Heroin Overdose

An accidental overdose is currently one of the leading causes of death for people between the ages of 35-54, and also a major injury-related death for people below the age of 35. A heroin overdose is rightly treated as a very serious condition, and the reaction of emergency services is usually vital to deciding whether the person lives or dies. There are some people who believe that it is virtually impossible for an experienced user to take an accidental overdose, except in certain circumstances, while others are of the opinion that a heroin overdose is the likely outcome of years of addition. The truth in fact lies somewhere between these two options, as there are many ways in which an overdose of heroin can affect the system.

Impure Drugs

One of the biggest causes of heroin deaths is an impure drug. Heroin is often ‘cut’ with other substances in order to make the amount the dealer has gone further. Items such as sugar and salt or powdered milk are often used as substitutes for heroin in the cutting process. However, less scrupulous persons may also make a concoction based on heroin plus drain cleaner, detergent, bleach powders, or even rat poison. All of the latter types of substances can cause severe reactions within the user, sometimes leading to an ‘overdose’. Death by strychnine poisoning (strychnine being the common ingredient in rat poison) has occurred among batches of drug users in all major cities in the West. Drug deaths due to this type of poisoning should not really be considered an accidental heroin overdose, as in fact it is a clear case of poisoning by ingesting a toxic substance.

Over-pure Drugs

Conversely, another problem which some people find is that they overestimate how much pure heroin they are taking. With a ‘cut’ street drug, they may only be taking half the amount of heroin that would be found in a pure bag of heroin. This can complicate matters when the user is in hospital or in jail, for example, where the graded heroin can be expected to be much purer. In these cases, the drug addict will take more than they expected, causing a fatal overdose. This mostly happens with inexperienced users; however, as those with experience may be able to guess that the heroin is purer than needed.

Lack of Tolerance

The overdose can also occur when the user is taking a higher dose than is usual for them. They may have decided to try and increase their dose in order to get a longer high. They may also be intoxicated from another drug, such as alcohol or cocaine, which can then affect their judgment. This is more serious when injecting heroin, as smoking the drug will usually mean that the user is not affected by a few grams either way, while a couple of grams of difference can mean that the injecting addict accidentally gives themselves an overdose.
The other problem caused by tolerance rates is that they can go up and down, depending upon external factors. It has been shown, for example, that a user injecting in an unfamiliar place is five times more likely to overdose there than in familiar surroundings. This suggests that environmental factors have some effect on the absorption of heroin. If they have allowed another user to draw up the dose, then that user may have made a mistake, or perhaps drawn up a higher dose based on their own use. This can lead to an accidental overdose. Other internal forces, such as feelings of anxiety or paranoia may also decrease tolerance for heroin, leading to an overdose.

Non-Accidental Overdose

It is a sad fact that many addicts experience depression and anxiety between fixes, due to the side-effects of heroin. In this state, they may feel that they have wasted their life on heroin, and the only solution left to them is to take their own lives. In this case, the overdose is likely to be a very large one, rather than the one-or-two grams which might be expected with an accidental overdose. Suicides using heroin will also often go to a private place rather than risk being discovered and saved.

Heroin Overdose Symptoms

Warning signs of a heroin overdose can be overlooked at first glance, if the observer does not realize that the symptoms of overdose are far more intense and serious than the actual immediate effects of the drug. It is ironic (and very unfortunate) that the overdose symptoms of the drug produce the pain that the user was trying to avoid in the first place by continuing use. “Normal” use of the drug creates many of the same symptoms as overdose. For instance, the user will normally experience a slowing of their breathing, dry mouth, a lowering of their blood pressure, slowing of movement, and dreaminess. Part of the appeal of heroin is the “rush” it creates and then the state of elation or pleasure. In an overdose, however; breathing may become difficult and much slower. There is a weak pulse, not just a low blood pressure. An observer should also notice in an overdose that the tongue becomes discoloured and the pupils become very constricted. The fingernails and lips turn blue. They may have muscle spasms. The person can experience hallucination, disorientation, and sleepiness, or can go into a coma if not treated immediately.

