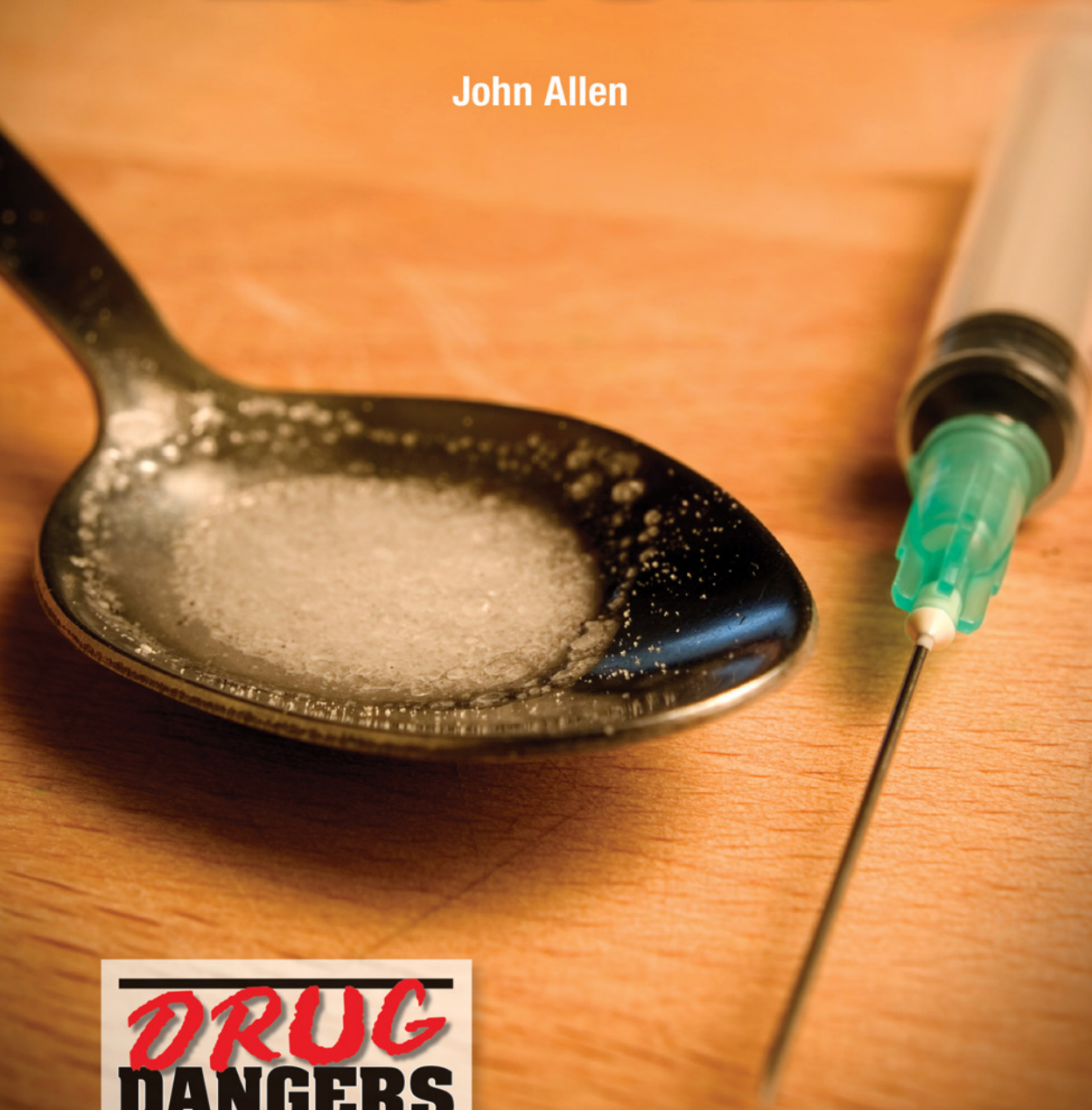


The Dangers of Heroin

John Allen



DRUG
DANGERS

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CHAPTER 1: A Drug on the Rise—Again

Philip Seymour Hoffman seemed to have it all. The forty-six-year-old was one of the most versatile film actors of the twenty-first century. He had won an Academy Award for his lead role in the 2005 film *Capote* and had been nominated four other times. He had three children, a thriving career, an affluent lifestyle, and lots of friends. But, as he told a total stranger at the Sundance Film Festival two weeks before he died, he was also a heroin addict.

