# **Heroin Resurgence**

Over the last year, heroin has started to creep back into the drug scene in Nebraska. This resurgence is alarming to authorities, health care professionals and communities for many reasons, but primarily because users do not know how to use the powerfully, addictive substance, which has led to several overdoses.

Heroin, also known as smack, horse, brown sugar, dope, H, junk, skag, skunk, white horse, China white, and Mexican black tar, is a schedule 1 (most addictive) opiate. It is processed from morphine, a naturally occurring substance that comes from the seedpod of poppy plants. Heroin is a depressant that affects the brains pleasure system and interferes with the brains ability to perceive pain. Opiates such as heroin are highly addictive and leave users physically dependent on the substance.

Heroin can be injected into a vein ("mainlining"), injected into a muscle, smoked in a water pipe or standard pipe, mixed in a marijuana joint or regular cigarette, inhaled as smoke through a straw (known as "chasing the dragon"), or snorted as powder via the nose.



In its purest form, heroin is a fine white powder, however, it is most often found to be gray, brown or black in color. The coloring variations come from additives which can include sugar, caffeine or other substances such as strychnine. Heroin is highly addictive and enters the brain quickly – sometimes even before the user, if injecting, has fully removed the needle from their arm. Contrary to popular opinion, any method of ingestion, injection, snorting or smoking, leads to the same level of addiction and accompany a myriad of other health concerns.

When heroin enters the brain, it is converted back into morphine, which binds to molecules on cells known as opioid receptors. These receptors are located in many areas of the brain (and in the body), especially those involved in the perception of pain and in reward. Opioid receptors are also located in the brain stem, which controls automatic processes critical for life, such as blood pressure, arousal, and respiration. Heroin overdoses frequently involve a suppression of breathing, which can be fatal.

The short-term effects of heroin use appear soon after a single dose and disappear in a few hours. After an injection of heroin, the user reports feeling a surge of euphoria ("rush") accompanied by a warm flushing of the skin, a dry mouth, and heavy extremities. Following this initial euphoria, the user goes "on the nod," an alternately wakeful and drowsy state. Mental functioning becomes clouded due to the depression of the central nervous system. Other effects include slowed and slurred speech, slow gait, constricted pupils, droopy eyelids, impaired night vision, vomiting, and constipation.

Long-term effects of heroin appear after repeated use for some period of time. Chronic users may develop collapsed veins, infection of the heart lining and valves, abscesses, cellulites, and liver disease. Pulmonary complications, including various types of pneumonia, may result from

the poor health condition of the abuser, as well as from heroin's depressing effects on respiration. In addition to the effects of the drug itself, street heroin may have additives that do not dissolve and can result in clogging the blood vessels that lead to the lungs, liver, kidneys, or brain. This can cause infection or even death of small patches of cells in vital organs.

Regular heroin use changes the functioning of the brain. One result is tolerance, in which more of the drug is needed to achieve the same intensity of effect. Another result is dependence, characterized by the need to continue use of the drug to avoid withdrawal symptoms. National Institute on Drug Abuse (NIDA) estimated that almost one-fourth of the people who try heroin become addicted. It is extremely easy to not only become addicted, but to become physically dependent on heroin as well. Physical dependence occurs when your body adapts to the drug's presence, causing withdrawal when use stops. Symptoms of withdrawal include muscle and bone pain, diarrhea and vomiting, cold flashes with goose bumps, and insomnia. Chronic heroin users can begin experiencing withdrawal in as little as a few hours and can last up to a week.

A range of treatments, including behavioral therapies and medications such as buprenorphine, methadone, and naltrexone, are effective at helping patients stop using heroin and return to stable and productive lives.

(Sources: www.drugabuse.gov/publications/drugfacts/heroin; www.dosomething.org/tipsandtools/11-facts-about-heroin; www.abovetheinfluence.com/facts/drugsheroin; www.drugfree.org/drug-guide/heroin)

## **Self Injury and Cutting**

Self-injury, also called self-harm, is the act of intentionally harming your own body, such as cutting or burning yourself. It's typically not meant as a suicide attempt. Rather, self-injury is an unhealthy way to cope with emotional pain, intense anger and frustration.

