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Heroin overdose

Heroin is a pain-killer derived from morphine. It is very addictive and known for causing significant withdrawal symptoms. It has been illegal in the United States since 1924. It is in the class of drugs known as opioids.

This article discusses heroin overdose. An overdose occurs when someone takes too much of a substance, usually a drug. This can happen by accident or on purpose. A heroin overdose may cause serious, harmful symptoms, or even death.

About heroin overdose:

Heroin overdoses in the United States rose sharply from 2006 to 2015, but since 2016 the number of deaths has trended down. There were 9,173 heroin-related deaths reported in 2021. In the United States, heroin is sold illegally, so there is no control over the quality or strength of the drug. Also, it is sometimes mixed with other poisonous or dangerous substances, such as fentanyl.

Most people who died from an overdose in the United States from 1999 to 2019 were aged 35 to 54. Many people who use heroin also abuse prescription pain medicines and other drugs. They may also abuse alcohol. These combinations of substances can be very dangerous.

This article is for information only. DO NOT use it to treat or manage an actual overdose. If you or someone you are with has overdosed, call the local emergency number (such as 911), or the local poison control center can be reached directly by calling the national toll-free Poison Help hotline (1-800-222-1222) from anywhere in the United States.

Poisonous Ingredient

Heroin is poisonous. Sometimes, the substances heroin is mixed with are also poisonous.

Where Found

Heroin is made from morphine. Morphine is a strong drug that is found in the seedpods of opium poppy plants. These plants are grown around the world. Pain medicines that contain morphine are called opioids. Opioid is a term derived from *opium*, which was the Greek word for the juice of the poppy plant. There is no legal medical use for heroin in the United States.

Heroin is also known as diamorphine or diacetylmorphine. Street names for heroin include:

- Junk

- Smack
- H
- Horse
- Dope
- Brown sugar
- White horse
- China white
- Skag

Symptoms

People use heroin to get high because of its effects of short-lived euphoria and blissful apathy. But if they overdose on it, they get extremely sleepy and may become unconsciousness and stop breathing. Most deaths from heroin are due to not breathing.

Below are symptoms of a heroin overdose in different parts of the body.

AIRWAYS AND LUNGS

- No breathing
- Shallow breathing
- Slow and difficult breathing

EYES, EARS, NOSE AND THROAT

- Dry mouth
- Extremely small pupils, sometimes as small as the head of a pin (pinpoint pupils)
- Discolored tongue

HEART AND BLOOD

- Low blood pressure
- Weak pulse

SKIN

- Bluish-colored nails and lips (cyanosis)

STOMACH AND INTESTINES

- Constipation
- Spasms of the stomach and intestines

NERVOUS SYSTEM

- Coma (lack of responsiveness)

- Delirium (confusion)
- Disorientation
- Drowsiness
- Uncontrolled muscle movements

Home Care

Seek medical help right away. Do NOT make the person throw up unless poison control or a health care provider tells you to do so.

In 2014, the U.S. Food and Drug Administration (FDA) approved the use of a medicine called naloxone (brand name Narcan) to reverse the effects of a heroin overdose. This type of medicine is called an antidote. Naloxone is injected under the skin or into a muscle, using an automatic injector. It is also available as a nasal spray. It can be used by emergency medical responders, police, family members, caregivers, and others. It can save lives until medical care is available.

Before Calling Emergency

Have this information ready:

- The person's age, weight, and condition
- How much heroin they took, if known
- When they took it

Poison Control

Your local poison control center can be reached directly by calling the national, toll-free Poison Help hotline (1-800-222-1222) from anywhere in the United States. This national hotline will let you talk to experts in poisoning. They will give you further instructions.

This is a free and confidential service. All local poison control centers in the United States use this national number. You should call if you have any questions about poisoning or poison prevention. It does NOT need to be an emergency. You can call for any reason, 24 hours a day, 7 days a week.

What to Expect at the Emergency Room

The provider will measure and monitor the person's vital signs, including temperature, pulse, breathing rate, and blood pressure. Symptoms will be treated. The person may receive:

- Blood and urine tests
- Breathing support, including oxygen tube through the mouth into the throat, and breathing machine
- Chest x-ray
- CT scan (advanced imaging) of the brain if head injury is suspected
- ECG (electrocardiogram, or heart tracing)
- Intravenous fluids (IV, through a vein)
- Medicines to treat symptoms, such as naloxone (see "Home Care" section above), to counteract the effects of the heroin

- Multiple doses or continuous IV administration of naloxone. This may be needed because naloxone's effects is short-lived and the depressive effects of the heroin are long-lasting.

Outlook (Prognosis)

If an antidote can be given, recovery from an acute overdose occurs within 24 to 48 hours. Heroin is often mixed with substances called adulterants. These can cause other symptoms and organ damage. A hospital stay may be necessary.

If the person's breathing has been affected for a long time, they may breathe fluids into their lungs. This can lead to pneumonia and other lung complications.

Individuals who become unconscious for longer periods of time and lie on hard surfaces may develop crush injuries to the skin and underlying tissue. This may lead to skin ulcers, infection, and deep scarring.

Injecting any drug through a needle can cause serious infections. These include abscesses of the brain, lungs, and kidneys, and heart valve infection.

Because heroin is commonly injected into a vein, a heroin user may develop problems related to sharing needles with other users. Sharing needles can lead to hepatitis, HIV infection, and AIDS.

Alternative Names

Acetomorphine overdose; Diacetylmorphine overdose; Opiate overdose; Opioid overdose

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Updated by: Jesse Borke, MD, CPE, FAAEM, FACEP, Attending Physician at Kaiser Permanente, Orange County, CA. Also reviewed by David C. Dugdale, MD, Medical Director, Brenda Conaway, Editorial Director, and the A.D.A.M. Editorial team.

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