

[heroin]

Diacetyl
Morphine**Slang/Street names for HEROIN:**

AUNT HAZEL, BART SIMPSON, BATMAN, BIG H, BIG HARRY, BIN LADEN, BLACKTAR, BLACK EAGLE, BLACK PEARL, BROWN SUGAR, DOPE, H, HAMMER, HEL L DUST, HORSE, CK, SKAG, THUNDER.

Heroin can be a highly addictive drug (depending on the person using it).

It is derived from morphine which in itself is obtained from the opium poppy hence it belongs to the 'opioid' family. The German pharmaceutical company Bayer marketed it in 1898 as a cure for Tuberculosis and a non addictive substitute for Opium. Whilst heroin is a natural derivative of opium, several synthetic opioids exist such as buprenorphine and methodone (1); both are used in pharmacotherapy. Heroin can range from white to dark brown in colour and be a powder or tar like substance (2) referred to as 'blacktar heroin' (3).

Heroin works by mimicking the action of naturally occurring chemicals such as endorphins, which are produced in response to pain and pleasure. Endorphins, which are thousands of times more powerful than morphine (4), activate opioid receptors which are mainly found in the brain. When heroin enters the brain it is converted to morphine and attaches itself to these opioid receptors (5). These receptors are especially present in the brain stem area that is responsible for many automated systems of the body such as breathing, blood pressure, arousal etc (6). When activated, these sites produce a sense of 'happiness', relaxation, fearlessness and tolerance to pain (7).

Because heroin is a suppressant it can very quickly cause the autonomous functions of the body to slow down or shut down to the extent of causing death by overdose.



The impurities added into the pure form can cause just as much if not more damage to the user. In many instances the additives do not break down causing blockages in various organs such as the liver which then leads to the demise of small parts of these organs (8). Heroin users who inject in particular tend to have many problems with abscesses and infections at the injection site.

When HEROIN was originally marketed by the German pharmaceutical company Bayer in 1898, it was heralded as a magical cough suppressant that could even cure Tuberculosis. At that time there was no understanding of the devastating effects of heroin. Though the patient's coughs were suppressed they later died of the disease though painlessly due to the anaesthetic properties of heroin (10).





HOW IT MESSES YOU UP... SHORT TERM :

Long time heroin users will do anything for the initial short lived euphoric 'rush' and feeling of calm.

The crash after the high is extremely bad and the user finds they build tolerance very quickly. Heroin is thought to be one of the most addictive of all drugs. Following are some of the short term effects (13):

- Dry mouth
- Heavy extremities
- Going "on the nod," an alternately wakeful and drowsy state.
- Clouded mental functioning due to the depression of the central nervous system.
- Slowed and slurred speech
- Slow gait
- Constricted (pinned) pupils
- Droopy eyelids
- Impaired night vision
- Vomiting
- Constipation

HEROIN IN THE BODY

In the brain, heroin is converted to morphine and binds to opioid receptors. These receptors are proteins on the surfaces of nerve cells, or neurons. Nerve cells communicate with one another by releasing chemicals, which deliver their message by attaching to receptors on nearby neurons. Here's how heroin affects the brain and body:

HOW HEROIN AFFECTS THE BRAIN

It triggers feelings of pleasure by producing charges in the limbic system, which controls emotion.



It depresses breathing, which is controlled by the brain stem.

It blocks pain signals from the body arriving through the spinal cord.

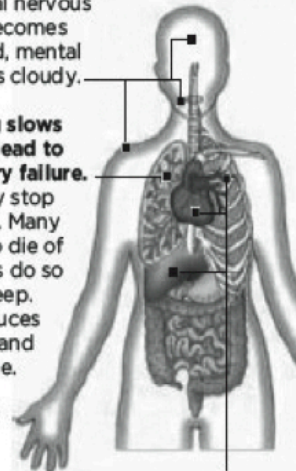
... AND THE BODY

Heroin use causes extremities to feel heavy, flushing of the skin and dry mouth. Users experience alternately wakeful and drowsy states. Because the central nervous system becomes depressed, mental function is cloudy.

Breathing slows and may lead to respiratory failure.

Users may stop breathing. Many users who die of overdoses do so in their sleep. Sleep reduces the heart and breath rate. Heroin reduces it further.

Longtime users may suffer collapsed veins, heart lining and valve infections, and liver disease. Users are also at risk for pneumonia.



