

Narcotic Educational Foundation of America

Drug Abuse Education Provider of the:

California Narcotic Officers' Association

THE HEROIN STORY

QUICK FACTS:

Heroin, an (opiate) narcotic is an illegal and highly addictive drug. Opiate dependence producing (addictive) properties are displayed by: 1. abusive regular use of the drug; 2. sudden attempts to stop using the drug will cause significant and painful withdrawal symptoms; 3. reuse of the drug will cause the withdrawal signs to disappear; 4. abuse may lead to compulsive drug seeking behavior (craving); and 5. abuse leads to increased frequency or dosage of the drug (tolerance).

Heroin and other opioids primary addictive qualities are exerted on those regions of the brain and central nervous system that are responsible for the pleasure sensation of "reward" and the "physical / psychological dependence syndrome." The brain's neurochemicals associated with the opiates control pain and physical endurance. The additions of these drugs into the system account for the abuser's loss of control. Heroin itself, as well as the "drug abusing" lifestyle, may suppress the body's immune system. This suppression makes users "high risk" for infections, some life threatening. Intravenous drug abusers account for the highest percentage of HIV (AIDS) and hepatitis virus infected population.

HISTORY OF DRUG

The term opiate refers to certain alkaloids or chemical compounds found in the milky fluid of the unripe seed pod of the poppy plant *Papaver somniferum*, the only one of 28 main types of poppies from which opium is obtained. There are over 25 known alkaloids in the poppy, but the most important are morphine and codeine.

Heroin is the name, copyrighted in Germany at the end of the 19th century, for the synthesized drug "diacetylmorphine." This drug is derived from acetylating the natural opium compound morphine ($C_{17}H_{19}NO_3$) into a semi-synthetic drug by the name of diacetylmorphine ($C_{21}H_{23}NO_5$), also known as Heroin. Like morphine, pure heroin is a white, bitter, powdered substance.

Traffickers dilute it with substances that color it from off-white to brown. In recent years, illicit manufacturers have now taken a shortcut by acetylating the tar opium and converting the available morphine in the tar opium into heroin. This type of end product takes on a "tar like" appearance. Usually a dark brown to black in color, and soft to hard chunk consistency in appearance. This product is sold as "tar heroin."

In 1898 heroin was marketed as a safe product; free from the addictive properties then known to result from morphine.

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UNDER THE INFLUENCE SIGNS AND SYMPTOMS

With moderate use, the user will be subject to:

- Nausea and occasional vomiting because the drug acts on the nausea center in the brain.
- Constricted pupils because opiates affect the muscles which control muscle size.
- Slowed respiration and pulse because the drug affects the part of the nervous system that controls those functions.
- Dry skin and itching (histamine reaction)
- Slowed speech and movement.

With larger quantities to get a desired euphoric effect the user will be subject to:

- Suppressed breathing to dangerous levels.
- Slower heart rate, lower blood pressure and unconsciousness.

Effects for longer period of time:

- Become severely constipated.
- Become drug dependent.
- Lose sexual desire.

History - *(Continued from column 1 - this page)*

Being considered a depressant, it was used in sleeping aids; also for coughs, asthma, and was proposed as a treatment for "morphinism." (diseased condition resulting from excessive use of morphine; addiction to morphine). However, heroin was soon to reveal a high potential for addictive abuse, causing a dependency quicker than morphine. It was then outlawed in the United States and is listed as a scheduled non-prescribed drug. Heroin has become the opiate of choice by its users because of the potency, which is 4 to 5 times greater than morphine. Heroin, when used, creates a euphoric feeling of relaxation and, is a more intense experience which occurs when the user injects the drug into the vein. This experience is referred to as a "Rush". Although the novice user may also feel sick and even vomit after an injection, this "satisfaction" quickly captivates the user; thus establishing a desire that just about assures continued use - and eventually addiction.

If drugs did only what people wanted them to, then drugs wouldn't be much of a problem. But drugs not only generate desired emotional and physical effects, they also trigger unwanted dangerous side effects. This competition between the emotional effects that users want, and the physical/emotional effects they don't want, is the main danger from the psychoactive drugs.