On February 2, 2014, friends of Hoffman found him dead inside his \$10,000-a-month apartment in the West Village of Manhattan. Stuck in his left arm was the needle that had delivered the fatal overdose. The apartment contained seventy plastic bags

“If I don’t stop [using heroin] I know I’m going to die.”¹

—Actor Philip Seymour Hoffman.

of heroin, fifty of them still unopened. The little bags were stamped with the words *Ace of Spades* or *Ace of Hearts*, branding them as an especially lethal kind of heroin that is often cut with fentanyl, a potent pain reliever. There were also other drugs scat-

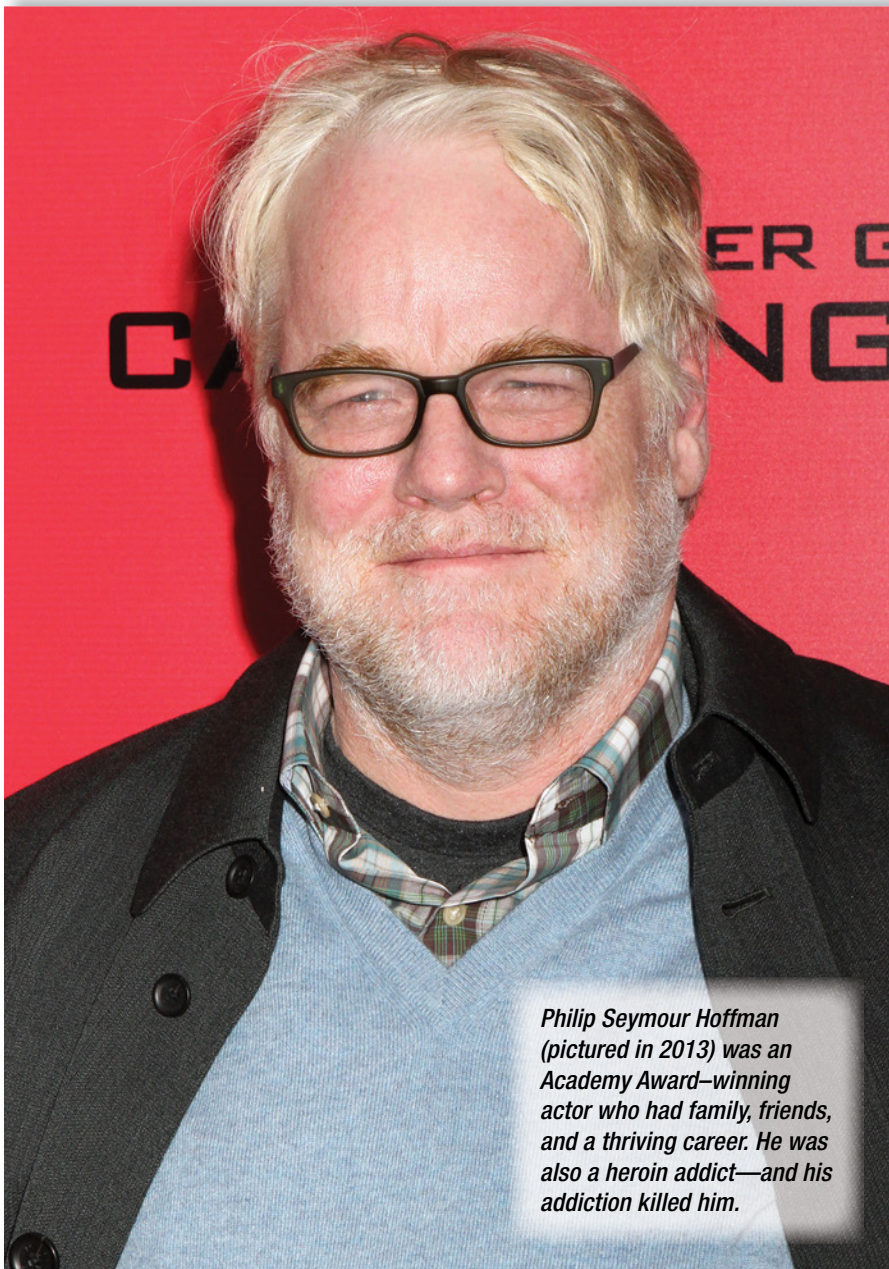
tered inside his home, along with twenty syringes. Hoffman was found to have withdrawn \$1,200 from an ATM down the street in order to buy more heroin the night before. Then he had gone back to his apartment to resume his binge, knowing full well the danger involved. As he had told some friends at Christmas, “If I don’t stop I know I’m going to die.”¹

Easy Availability

The coroner found that Hoffman died from a mixture of drugs, with heroin being the main culprit. In addition to heroin, the coro-

ner found cocaine, benzodiazepines (tranquilizers), and amphetamines in his system. Experts noted that an addict like Hoffman, who was accustomed to mixing drugs, probably was not aware of the stress this placed on his respiratory system and on his ability to breathe. Thus, the actor's death was ruled an accident—despite his own foreboding about the dangers of heroin.