Heroin Overdose Treatment

As a matter of course, an observer who witnesses any overdose should call to an emergency phone or a poison control centre immediately and should not induce vomiting unless told to do so by a health care professional. Although the obvious solution to avoid overdose on any drug is abstinence from the drug itself, overdose on heroin is not always fatal if the user is caught right away; so a user should not use the drug when alone, in a locked room. He or she should not mix heroin with any other drugs. In addition, buying the drug from the same dealer each time helps prevent discrepancies in purity. The treatment of an overdose involves the use of a drug called Naloxone. It is given intravenously, if possible, and counteracts the effects of overdose almost immediately. It can also be given intramuscular or subcutaneously if necessary. Although the drug in the form of an injection in an emergency kit is provided to heroin addicts in some states, it is best to use in a clinical setting. Sometimes the drug is so effective at reversing the symptoms that the user can go immediately into withdrawal. For this reason, dispersing of the drug should be monitored.
Now if you are interested in avoiding an overdose then you might consider getting some form of treatment. The starting point of most treatment is heroin detox, where you will likely be supervised in a medical setting and probably given some sort of synthetic opiate or other medications to help control your withdrawal symptoms. After approximately 3 to 5 days of detox, you will probably go into residential treatment where you might attend various groups and lectures so you can learn how to live without using heroin every day. This is the brief outline of heroin treatment and will generally work for most any addict provided they really want to change their life. Without a great deal of personal motivation from the individual addict they are not likely to succeed and will probably relapse shortly after leaving treatment.

**Effective Emergency Procedures for Treatment of Heroin Overdoses**

Respiratory failure and pulmonary oedema resulting in coma or death may occur without effective emergency procedures for heroin overdoses. Heroin, a synthetic opiate, was originally derived from the white liquid from the opium poppy plant. In its pure form heroin is a white powder in substance with a bitter taste. Street heroin is usually laced with unknown filler substances and is approximately ten times more toxic than morphine when administered through intravenous injection, the preferred method of delivery. Heroin users quickly develop tolerance and require higher amounts to achieve the desired euphoric effect. Most overdoses occur accidentally and can be immediately reversed through emergency medical treatment. Symptoms of overdose include respiratory distress, small pupils, low blood pressure, weak pulse, disorientation, drowsiness and seizures. Death can occur as a result of depressed breathing, cardiovascular complications and the inability to immediately clear airway obstructions due to vomit or fluid.

Emergency room protocol for patients presenting with suspected overdose begins with immediate assessment of respiratory function. Breathing support systems such as mask valve ventilation or mechanical ventilation are used to maintain the patient until heroin can be eliminated from the system. Invasive ventilation measures such as endotracheal intubation may be required in cases of respiratory failure.

The effects of heroin can be immediately reversed through the intravenous administration of an opioid antagonist agent such as naloxone or naltrexone. This class of medication causes an immediate return of consciousness, but may cause minor symptoms of withdrawal including mood changes, gastrointestinal upset, dizziness, seizures and headache. Opioid antagonist agents usually counteract the effects of heroin within one to two minutes after intravenous delivery, with effects lasting approximately 45 minutes. Once the patient is stabilized, respiratory function will be assessed and supportive care provided before release from the emergency department.

In severe heroin overdose cases resulting in coma, emergency procedures may include endotracheal intubation and mechanical ventilation for rapid oxygen delivery. Laboratory tests may be performed for analyses of arterial blood gas, metabolic and creatine levels. Liver and renal function tests may be performed. Comatose patients may require pulmonary artery catherization or lumbar puncture. Chest imaging studies including CT scans and MRI scans are useful in assessing pulmonary complications. Brain scans may be performed to diagnose potential brain and central nervous system damage. Benzodiazepine therapy is often used to control seizures or convulsions.
Emergency medical treatment is vital in saving the lives of many overdose patients. Death often results due to unavailability of emergency care.