

# 2019 Connecticut Epidemiological Profile: Heroin



## *A product of the State Epidemiological Outcomes Workgroup (SEOW)*

**Heroin is an illicit opioid. In Connecticut, the use of heroin now often involves the use of fentanyl, either intentionally or not. This profile, where appropriate, describes the concurrent and overlapping use of fentanyl and heroin.**

### Prevalence and Use

According to the 2017-2018 National Survey on Drug Use and Health (NSDUH), less than one percent (0.4%) of Connecticut residents 12 or older have used heroin in the past year, a rate slightly higher than the national average (0.3%).<sup>1</sup> The highest prevalence is among young adults aged 18-25 years old (0.6%), followed by adults aged 26 or older (0.4%), and then adolescents (0.04%).

According to the 2019 Connecticut School Health Survey (CT's Youth Risk Behavior Surveillance survey), an estimated 1.8% of high school students in Connecticut reported heroin use in their lifetime.<sup>2</sup> The Connecticut data show that black non-Hispanics and Hispanics reported the highest overall rate (3.0% each), which is higher than the prevalence for white non-Hispanics (1.1%). Almost three percent of males (2.7%) and .9% of females reported ever use of heroin. Use among high school students in general is of particular concern, as youth use is often linked to continued use and substance use disorder in the future.

In 2019, about 1 in 3 (32%) unintentional overdose deaths that occurred in Connecticut involved heroin. While the number of overdose deaths in Connecticut involving heroin has declined since 2016, these numbers are misleading due to the concomitant rise of fentanyl, the increasing number of opioid deaths in Connecticut involving fentanyl and/or heroin, and the intertwined nature of heroin and fentanyl in the illicit opioid supply. Across New England, fentanyl availability is high, may be available either mixed with white powder heroin or alone, and may be sold in powder form as heroin or as fentanyl.<sup>3</sup> Heroin may be injected, snorted, or smoked.

<sup>1</sup> NSDUH (2017-2018)

<sup>2</sup> Connecticut School Health Survey, 2019 (CT YRBSS)

<sup>3</sup> US DOJ- DEA, 2018 National Drug Threat Assessment (October 2018)

Fentanyl is often sold under the same or similar "brand" names as heroin, creating confusion and uncertainty among buyers. More than 1 in 3 (35%) fentanyl deaths in Connecticut in 2019 also involved heroin. Since 2017, deaths involving fentanyl have outnumbered deaths involving heroin, suggesting that much of the heroin consumed in Connecticut may contain fentanyl. Thus, all individuals who use heroin are at risk of fentanyl exposure.

### Who is at risk?

- People who are addicted to other substances are more likely to meet criteria for heroin use disorder. Compared to people without an addiction, those who are addicted to alcohol are 2 times more likely to become addicted to heroin. Those addicted to marijuana are 3 times more likely, while those addicted to cocaine are 15 times more likely, and those addicted to prescription pain medications are 40 times more likely to become addicted to heroin.<sup>4</sup>
- Other groups at risk include:<sup>5</sup>
  - Non-Hispanic whites;
  - Males;
  - Young adults (18 to 25);
  - People without insurance or enrolled in Medicaid; and
  - People living in urban communities.

### Overdose

- Overdose warning signs include: stupor or non-responsiveness; pinpoint pupils; altered breathing or not breathing; foaming from the mouth or nose; blue lips or nails; blue or grayish skin color; and indications of heroin use (such as syringes). Respiratory failure may lead to death. Overdose and death may occur more quickly with fentanyl-adulterated heroin compared to heroin or other opioids, due to fentanyl's higher potency.
- People who inject heroin and those who use multiple substances, including other opioids,

<sup>4</sup> CDC. Overdose: Heroin.