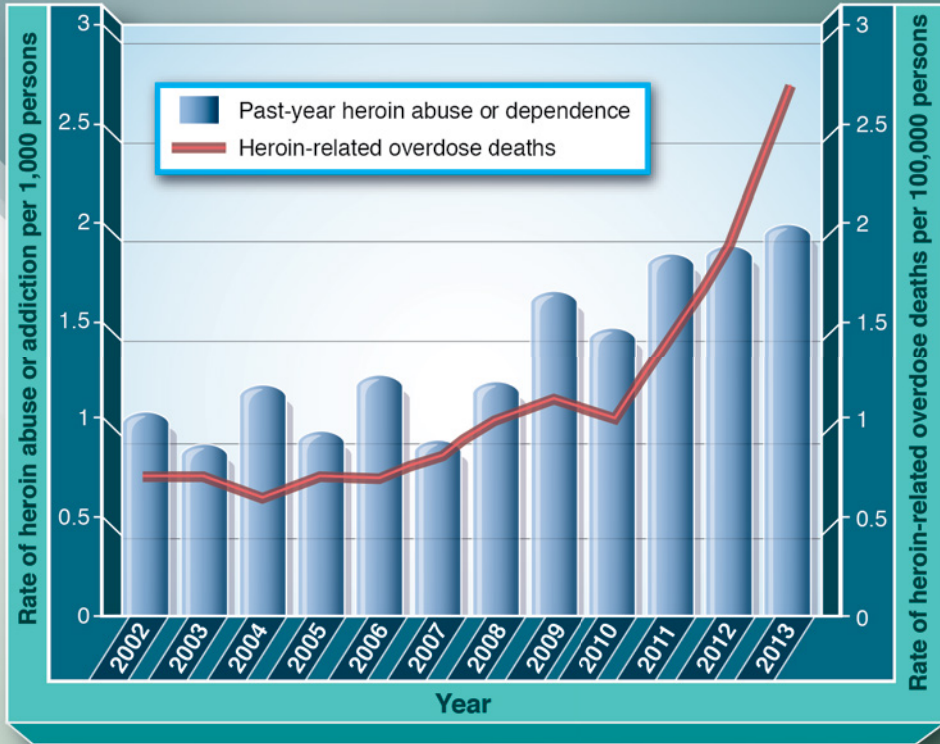
Hoffman's case demonstrates the wide availability of heroin on US streets. It also shows how easy it is for recovering addicts to



Philip Seymour Hoffman (pictured in 2013) was an Academy Award–winning actor who had family, friends, and a thriving career. He was also a heroin addict—and his addiction killed him.

Rising Levels of Heroin Dependence and Heroin-Related Deaths

Heroin abuse and its deadly consequences are a growing problem in the United States. Between 2002 and 2013 the rate of abuse of heroin or addiction to the drug per one thousand people doubled. The rate of heroin-related overdose deaths also soared, rising 286 percent between those same years.



Source: Lindsey Cook, "The Heroin Epidemic, in 9 Graphs," *U.S. News & World Report*, August 19, 2015. www.usnews.com.

Morrison and Kurt Cobain—but merely a fairly inexpensive means to escape oneself for a while. Theodore Cicero, vice chairman of psychiatric research at the Washington University School of Medicine in St. Louis, Missouri, notes how the drug has broken through old boundaries. "The stigma is going away as people begin to see heroin used by friends or acquaintances that they didn't think would be taking it,"⁴ he says. Nonetheless, with addiction rates on the rise, the bleak reality of heroin abuse seems sure to reassert itself in the public mind.

An Alternative to Morphine

Ironically, heroin was originally developed as a nonaddictive alternative to other pain medications, particularly morphine. Around 1810 morphine was found to be the active pain-relieving ingredient in opium. German chemists were able to isolate it by dissolving opium in acid and then neutralizing the product with ammonia. Physicians seized on morphine as a wonder drug for its ability to treat severe pain, such as during surgical operations or from traumatic injuries. However, morphine proved to be toxic and highly addictive—as shown by the terrible rates of addiction among Civil War soldiers who were treated with the drug for battlefield wounds.

