

## Treatment

Methadone has been used to treat opioid addiction for more than 30 years. This synthetic narcotic suppresses opioid withdrawal symptoms for 24 to 36 hours. Although the patient remains physically dependent on the opioid the craving from heroin use is reduced and the highs and lows are blocked. This permits the patient to be free from the uncontrolled, compulsive, and disruptive behavior associated with heroin addiction.

Detoxification relieves the withdrawal symptoms experienced when substance use is discontinued. It is not a treatment for addiction, although it can be used to aid in the transition to long-term treatment.

Naloxone and naltexone are medications that inhibit the effects of opiates such as morphine and heroin. LAAM, a synthetic opiate similar to methadone, is used to treat heroin addiction. Buprenorphine, another opiate treatment, causes weaker opiate effects and is not as likely to cause overdose. Buprenorphine, creates a lower level of physical dependence and makes it easier for patients to discontinue medication.

## Resources

### National Institute on Drug Abuse

*Epidemiologic Trends in Drug Abuse Advance Report*, December 2002.

[www.drugabuse.gov/about/organization/CEWG/AdvancedRep/1202adv/1202adv.html](http://www.drugabuse.gov/about/organization/CEWG/AdvancedRep/1202adv/1202adv.html)

Research Report, *Heroin Abuse and Addiction*, September 2000.

*Drug Availability Estimates in the United States*, December 2002.

[www.whitehousedrugpolicy.gov/publications/pdf/drugavailability.pdf](http://www.whitehousedrugpolicy.gov/publications/pdf/drugavailability.pdf)

Drug Policy Information Clearinghouse, *Street Terms: Drugs and the Drug Trade*, 2002.

[www.whitehousedrugpolicy.gov/streetterms/default.asp](http://www.whitehousedrugpolicy.gov/streetterms/default.asp)

### U.S. Department of Health and Human Services:

### Centers for Disease Control and Prevention



U.S. DEPARTMENT OF  
HEALTH AND HUMAN SERVICES  
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# Facts About Heroin



# Heroin

## Background

Heroin was first synthesized in 1874 from morphine, a naturally occurring substance extracted from the seed pod of certain varieties of poppy plants. It was commercially marketed in 1898 as a new pain remedy and became widely used in medicine in the early 1900s until it became a controlled substance under the Harrison Narcotic Act in 1914. Heroin is a highly addictive drug and is considered the most abused and most rapidly acting opiate.

Heroin comes in various forms, but pure heroin is a white powder with a bitter taste. Most illicit heroin comes in powder form in colors ranging from white to dark brown. The colors are due to the impurities left from the manufacturing process or the presence of additives. "Black tar" is another form of heroin that resembles roofing tar or is hard like coal. Color varies from dark brown to black.

## Effects

Heroin can be injected, smoked, or snorted. Intravenous injection produces the greatest intensity and most rapid onset of euphoria. Effects are felt in 7 to 8 seconds. Even though effects for sniffing or smoking develop more slowly, beginning in 10 to 15 minutes, sniffing or smoking heroin has increased in popularity because of the availability of high-purity heroin and the fear of sharing needles. Also, users tend to mistakenly believe that sniffing or smoking heroin will not lead to addiction.

## Initial Effects

- Feeling surge of pleasure, "Rush"
- Warm flushing of skin
- Dry mouth
- Heavy feelings in arms and legs
- Nausea, vomiting, and severe itching

## Chronic Effects

- Drowsy with clouded mental function
- Breathing slowed possibly to point of death
- Repeated heroin use produces tolerance and physical dependence.

## Availability

According to *What America's Users Spend on Illegal Drugs*, heroin expenditures were an estimated \$22 billion in 1990, and decreased to \$10 billion in 2000. During 1990, Americans consumed 13.6 metric tons of heroin. Current estimates of heroin consumption remain relatively unchanged and show that 13.3 metric tons of heroin were consumed in 2000.

## Production and Trafficking

According to the *National Drug Intelligence Center's National Drug Threat Assessment 2003*, heroin is cultivated from opium poppies in four source areas: South America, Mexico, and Southeast and Southwest Asia. Opium cultivation decreased from 5,082 metric tons during 2000 to 1,255 metric tons during 2001. This led to a reduction in heroin production from 482.2 metric tons during 2000 to 109.3 metric tons during 2001.

## Consequences of Use

- **Tolerance-need for increasing amounts to produce desired effects**
- **Permanent brain damage**
- **Risk of contracting HIV/AIDS, Hepatitis B,C**
- **Bacterial Heart infections**
- **Scarred and/or collapsed veins and abscesses at injection sites**
- **Lung complications including various types of pneumonia and tuberculosis**
- **Toxins clog blood vessels in lungs, liver, kidneys, or brain, causing tissue death.**

## Addiction and Withdrawal

Withdrawal symptoms begin within a few hours of last use and can include restlessness, muscle and bone pain, insomnia, diarrhea, vomiting, cold flashes with goose bumps, and involuntary leg movements. These symptoms peak between 24 and 48 hours after the last dose and subside after about a week, but may persist for up to a month. Heroin withdrawal is not usually fatal in an otherwise healthy adult, but can cause death to the fetus of a pregnant addict. Trying to break a heroin addiction is miserably difficult because of withdrawal. Heroin withdrawal is the worst there is.

Heroin causes severe physical and psychological symptoms six to eight hours after the last dosage.

First the addict experiences intense cravings for the drug. Painful withdrawal gets worse as time passes, until it is unbearable.

## Symptoms include.

- Runny nose. Heavy feelings in legs.
- Horrible muscle and bone pain.
- Emotional distress and restlessness.
- Abdominal cramps.
- Diarrhea and vomiting.
- Hot flashes with goose bumps.
- Insomnia.
- Racing thoughts and anxiety.
- Full body shakes.
- Jerking leg movements.
- An overwhelming need for more heroin.

## Overdose Death

Heroin users have great risk of overdose. Addicts may take a larger dose or unknowingly buy heroin that is stronger than usual. Overdoses are common, and they kill fast. Fingernails and lips turn bluish, muscles become rigid, and the heartbeat slows dramatically. Users lose consciousness and when their breathing slows too much, they stop breathing and die. Nearly half of all addicts have been present when someone else overdosed on heroin, yet overdosers rarely receive medical help. The addicts' "friends" sit by and let them die, because they are afraid of arrest.

## Dope Deaths

- About 80,000 people are newly addicted to heroin each year.
- 14% of all drug-related emergency room visits involve heroin.
- Heroin is responsible for nearly 40% of deaths caused solely by a single drug.
- Heroin-related emergency room visits by youth aged 12-17 nearly quadrupled last year.
- 20% of alcohol and drug-related suicides are heroin users.