SOURCES: Society for Neuroscience; Office of National Drug Control Policy; Plano police; Dallas Morning News research

JAMES A. BLACK and DEAN HOLLINGSWORTH/Staff Artists

HOW IT MESSES YOU UP... LONG TERM :

Long term Heroin use can bring on a host of deadly effects such as (14):

- Collapsed veins
- Infection of the heart lining and valves
- Abscesses, cellulite, and liver disease.
- Various types of pneumonia
- Bad teeth
- Weakening of the immune system
- Coma
- Respiratory (breathing) illnesses
- Muscular weakness, partial paralysis
- Reduced sexual capacity and long term impotence in men
- Menstrual disturbance in women
- Inability to achieve orgasm (women and men)
- Loss of memory and intellectual performance
- Depression
- Pustules on the face
- Loss of appetite
- Insomnia
- Death through sudden withdrawal
- Organ damage due to impurities in the drug



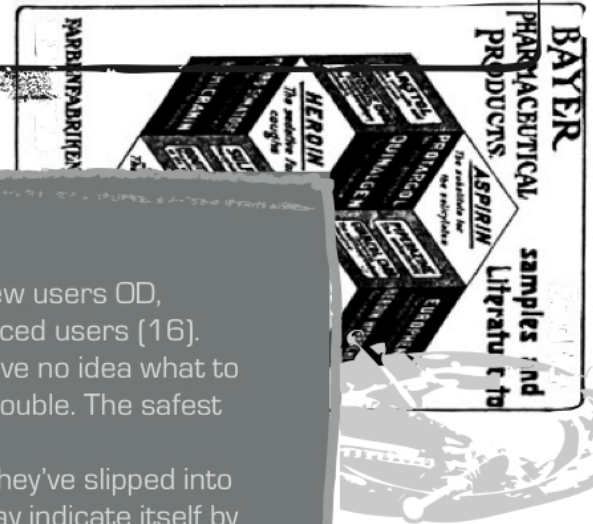


UNUSUAL FACTS:

- The term 'junkie' was first used on addicts who sold stolen junk metal to support their heroin habit (10)
- In 1949 Mao Zedong 'solved' China's drug problem by executing dealers and 'users' who refused to quit. Over 20 million Chinese were addicted to opiates. The numbers dropped dramatically as users suddenly found the willpower to cure themselves from a so called 'illness' (11).
- 'Skin popping' is the practice of injecting heroin under the skin. This causes abscesses and infections at the point of injection (12)

myths

- **Usually it's the new users who OD — FALSE!** Whilst some new users OD, statistics show that the vast majority are older more experienced users (16).
- **If I use with friends I'll be safe — FALSE!** Your friends may have no idea what to do and they too may be too affected to notice that you're in trouble. The safest option is NOT TO USE!
- **If you hear loud snoring this means they're OK — FALSE!** If they've slipped into unconsciousness they can have breathing difficulties which may indicate itself by snoring or gurgling sounds. Call an Ambulance.
- **You can't OD when on Bupe — FALSE!** You can still OD when on Bupe. Bupe unlike Narcan does not block the effects of Heroin.



OTHER DATA THAT'S RELEVANT:








- There are three main pharmacotherapies to treat Heroin addiction (17). They are Methadone & Buprenorphine which are synthetic opioids and Naltrexone which works by blocking the 'high'. Naltrexone Implants were pioneered by an Australian Dr G O'Neil who has consistently demonstrated that Naltrexone is a better management tool than substitutes like methadone'. Naltrexone is very effective at facilitating clients getting off all drugs, not just keeping them medicated on a substitute drug
- Narcan is an 'anti opioid' given to OD'ing opioid users. It works instantly by blocking the opioid receptors in the brain (18).
- Heroin itself is an inactive drug, but it quickly turns into morphine and the chemical 6-Monoacetylmorphine once inside the brain (19).
- Heroin users are often poly-drug users and tend to mix heroin with benzodiazepines thereby causing even more damage (20).
- The term mainlining refers to heroin being injected directly into a vein. The heroin is usually mixed in water to make an injectable solution (21). It can also be injected into a muscle, smoked via a waterpipe or standard pipe, mixed into a regular or marijuana cigarette, snorted, inhaled through a straw (22) or heated up and the smoke inhaled (known as 'chasing the dragon' because of the lazy curl the smoke makes causing it to look like a dragon's tail).
- Heroin is one of the most addictive substances we know of. It is possible to become both physically and psychologically addicted to heroin in as little as a few days (23).
- A study in the US showed that about 40% of people who had been using heroin at age 24 were dead on average by age 49! (24)





HOW IT'S INTRODUCED INTO THE BODY :

[The skull indicates the most used methods of ingestion of the drug described in this Fact Sheet]

- Injected/Intravenously 
- Injected/Intramuscularly 
- Injected/ subcutaneously 
- Sniffed/Snorted (powder) 
- Inhaled (vapour) 
- Smoked 
- Swallowed 
- Eaten
- Absorbed through skin



FIRST AID :

A **Herion overdose** is a medical emergency and some will die without medical intervention. If you suspect someone has overdosed, check to see if they are breathing, put them on their side and gently tilt their head back to open their wind-pipe. **Call an ambulance immediately (dial 000) and follow the operator's instructions.** The patient should be made as comfortable as possible, preferably by a qualified medical or first aid person, until paramedics arrive. (15)

BEST AID :

never touch it



WHERE TO GET HELP : medical and other

- DirectLine Alcohol and Drug Counselling and Referral Line 1800 888 236
- Centre Against Sexual Assault (CASA) House 93473066
- Live Free Victoria 03 58523777



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