



MEDICAL EXAMINER

Marcus Nashelsky, Medical Examiner

Mike Hensch, Medical Examiner Administrator

Contact: Marcus Nashelsky, MD, Johnson County Medical Examiner OR Doug Beardsley, MPH, Director,
Johnson County Public Health

Phone: 319-353-7594 OR 319-356-6040

E-mail: marcus-nashelsky@uiowa.edu OR dbeardsley@co.johnson.ia.us

July 26, 2014

Medical Examiner, Public Health Discuss Concerns About Heroin Deaths

Johnson County, Iowa – Last week, representatives from the Johnson County Medical Examiner Department (JCME); Johnson County Public Health (JCPH); and local, state and federal law enforcement met to discuss concerns about the increasing number of heroin-related deaths seen by the JCME.

According to Mike Hensch, Johnson County Medical Examiner Administrator, the JCME investigated 10 heroin-related deaths between January and June of this year. As comparison, in all of 2012, the department investigated nine such deaths. There were three deaths in 2011 and three in 2013. “Heroin-related” means a death caused exclusively by heroin intoxication or a death in which heroin was one of the drugs that caused death. From 2010 through June 2014, nine of 25 heroin-related deaths investigated by the JCME (36%) occurred in 21- to 30-year-olds. Twelve of the 25 deaths, or 48%, occurred in those aged 41 to 60.

“Our purpose in bringing this issue to the public’s attention is to raise awareness of a growing public health concern in Johnson County and nationwide. These accidental heroin-related deaths often occur in people who are young and otherwise healthy,” said Johnson County Medical Examiner Marcus Nashelsky. According to the National Institute on Drug Abuse (NIDA) (www.drugabuse.gov/publications/drugfacts/heroin), heroin is an opioid drug synthesized from morphine, a naturally occurring substance extracted from the seed pod of the Asian opium poppy plant. Heroin usually appears as a white or brown powder or as a black sticky substance, known as “black tar heroin.”

Nationwide, heroin use has been on the rise since 2007, particularly among young adults. Most people think of heroin as an injection drug, but it also can be smoked, inhaled by snorting or sniffing, or even eaten. Law enforcement officials believe that the ability to use heroin in a manner other than injection has contributed to its increased use, because the stigma attached to injection drug use is removed. Additionally, there is a misperception among users that highly pure heroin is safer than less pure forms because it does not need to be injected.

Research also suggests that misuse of prescription opioid pain relievers (legally prescribed or illegally obtained) like Vicodin® or OxyContin® may be the first step on a path toward heroin abuse. “That’s why it’s so important to clean out your medicine cabinet, be alert to the signs of drug abuse and refer friends or family members to treatment,” said Johnson County Public Health Director Doug Beardsley. “It’s also a good reminder for physicians to limit the number of pain killers prescribed to patients undergoing medical procedures. Patients should discuss with their doctor what a reasonable amount of medication

should be for a given person and procedure. Unfortunately, leftover medicines may end up in the wrong hands.”

Heroin is seen as a readily available, cheaper alternative to OxyContin®. On the street, an 80-milligram dose of OxyContin® can cost more than 10 times as much as a small bag of heroin.

When heroin enters the bloodstream, it is converted to 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 and respiration. Heroin overdoses frequently involve a suppression of breathing, which can be fatal. “Most autopsy examinations of heroin-related deaths reveal significant accumulation of fluid in the lungs due to respiratory depression,” said Johnson County Medical Examiner Marcus Nashelsky. Someone who has overdosed can be mistaken for being passed out or asleep. NIDA estimates that 23% of individuals who use heroin become dependent on it because of the rapid delivery of the drug to the brain.

The Johnson County Medical Examiner Department and Johnson County Public Health recommend that members of the public learn the facts about heroin and prescription drug misuse by visiting www.drugabuse.gov/publications/drugfacts/heroin or www.not-even-once.com. For information on treatment, visit Narcotics Anonymous: www.na.org or Smart Recovery: www.smartrecovery.org.