Heroin Related Mortality in the City of St. Louis

In the United States, heroin overdose death rates increased by 26% from 2013 to 2014 and have more than tripled since 2010. Nationally, more than 8,200 people died from heroin-related overdoses in 2013.

The City of St. Louis continues to be concerned about the high rates of substance abuse, particularly the use of heroin, in the region. From 2006 to 2015, heroin related deaths have been trending upwards in the City. There were 810 confirmed heroin-related deaths reported by the City of St. Louis Medical Examiner, from 2006 to 2015. During this time period, the highest number of heroin-related deaths was reported in 2014, with 126 deaths. In 2015, the number of heroin-related deaths decreased by 29% with 89 confirmed deaths.

National Opioid Overdose Epidemic
- Drug poisoning (overdose) is the number one cause of injury-related death in the United States, with 43,982 deaths occurring in 2013;
- Nationally, the rate for drug-poisoning deaths involving heroin nearly quadrupled from 0.7 deaths per 100,000 in 2000 to 2.7 deaths per 100,000 in 2013;
- Most prescription opioid users do not become heroin users, although three out of four new heroin users started by misusing prescription opioids;

Heroin Related Deaths in the City (2015)
- In 2015 heroin-related deaths ranged in age from 19 to 68; The average age is 39 years old and median age is 37;
- 78% of the deceased are male; 57% of the deceased are white;
- One in three heroin related deaths in 2015 involved the use of more than one substance

In recent years, fentanyl, a powerful synthetic opioid similar to but 50 – 100 times more potent than morphine and approved for chronic pain management associated with cancer, has been trending upwards in the United States. In March 2015, the Drug Enforcement Administration issued a nationwide alert identifying fentanyl as a threat to public health and safety. On a national level, many of the overdose deaths due to fentanyl were attributed to illicitly-manufactured fentanyl, not the pharmaceutical fentanyl – and were mixed with heroin and sold as a highly potent form.

The City of St. Louis is also concerned about fentanyl related deaths. Figure one below shows that from 2007 to 2013, the number of fentanyl related deaths in the City were relatively low. That number increased to 14 in 2014 and more than tripled in one year to 45 deaths in 2015. This is concerning because, although the number of heroin-related deaths in the City have decreased from 2014 to 2015, the number of fentanyl deaths have increased during this time period. This rise may be due to the increased availability of illegally made, non-pharmaceutical fentanyl being sold as heroin, with or without the user’s knowledge.
Heroin and Fentanyl Related Deaths, City of St. Louis, 2006 - 2015*

Figure 1: *If both heroin and fentanyl appear on the toxicology report, the death is classified under both heroin-related death and fentanyl-related deaths. For this reason, some cases may be included under both classifications.

Risk Factors & Trends

Heroin abuse is a part of a larger substance abuse problem. Abuse often starts with prescription pain medications and escalates to the use of heroin which is cheaper and easier to obtain. The Centers for Disease Control and Prevention (CDC) found that past misuse of prescription opioids is the strongest risk factor for heroin initiation and use, specifically among people who report dependence or abuse in the past one year. Based on data from the National Survey on Drug Use and Health (NSDUH), persons who are addicted to opioid painkillers are 40 times more likely to be addicted to heroin. The CDC also found that heroin use has increased among men, women, most age groups, and all income levels. In addition, most people who use heroin are using multiple substances. According to the CDC more than nine in ten people in the United States who used heroin also used at least one other drug. NSDUH also reports that those who use cocaine are fifteen times more likely to be addicted to cocaine and those who use marijuana are three times more likely to be addicted to heroin.

DOH Response

- Partnering with the National Council on Alcoholism and Drug Abuse (NCADA) to educate residents on the health risks and possible signs of heroin use
- Developing of maps to identify “hot spots” for heroin overdose deaths
- Including the reduction of substance abuse in its Community Health Improvement Plan and building partnerships with NCADA, the Maternal Child and Family Health Coalition, and other key stakeholders
- Working with St. Louis County Department of Public Health to facilitate teen focus groups to understand risk factors associated with risky and self-destructing behaviors such as substance abuse (smoking, drinking, legal prescription drugs and illegal street drugs)

Preventing opioid and heroin overdoses is necessary, but it is also important to help those who are already addicted to opioids and heroin. Individuals with heroin dependence and their families are encouraged to seek treatment. It is important to know the signs of possible addiction. A self-test is available at
http://ncada-stl.org/find-help/self-test-drugs/. For individuals seeking treatment, a list of providers in the City and County may be found at http://ncada-stl.org/find-help/treatment-recovery-services-manual/
Heroin Related Deaths
City of St. Louis
2014 - 2015

**ZIP Code is the death location, not necessarily the home ZIP code of the deceased.**

Prepared by:
City of St. Louis Department of Health
Center for Health Information, Planning, and Research

Data Sources: City of St. Louis Office of the Medical Examiner, Centers for Disease Control and Prevention, National Survey on Drug Use and Health