Spurred by doctors' reports, the quest was on for a safer alternative to morphine. In 1874 a London chemist named C.R. Alder Wright combined morphine with acids to make a painkiller that was much like heroin. At the end of the nineteenth century, Felix Hoffmann, a German researcher, developed an opium-based pain reliever with a similar molecular structure to that of morphine but supposedly without its addictive properties. In 1898 the Bayer Company of Germany began producing the new medicine for sale, calling it Heroin—probably from the German *heroisch* for its heroic effectiveness—and marketing it as a safe, non-habit-forming replacement for morphine. The new painkiller had twice the potency of morphine, and it took effect more rapidly. Heroin quickly became a sensation, as popular as the pain relievers seen on television ads today.

In the United States, drug companies sold heroin over the counter in special drug kits, complete with hypodermic needles for administering the medicine. Heroin, like other opiates, was used to treat children and adults for a range of ailments, from tuberculosis and depression to coughs and colds. Physicians discovered, however, that heroin was even more addictive than morphine and

“The stigma is going away as people begin to see heroin used by friends or acquaintances that they didn’t think would be taking it.”⁴

—Theodore Cicero, vice chairman of psychiatric research at the Washington University School of Medicine.

The sleep-inducing effect of heroin is also one of its main hazards. “Heroin makes someone calm and a little bit sleepy,” says Dr. Karen Drexler, director of the addiction psychiatry training program at Emory University, “but if you take too much then you can fall

“Usually when you are sleeping, your body naturally remembers to breathe. In the case of a heroin overdose, you fall asleep and essentially your body forgets.”⁸

—Dr. Karen Drexler, director of the addiction psychiatry training program at Emory University.

asleep, and when you are asleep your respiratory drive shuts down. Usually when you are sleeping, your body naturally remembers to breathe. In the case of a heroin overdose, you fall asleep and essentially your body forgets.”⁸

Overdosing on heroin can also reduce blood pressure drastically and lead to heart failure. Injecting heroin greatly increases the risk of infectious endocarditis, which is basically an infection of the heart’s inner lining and heart valves. It can trigger an arrhythmia, or irregular heartbeat, affecting blood flow

to the organs. It can result in pulmonary edema, which also restricts blood flow and causes blood to back up into the veins. This condition limits normal oxygen flow through the lungs and can lead to shortness of breath, heart attack, or kidney failure. Studies indicate that dying instantly from taking heroin is not common, occurring only in about 14 percent of deaths related to heroin use. Nevertheless, taking heroin even one time is like playing Russian roulette.

Ignoring warnings about the dangers of addiction and overdose, Sebastian injected heroin three more times within a month of his first use. Quitting at that point was hard for him, but fortunately he was able to walk away from the drug. Many beginning users, like Ethan Romeo, are not so fortunate. Unlike Sebastian, Romeo slid into the routine of a full-blown heroin addict. “I knew then and there that my life had changed forever,” says Romeo, “and I would forever be addicted to a needle.”⁹

The Trouble with Needles

Many users, like Romeo and Sebastian, take heroin through the traditional process of injecting it into a vein in the arm, or main-

lining, as it is called. This method delivers the most intense rush from the least amount of drug—and also presents the greatest danger of overdose. Heroin can also be injected under the skin, called skin-popping, or into a muscle. To prepare a fifteen-dollar chunk of black tar heroin for intravenous use, it is usually heated, or cooked. The brownish, faintly vinegary chunk is placed in a spoon and then a small amount of water is added with a syringe. A lighter is used to heat the spoon from the bottom and dissolve the chunk. Once the heroin is completely dissolved into liquid, a rolled ball of cotton is dropped into the solution until it swells like a sponge. Then the syringe is used to suck the liquid heroin out of the cotton, which acts as a filter for any germs and dirt particles.

The target area for injection is swabbed with alcohol to sterilize it. A rubber hose or shoestring may be used as a tourniquet to tie off the arm and cause veins to bulge, making them easier to hit with the needle. Novice users concentrate on veins at the



A heroin user prepares for a fix by heating and dissolving a chunk of black tar heroin mixed with water. Once the drug is fully liquefied, it will be prepared for injection.

and I will live with this for the rest of my life, but there are ways to maintain control.”³⁴

Perhaps most important, treatment can instill a realistic attitude about relapse. Backsliding into heroin use should be viewed not as a discouraging failure but instead as a setback that is not uncommon on the road to recovery. After all, the addict’s brain is divided in a constant battle. Part of it realizes the awful consequences of using heroin, but another part is burning to take the drug again *right now*.

