classified as central nervous system depressants. They act on the brain and nervous system by dulling perceptions of pain and fear, slowing breathing, and reducing body temperature.

Heroin mimics the naturally occurring chemicals in the body which are produced in response to pain, and which modify the effects of the pain-killing, pleasure-producing neurotransmitters called endorphins. On entering the bloodstream, heroin releases a flood of endorphins.

The calming, sedating effect creates a sense of escaping from reality to a warm fuzzy world, and this is perhaps the primary factor of continued heroin use and dependence. The fear of facing the realities and difficulties of normal life can be a common barrier to stopping or reducing use.

The short-term effects of using heroin may include:

- A relaxed, 'cocooned' warm feeling and the disappearance of fear and worry, after an initial rush of euphoria



- Skin becomes cold
- Slower, shallower breathing
- Eyes glazing over, and the user commonly appearing to be falling asleep where they sit or stand ('on the nod')
- The pupils of the eyes narrow to pin-points
- Nausea and vomiting
- Constipation and itching.

Reducing the risks

Burning or smoking (chasing the dragon) is a safer method of use than injecting. It will not reduce dependency, but reduces the risk of transmittable diseases (see page 59).

Do not share injecting equipment, and inject carefully to avoid collapsed veins and abscesses. Don't use cigarette filters to filter the mix, as they may contain fiberglass. Cotton wool, filter wheel or tampons are safer options. The ideal is the filters provided

by Needle & Syringe Programs.

If smoking heroin, do not burn it on anything plastic such as plastic spoons

Avoid using alone to reduce risk of overdose.

Check the interaction between medications and heroin, and be aware that use of other depressant drugs (i.e. alcohol or benzodiazepines) may increase the risk of overdose.

Dependency

Regular use of heroin is very likely to produce dependence. Tolerance to heroin increases rapidly, and users quickly find themselves chasing the experience of their first hit with higher doses, and needing heroin just to feel normal and remove the unpleasant withdrawal effects.

Withdrawal

Withdrawal occurs when a dependent person stops using heroin or severely cuts down the amount used. Sudden withdrawal from heroin very rarely causes death, unless the person has other medical complications, or is withdrawing from another drug at the same time. However, detox is not advised for pregnant women, who will generally be encouraged to transfer across to a pharmacotherapy program for the course of the pregnancy. The symptoms can be unpleasant, and may last up to seven days. They may include:

- Runny nose
- Sore throat
- Cramps
- Aching bones and joints
- Heavy sweating
- Change in body temperature, shivers
- Diarrhoea
- Loss of appetite
- Sleeping difficulties
- Vomiting
- Depression
- Irritability and anxiety.

Overdose

Too much heroin, morphine, methadone or opium causes the body to progress past contented drowsiness to a state of coma. Overdose occurs as a result of the drug's effect on the central nervous system. The blood pressure drops so low that oxygen does not get to vital organs, the body shuts down, and breathing slows and may stop.

As street heroin is usually mixed with other substances, it is difficult to know the strength of the drug. This can be a factor in accidental overdose. A change in the purity of heroin alone is rarely the cause. The majority of overdoses are accidental, and the risks are increased when heroin is combined with other drugs such as other depressants; alcohol and benzodiazepines (e.g. valium).

These combinations can lead to coma or even death. Research indicates that the first overdose usually occurs after the person has been using for two years or more; however there are overdose risks associated with first time use, or use following a period of abstinence from the drug. The majority of fatal overdoses occur when the person is alone.

Overdose is not a crime, and paramedics are not required to notify police unless a death has occurred or they are at risk of violence. Paramedics or medical staff will treat an overdose by administering Narcan, which immediately reverses the effect of the heroin. It is a common myth that Narcan 'cleans' the system of heroin or methadone – its blocking effects are only temporary, and once it wears off, the person may use heroin a short time

later and overdose again. Narcan only works for opioids.

What to do if someone has passed out

If the person is drowsy, rouse them regularly to ensure they do not slip into unconsciousness. Snoring or gurgling sounds may indicate a person's airways are partially blocked. Do not let their head fall forward or back – this restricts oxygen flow to the lungs.

If the person is unconscious, turn them on their side to reduce the risk of them vomiting and choking. Make sure their airways are clear. Do not leave them alone. Call an ambulance immediately on 000, or 112 from a mobile phone (you don't need credit or to be in range).

If breathing has stopped, give mouth-to-mouth resuscitation. If there is no pulse, commence CPR if you are trained.

Detox and treatment

Methadone maintenance treatment, as well as treatment with other newer pharmacotherapies, may be useful in the treatment of opiate dependence. Detox generally takes five to seven days, and the symptoms can be relieved with medication, either as an in-patient or through home detox.

If the person is at risk of reverting to heroin use, they can choose one of the pharmacotherapy treatments, including methadone, buprenorphine or other suboxone. The support of a drug counsellor or psychologist may be helpful, as well as going into a rehabilitation program. Phone the Alcohol & Drug Information Service, or local health service in your State, for details of services providing detox and support programs.

Tips for families

Some tips for supporting a loved one with a heroin problem are to find information on the effects of heroin, and encourage your loved one to reduce the risks of overdose.

Keep communicating. Avoid pleading or nagging. Don't only talk about the problem. Choose your moment to express concern.

If a person agrees to treatment, don't rush them. Acknowledge that change is hard, and recognise that relapse is part of the process.

Withdrawal can be very slow, and even after coming out of detox, they may experience symptoms. They will need lots of reassurance and support.

Know what to do in the event of an overdose. Learn first aid. Have contact numbers readily available.

It's okay to talk about it. Get support for yourself even if they don't want help.

FDS - acknowledgement to National Drug and Alcohol Research Centre (NDARC)

PROBLEMS LINKED WITH HEROIN USE

Problems associated with heroin use may include:

PHYSICAL PROBLEMS

- Organ damage, particularly to liver and brain
- Collapsed and damaged veins
- Heart and lung damage
- Heart and blood disorders, and possible stomach inflammation
- Women may experience irregular menstruation and possible infertility, while men may experience impotence
- If heroin is injected, there is an increased risk of contracting infectious diseases, such as hepatitis C or HIV, through shared needles or unsafe injecting practices
- The use of heroin during pregnancy causes risks to maternal and foetal health, and may result in an underweight baby with retarded development (methadone maintenance is strongly advised during pregnancy).

EMOTIONAL AND SOCIAL PROBLEMS

- Increased potential for criminal activities to support dependent heroin use
- Withdrawal from regular social activities
- Reduced sex drive
- Relationship and family problems
- Poor work performance and financial difficulties
- Legal problems.

MENTAL HEALTH PROBLEMS

- Heroin use can aggravate symptoms of depression and anxiety
- Make a person feel more disorganised and confused
- If there is a history of psychosis, heroin use may increase severity of hallucinations and strange beliefs (especially during withdrawal)
- Can interfere with the effectiveness of psychiatric medication
- Can increase stress due to other problems that might occur, such as legal and financial issues.