

Heroin is a white or brown powder or a black, sticky substance. It's an **opioid drug** made from morphine, a natural substance synthesized from opium extracted from the seedpod of the poppy plant (*papavera somniferum*).

It can be mixed with water and injected with a needle. Heroin can also be smoked or snorted up the nose. All of these ways of taking heroin send it to the brain very quickly. This makes it very addictive. Some people mix heroin with crack cocaine, a practice called **speedballing** which is very dangerous for human health.

Heroin enters the brain rapidly and binds to opioid receptors on cells located in many areas, especially those involved in feelings of pain and pleasure and in controlling heart rate, sleeping, and breathing.

Health problems from heroin include miscarriages, heart infections, and death from overdose. People who inject the drug also risk getting infectious diseases, including HIV/AIDS and hepatitis.

Regular use of heroin can lead to tolerance. This means that users need more and more drug to have the same effect. At higher doses over time, the body becomes dependent on heroin. If dependent users stop heroin, they have withdrawal symptoms. These symptoms include restlessness, muscle and bone pain, diarrhea and vomiting, and cold flashes with goose bumps.

Other Harmful effects of Heroin on human body are insomnia, collapsed veins for people who inject the drug, damaged tissue inside the nose for people who sniff or snort it, infection of the heart lining and valves, abscesses (swollen tissue filled with pus), constipation and stomach cramping, liver and kidney disease, lung complications including pneumonia, mental disorders such as depression and antisocial personality disorder, sexual dysfunction for men, irregular menstrual cycles for women etc. Heroin overdose is life threatening and can cause death. Naloxone in right amount and right time is the first aid for Heroin overdose which should only be used under medical supervision.