METHODS OF USE

Heroin has been ingested, injected, smoked, and sniffed (insuffilation) into the nose. In the United States, the majority of those using heroin do so by taking a “fix” (an injection of enough heroin to bring on the desired effects). This consists of dissolving the drug in a little water, filtering it through cotton into a needle, and injecting it, usually into a vein. Continued injections develop scar tissue or “track marks” on the vein.

Due to the public awareness of the infectious diseases that are associated with intravenous use and shared needles, the users are now more aware of rinsing their needles out with bleach between injection sharing.

SOCIOLOGICAL IMPLICATIONS OF NARCOTIC ADDICTION

Most heroin addicts are socially non-functional. Their daily activities are centered around committing crimes to obtain money for heroin, making a “connection” with a dealer, and trying to avoid withdrawal pains. The activities that an addict will resort to in order to obtain money to purchase heroin are usually harmful and destructive to the person and those around them. A career of heroin addiction may lead to destructive changes in personality or impaired emotional maturation.



UNBORN INFANTS SUFFER ADDICTION

Heroin can penetrate the placenta, harming the developing fetus.

- Heroin use impedes needed oxygen delivery to the fetus.
- Heroin use contributes to the danger of miscarriage, stillbirth, and infant mortality.
- Heroin exposed infants suffer 10 times more chance of having birth defects than do unexposed fetuses.
- Heroin use regularly during pregnancy increases the assurance the child will be born addicted and suffer withdrawal symptoms after birth that may be more severe than those experienced by adults.
- Heroin injections often result in infection that is transmitted to the infant; leading to mental retardation, impaired coordination, lack of full muscle control, and even death.

Medical treatment can help control some of the immediate symptoms and suffering. Some may persist for months, and some may be irreversible. The child may continue to be hyperactive, have limited attention span, poor coordination, and have speech problems.

NEWBORNS HAVE SUFFERED:

- | | |
|---------------------|----------------------|
| Below normal weight | Food rejection |
| Watery eyes | Breathing difficulty |
| Runny nose | Muscle spasms |
| Irritability | Dehydration |
| Sleeplessness | Severe vomiting |
| Fever | Diarrhea |
| Pain | Convulsions |
| Excessive crying | Death |

TREATING ADDICTION METHADONE MAINTENANCE

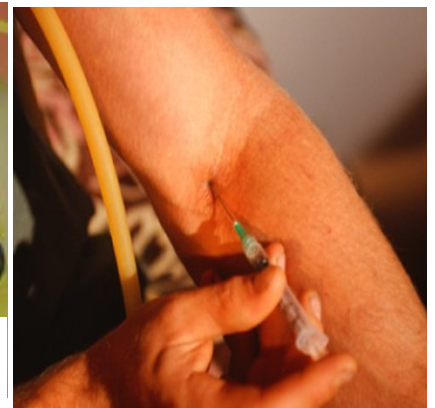
A synthetic opioid developed to help control pain and heroin addiction was developed by the name of Methadone or “Dolophine.” It is the only legally authorized opioid (that is not an opiate blocker) to treat heroin addiction through a program known as “maintenance.” Methadone is usually taken orally causing pain killing and depressant effects that last for 4 to 6 hours. It also reduces the drug craving and blocks withdrawal symptoms for 24 hours. Thus, only one dose is needed every day instead of 4 to 6 doses of heroin. There is great controversy about the “maintenance” programs because there are those who do not believe you should treat drug abuse with another addicting drug on a long term basis.

HEROIN AND OPIOID ANTAGONISTS

Opiate or opioid antagonists do not have much effect on the body except for their ability to block the effects of the drug. Naloxone is effective in treating heroin or opiate overdose. Naltrexone is used to prevent the addict from using. It is usually a requirement that the user be free of heroin for a few days before starting this program. Taking Naltrexone daily will block the effects of heroin or any other opiate or opioid.



KIT FOR INJECTING HEROIN



KICKING “COLD TURKEY” WITHOUT MEDICAL AID

FIRST PERIOD

The first symptoms to appear are watery eyes, mucous is discharged from the nose, perspiration becomes noticeable, and the addict begins to yawn. Restlessness develops, accompanied by increasing nervousness; both becoming worse as the addict progresses toward maximum discomfort.

