The recent overdose deaths of celebrities Cory Monteith and Philip Seymour Hoffman have drawn increased attention to the rising problem of heroin addiction in the United States. Statistics from the Substance Abuse and Mental Health Services Administration (SAMHSA) indicate that heroin use has increased dramatically in the last five years.

Drug officials believe the increase may be linked to the rise in prescription drug abuse, as people who abuse drugs such as Oxycontin or Vicodin look for a greater, cheaper high. Heroin is both less expensive and potentially more powerful than prescription drugs. It is also far more dangerous.

Heroin’s dangers include its unpredictable potency and the fact that street dealers often lace it with other drugs. In the early weeks of 2014, both Pennsylvania and Rhode Island authorities reported dozens of overdose deaths—far above average—that they believe were due to “tainted” heroin laced with fentanyl, a powerful, synthetic painkiller estimated to be hundreds of times more potent than heroin.

The facts about heroin

Heroin is a highly addictive opiate drug derived from morphine obtained from the seed pod of various poppy plants. It is a “downer,” or depressant, that interferes with the brain’s ability to perceive pain. It can look like a white or dark brown powder or like tar. Common street names include horse, smack, junk and brown sugar.

- The onset of heroin’s effects depends on how it is taken. Intravenous use (i.e., injecting heroin into a vein) is said to produce the quickest high, and is also the most dangerous. Other means of use include smoking, snorting and ingesting.
- Short-term effects include a feeling of euphoria (or “rush”) and a warm flushing of the skin. After the euphoria passes, the user alternates between wakefulness and drowsiness. And as a depressant, it can cause slow gait, slow and slurred speech, and constipation.
- Long-term effects can occur after repeated use, and include collapsed veins, infections, breathing difficulties and physical dependence. Users develop tolerance to the drug, and increasing amounts are needed to achieve the “high.”
- Using too much or too strong a form of the drug can result in overdose and death.

Seeking treatment for heroin addiction

Treatment for heroin addiction tends to be more effective when the heroin use is identified early, before the physical addiction has been able to take hold.

First step: Detoxification

Detoxification is the process by which the body is cleaned of the substance. The goal of detox is to help the individual withdraw from opiates safely and without complications.

- Opiate withdrawal is rarely fatal, but is best accomplished in a hospital setting. Acute withdrawal symptoms peak 48 to 72 hours following its most recent use and disappear within seven to 10 days.
- Following detox, the user may have general malaise and continued heroin craving.

After detoxification, individuals pursue either a behavioral (i.e., focusing on behaviors or thoughts) or pharmacological (i.e., using medication) treatment, but usually an integration of the two approaches proves to be the most effective.

Behavioral therapies

- Cognitive-behavioral programs help clients cope with life stressors and modify their thoughts and behaviors as they relate to a drug-free life.
- Voucher-based programs, in which the clients receive “points” for clean urine screens, have also been found to be effective, especially when the points are exchanged for items that encourage healthy living.
- Programs can occur in hospital, residential or outpatient settings.
What do the numbers say?

- Data from the 2012 National Survey on Drug Use and Health indicated that more than 650,000 Americans used heroin within the past year, nearly double the rate reported in 2007.
- Heroin was second-most common drug cause (after marijuana) of hospital emergency departments visits in 2011.
- Data provided by the CDC in 2009 suggests that the number of heroin overdose deaths has doubled since 1999. This suggests that the heroin on the street today may be more potent than in previous years.
- On a positive note, there is some evidence that heroin use among youth may be decreasing slightly. The annual “Monitoring the Future” survey of eighth, 10th and 12th graders shows that heroin use dropped in the past decade, with less than 1 percent using heroin in 2012, compared to 1.5 percent in 2000.

Increase in Heroin Use over the Past Decade
(among persons aged 12 or older)

Preventing overdose
Heroin overdose occurs when too much is consumed. The body’s respiratory and cardiac functions slow down, and breathing decreases to a level unable to support life.

The drug naloxone, sold under the brand name Narcan, can counteract the effects of overdose if administered in time. Administered via nasal spray or injection, it binds to the opioid receptors in the brain and offsets heroin’s effect on the respiratory system.

In late 2013, the New York State Commissioner of Health approved the use of naloxone by emergency medical service personnel in the state. More and more U.S. states are providing training and access to Narcan in response to the rising number of overdose deaths.

Sources:
The Truth about Heroin: http://www.drugfreeworld.org/drugfacts/heroin/a-very-slippery-slope.html
Heroin treatment: http://www.drugabuse.gov/publications/research-reports/heroin-abuse-addiction/what-are-treatments-heroin-addiction
National Survey on Drug Use and Health: http://www.samhsa.gov/data/NSDUH.aspx

Pharmacological therapies

Methadone
- Used for more than 30 years to treat addictions to heroin and other opiates by relieving cravings. Suppresses severe physical effects of withdrawal
- Dispensed only at special clinics; patients must be carefully monitored
- If taken more frequently or at higher levels than prescribed, may build up to toxic levels, causing overdose

Naltrexone
- Blocks euphoric and pain-relieving effects of heroin and other opiates
- Not potentially addictive, but does not suppress cravings or withdrawal, so there can be low motivation to use

Buprenorphine
- Less likely to cause death or other adverse consequences than methadone
- Stops cravings and blocks withdrawal symptoms
- Can be prescribed by some physicians, who must certify that they are also referring patient for behavioral therapy

Suboxone (Buprenorphine + Naloxone)
- Stops cravings and blocks withdrawal symptoms
- Individuals must follow strict guidelines for use
- Can be abused

Mutual help organizations

Millions of people have found mutual aid (self-help) support groups to be extremely helpful in achieving and maintaining long-term recovery.

Narcotics Anonymous - provides peer support network; follows 12-step model
Secular Organizations for Sobriety (SOS), also known as Save Our Selves - 12-step program; alternative to spiritually based recovery programs
SMART Recovery - four-point program; focuses on face-to-face meetings and online support