Injuring yourself on purpose by making scratches or cuts on your body with a sharp object, enough to break the skin and make it bleed, is called cutting. Cutting is a type of **self-injury**, or **SI**. People who cut often start cutting in their young teens. Some continue to cut into adulthood. People may cut themselves on their wrists, arms, legs, or bellies. Some people selfinjure by burning their skin with the end of a cigarette or lighted match. Some other forms of self-injury include hitting/punching self, head banging, piercing skin with sharp objects and breaking bones.

#### Why Do People Self-Injure Themselves?

Many find it almost impossible to understand why young people harm themselves, and how it could possibly help them to feel better. By deliberately hurting their bodies, young people often say they can change their state of mind so that they can cope better with "other" pain they are feeling. They may be using physical pain as a way of distracting themselves from emotional pain. Others are conscious of a sense of release. For some, especially those who feel emotionally scarred, it may be a way to "wake up" in situations where they are so numb they can't feel anything.

Overall, self-harm is a way of dealing with intense emotional pain. Self-harm has a huge impact on the day-to-day life of those who do it. They will often try hard to keep what they're doing secret, and to hide their scars and bruises. But the burden of guilt and secrecy is difficult to carry. It can affect everything from what they wear to the kinds of sports and physical activities they take part in, as well as close physical relationships with others, including sexual relationships.

Ultimately, because young people who do it are all too aware of the stigma of self-harm, it can affect their relationships with friends and family and their sense of self-worth. Young people start self-harming to cope with their problems and feelings, but it very soon creates other serious problems. It can set up an addictive pattern of behavior, from which it can be very hard to break free.

Cutting and other self-harming behaviors can be habit forming. It can become a **compulsive behavior**, meaning that the more a person does it, the more he or she feels the need to do it. The brain starts to connect the false sense of relief from bad feelings to the act of cutting, and it craves this relief the next time tension builds. When self-harming acts become a compulsive behavior, it can seem impossible to stop. It can seem almost like an addiction, where the urge to self-injure can seem too hard to resist. A behavior that starts as an attempt to feel more in control can end up controlling you.

#### What Can Happen to People Who Cut?

While cutting or other self-harming acts may provide some temporary relief from a terrible feeling, even people who cut agree that it isn't a good way to get that relief. For one thing, the relief doesn't last. The troubles that triggered the cutting generally are still present.

People don't usually intend to hurt themselves permanently when they cut. And they don't usually mean to keep cutting once they start. But both can happen. It's possible to misjudge the depth of a cut, making it so deep that it requires stitches (or, in extreme cases, hospitalization). Cuts can become infected if a person uses non-sterile or dirty cutting instruments such as razors, scissors, pins, or even the sharp edge of the tab on a can of soda.

### Signs Someone May Be Cutting

- Frequently appearing with fresh cuts, scratches, bruises or other wounds more than would be considered normal
- Scars, such as from burns or cuts
- Keeping sharp objects on hand
- Wearing long sleeves or long pants, neck scarves, or wrist bands, even in hot weather
- Claiming to have frequent accidents or mishaps
- Spending a great deal of time alone
- Pervasive difficulties in interpersonal relationships
- Persistent questions about personal identity, such as "Who am I?" "What am I doing here?"
- Behavioral and emotional instability, impulsivity and unpredictability
- Statements of helplessness, hopelessness or worthlessness
- Self loathing

#### **Getting Help**

There are better ways to deal with troubles than cutting or other self-harming behaviors. The first step is to get help with the troubles that led to the self-harming behavior in the first place. Most people with deep emotional pain or distress need to work with a counselor or mental health professional to sort through strong feelings, heal past hurts, and to learn better ways to cope with life's stresses. Therapists and counselors are trained to help people discover inner strengths that help them heal. These inner strengths can then be used to cope with life's other problems in a healthy way.

(Sources: www.mayoclinic.com/health/self-injury; www.kidshealth.org; www.mentalhealth.org.uk)