WITHDRAWAL SICKNESS

Regardless of the severity of the first period symptoms, the worst is still to be endured. Piercing abdominal cramps, nausea, vomiting, retching, gagging, choking, plus mental despair reaching the level of hopelessness, hardly describes the “kicking” experience addicts suffer. Huddled under what covers they have, resorting to a fetal position, shivering even in hot weather, they become pictures of a tragic scene of a human being who has hit bottom.

CRAVING

After the several days during which a user “kicks it out”, the worst symptoms of abstinence decline until most signs of drug deprivation disappear. The memory of euphoria, the drug crutch to “lean” on, other recollections become overwhelming. Addicts, ignoring the dangers involved, experiencing the “old” mental craving, yield to the temptation of “just one heroin fix”, thus the whole cycle begins over again- and again - and again. Thus the adage “a hype -is a hype -is a hype.”

INJECTION SITES



PARAPHERNALIA

The most common method of using heroin is injecting it into the veins. Paraphernalia for injecting heroin is called an “outfit”, “rig”, “kit” or the “works”. It usually consists of a spoon or bottle cap, syringe, needle, needle sheath, cotton, match or lighter, and tourniquet.

Once the addict is in possession of the injection paraphernalia and heroin, they are ready to “fix” (inject the heroin into the vein.)

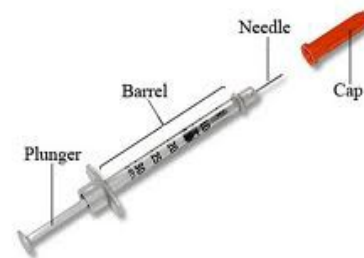
The heroin will be taken out of the packaging and placed in the empty spoon or cap. Water will be put into the syringe and then into the spoon or cap containing the heroin. The mixture is then heated with a heat source until the first bubble rises to the surface of the solution and the heroin dissolves. A small amount of cotton is placed in the bowl of the spoon or cap to prevent clogging of the needle. The solution is then drawn into the syringe through the cotton. The cotton is saved for a “rainy day” and can be squeezed to help the addict maintain until they can score again.

Heroin can be injected, smoked, or sniffed/snorted. Injection is the most efficient way to administer low-purity heroin. The availability of high-purity heroin, however, and the fear of infection by sharing needles has made snorting and smoking the drug more common. National Institute on Drug Abuse (NIDA) researchers have confirmed that all forms of heroin administration are addictive.

HEROIN USE

According to the 2008 National Survey on Drug Use and Health (NSDUH), approximately 3.8 million Americans aged 12 or older reported trying heroin at least once during their lifetimes, representing 1.5% of the population aged 12 or older. Approximately 453,000 (0.2%) reported past year heroin use and 213,000 (0.1%) reported past month heroin use. Overdose is a constant danger as street heroin is never cut (diluted) in an exact scientific proportion. It is whatever each drug dealer decides the traffic will bear. The heroin overdose death is usually very quick. Addicts who have overdosed have been found with the needle still sticking in the vein, and little anyone can do to save the persons life.

HEROIN SYRINGE



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HEROIN ABUSE COMPLICATIONS

- Respiratory depression
- Infection of inner heart lining
- Swelling lung tissue
- Blood clots lodged in the lungs
- High blood pressure
- Liver disease
- Tetanus
- Abscesses
- Clots and inflammation of blood vessels
- Bacteria in the blood

DESIGNER HEROIN

Street versions of fentanyls (alpha, 3 methyl) and Demerol (MPPP, MPTP), manufactured in illegal laboratories, are extremely potent and can cause drug overdoses and even nervous system damage. Sold as “China White,” these drugs bear witness to a growing sophistication of street chemists who now can by-pass the traditional smuggling and trafficking routes of heroin. Street fentanyls can be up to 3,000 to 20,000 times stronger than regular heroin.

Street Demerol containing a chemical MPTP, can destroy brain cells and neurochemicals and induce the degenerative nerve condition known as Parkinson’s disease