<https://www.cdc.gov/drugoverdose/opioids/heroin.html>

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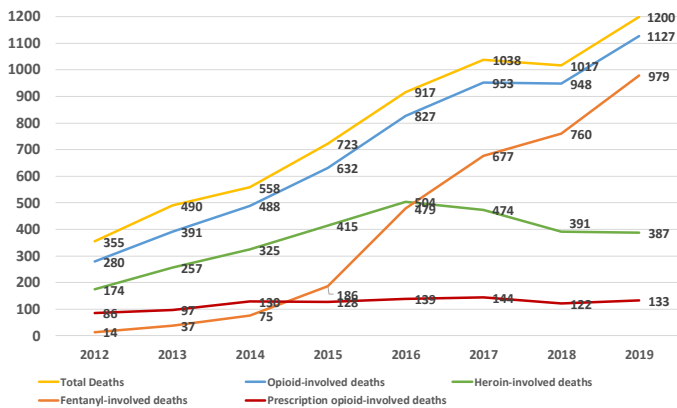
benzodiazepines, alcohol, and cocaine, have an increased risk of overdose.

- Narcan® (naloxone), available as nasal spray or for injection, can effectively reverse a heroin, fentanyl, or other opioid overdose. However, due to fentanyl's potency, multiple doses of naloxone may be required.
- Recent data from Connecticut's Office of the Chief Medical Examiner (OCME) suggests an increasingly unpredictable illicit opioid supply across the state. Substances such as xylazine and etizolam, which can induce central nervous system and respiratory depression that is unable to be reversed by naloxone, may be added to fentanyl or heroin, thereby increasing overdose mortality risk.

## Impact

- According to Connecticut's Office of the Chief Medical Examiner (OCME), in 2019, heroin was involved in 387 overdose deaths, and fentanyl was involved in 979 deaths.<sup>5</sup>

Figure 1. Fentanyl- and Heroin- Involved Deaths in Connecticut, 2012-2019



- Heroin-involved mortality rates have dropped from a high of 14.1 to 10.8 per 100,000 population between 2016 and 2019. However, since 2012 there has been a sharp increase in fentanyl-involved deaths, reaching the highest rate in 2019 with a death rate of 27.4 per 100,000 population.
- Heroin-involved deaths have occurred throughout the state, although the highest rates are in

Connecticut's urban areas.

- In 2019, the municipalities in Connecticut with the most heroin-involved overdose deaths were Waterbury with 47, Bridgeport 23, New Haven 23, and Hartford and Torrington, with 17 each.
- Heroin was the primary substance in 30.4% of all Connecticut treatment admissions in 2019. Of these, 68% were male, and 62.5% were White, non-Hispanic.<sup>6</sup>
- People who inject heroin and other drugs are at risk for Hepatitis B virus (HBV) and Hepatitis C virus (HCV) infection through the sharing of needles and drug-preparation equipment.<sup>7</sup> It is estimated that injection drug use has been a factor in one-third of all HIV and more than half of all hepatitis C cases in the United States.
- Opioids such as heroin and fentanyl are highly addictive, and their misuse has multiple medical and social consequences including increased risk for HIV/AIDS, property crime, unemployment, disruptions in family stability, and homelessness.
- Chronic opioid misuse may lead to serious medical consequences such as fatal overdose, scarred and/or collapsed veins, bacterial infections of the blood vessels and heart valves, abscesses and other soft-tissue infections, and liver or kidney disease. Depressed respiration from heroin use can cause lung complications, including various types of pneumonia and tuberculosis.
- Opioid misuse during pregnancy can result in miscarriage, pre-term birth, as well as neonatal abstinence syndrome (NAS), and exposure in utero can increase a newborns' risk of sudden infant death syndrome (SIDS).
- Opioid misuse is associated with increased property and violent crime, gang violence, and risk of arrest and incarceration.

## Connecticut SEOW Prevention Data Portal

For more data and information on opioid use in Connecticut, visit the

### Connecticut SEOW Prevention Data Portal

<http://preventionportal.ctdata.org/>

<sup>6</sup> CT DMHAS , 2019 Treatment Admissions

<sup>7</sup> <https://www.cdc.gov/hepatitis/populations/idu.htm>

<sup>5</sup> Office of the Chief Medical Examiner, <https://portal.ct.gov/OCME/Statistics>