Soon after beginning treatment, the dangers of relapse are greatest. Relapse can be triggered by stress, frustration, depression, fear, and anxiety. The addict may crave heroin as a way to

“Addiction never stops, and I will live with this for the rest of my life, but there are ways to maintain control.”³⁴

—Ethan Romeo, an addict in Ware, Massachusetts.

cope with daily reality. Another trigger for relapse is returning to places where the addict’s heroin use occurred or seeing people connected with the drug habit. Recovering addicts sometimes romanticize their heroin use and convince themselves that using was pleasurable and exciting. With clinical support and understanding, the patient can more easily bounce back from a

relapse. Medical personnel, having seen it all before, can offer realistic guidance about what to expect along the way. Sadly, relapse can occur even after years of being clean.

Replacement Therapies

Once a patient is placed in a rehab center, doctors can use special drugs to help that person make it through withdrawal. The type of medications used depends on the severity of the addict’s condition and his or her commitment to kicking the habit. Doctors can treat milder cases of heroin addiction with naltrexone, a drug that blocks the effect of any heroin in the person’s system. The patient can then be given clonidine, which relieves many of the symptoms of withdrawal. The combination of naltrexone and clonidine has proven very effective for heroin addicts whose cravings for the drug are less intense and can be controlled with counseling.

An Addict Describes Her Withdrawal from Heroin

Sarah Beach has known the depths of heroin withdrawal and the surprise of a possible cure by taking Suboxone. Here she describes her agony and her feelings of hope:

The closest I've ever come to describing [withdrawal] to a friend is: You know when you're underwater, and you need to come up for a breath? And it's taking too long to get to the surface? That feeling, of having no oxygen left, your whole body feeling like fire, salty and aching with the desperate need to breathe? That's it, only not exactly, because it's worse.

Finally Beach checked in to a detox clinic, where she was given the drug Suboxone to relieve her withdrawal symptoms:

I had just drawn in another ragged breath for another moan of agony, when it all . . . suddenly . . . STOPPED. What?! I sat up. My body was still and calm. The feeling of bugs crawling in and out of my skin vanished. My stomach settled and my head stopped whirling. The worst thing—the indescribable feeling of whole-body horror—was simply gone. . . . The sunlight felt amazing on my face. Tears came to my eyes, but I laughed.

Sarah Beach, "It Happened to Me: I Went Through the Hell of Heroin Withdrawal and Came Out the Other Side," xoJane, October 30, 2013. www.xojane.com.

More severe cases call for replacement therapies to assist the body in adjusting to lack of heroin. The drug buprenorphine—marketed under the brand name Suboxone—is a prescription painkiller that works on the same brain receptors as heroin but without the euphoric effect or associated high. It can eliminate the worst effects of withdrawal and enable the recovering addict to feel close to normal. If an even stronger medication is needed, doctors can provide methadone. This drug is very similar to heroin but lasts even longer in the user's system. Methadone provides more effective relief from withdrawal symptoms. A heroin addict

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ORGANIZATIONS TO CONTACT

American Society of Addiction Medicine (ASAM)

4601 N. Park Ave.

Upper Arcade, Suite 101

Chevy Chase, MD 20815-4520

phone: (301) 656-3920 • fax: (301) 656-3815

e-mail: e-mail@asam.org • website: www.asam.org

ASAM seeks to improve the quality of (and increase access to) addiction treatment, increase awareness of addiction, and support research and prevention efforts. Its website offers numerous articles, fact sheets, and other publications about painkiller and heroin addiction.

Centers for Disease Control and Prevention (CDC)

1600 Clifton Rd.

Atlanta, GA 30329-4027

phone: (800) 232-4636

website: www.cdc.gov

America's leading health protection agency, the CDC seeks to promote health and quality of life by controlling disease, injury, and disability. Its website features numerous articles, fact sheets, and policy statements about prescription drug abuse, including heroin.

DARE America (Drug Abuse Resistance Education)

9800 LaCienega Blvd., Suite 400

Inglewood, CA 90301

phone: (310) 215-0575

website: www.dare.org

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