

2022 Connecticut Epidemiological Profile: Fentanyl



A product of the State Epidemiological Outcomes Workgroup (SEOW)

Fentanyl, like heroin, is an opioid. In Connecticut, the use of heroin 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

In 2021, nearly 9 in 10 unintentional overdose deaths (86%) in Connecticut involved fentanyl.² Fentanyl can be injected, snorted, smoked, taken orally as a pill, or spiked onto blotter paper. Pharmaceutical fentanyl products may be diverted to illicit markets; however, most fentanyl that is used non-medically is illicitly manufactured (non-pharmaceutical). According to the DEA, fentanyl availability remains high across New England, despite reported availability decreases during COVID.¹ Fentanyl may be available either mixed with white powder heroin or alone, and may be sold in powder form as heroin or as fentanyl. Fentanyl is often sold under the same or similar "brand" names as heroin, creating confusion and uncertainty among buyers. Fentanyl may also be pressed into counterfeit prescription pills.¹

Since 2017, fentanyl-related deaths have progressively outnumbered heroin-involved deaths in Connecticut, while the number of drug-related deaths continues to rise (11% increase from 2020-21, 28% increase since 2019). Of deaths involving heroin, 93% also involved fentanyl.¹

With 9 out of 10 heroin-involved deaths including fentanyl, and just over 1 in 10 (12%) fentanyl-involved deaths including heroin¹, it is clear that most of the heroin consumed in Connecticut contains fentanyl. While prevalence estimates are not available specific to fentanyl misuse, due to the intertwined nature of fentanyl and heroin in Connecticut, heroin use statistics provide valuable information.

According to the 2018-2019 National Survey on Drug Use and Health (NSDUH), less than one percent (0.33%) of Connecticut residents 12 or older have used heroin in the past year, a rate slightly lower than the national average (0.28%).²

The highest prevalence is among young adults aged 18-25 (0.38%), followed by adults aged 18 or older (0.36%).² According to the 2021 Connecticut School Health Survey (CT's Youth Risk Behavior Surveillance survey), an estimated 0.6% of high school students in Connecticut reported heroin use in their lifetime. The Connecticut data shows that Hispanic students reported the highest overall rate (1.1% each) compared to Black non-Hispanics (0.4%) and white non-Hispanics (0.4%). One percent of males and 0.2% of females reported ever using heroin. However, caution should be taken when interpreting 2021 CSHS data due to difference in methodology and time of collection. Use among high school students in general is of particular concern, as youth use is often connected to substance use in the future.

Who is at Risk?

- Individuals who are using heroin or illicitly obtained prescription pills, which may be counterfeit.
- Individuals who use cocaine, since fentanyl overdose outbreaks have been linked to fentanyl-contaminated cocaine in Connecticut.⁴
- 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, marijuana 3 times, cocaine 15 times and prescription pain medications 40 times more likely to become addicted to heroin.⁵

¹ US DOJ- DEA, 2020 National Drug Threat Assessment (March 2021)

² NSDUH (2018-2019)

² NSDUH (2018-2019)

³ CT School Health Survey 2021

⁴ Tomassoni AJ. MMWR 2017; 66:107-111.

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Other groups at risk include:⁶

- Non-Hispanic whites, although recent trend data in overdose fentanyl deaths show that blacks and Hispanics are increasingly at risk of fentanyl and heroin overdose death;
- Males;
- 18 to 25 year olds;
- People without insurance or enrolled in Medicaid; and
- People living in large metropolitan areas.

Overdose

- Fentanyl is about 50 times more potent than heroin making its use at increased risk for 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 opioid use (such as needles or pills). Respiratory failure may lead to death, and overdose and death may occur more quickly with fentanyl use compared to heroin or other opioids due to fentanyl's higher potency.
- Individuals who inject fentanyl and those who use multiple substances, including other opioids, benzodiazepines, alcohol, and cocaine, have an increased risk of overdose.
- Narcan® (naloxone), available as nasal spray or for injection, can effectively reverse a fentanyl or other opioid overdose. However, due to fentanyl's potency, multiple doses of naloxone may be required to reverse a fentanyl overdose.
- Recent data from the Office of the Chief Medical Examiner (OCME) suggests an increasingly unpredictable illicit opioid supply across the state.⁶
- Substances such as the veterinary tranquilizer xylazine (present in 23% of opioid-involved deaths in 2021) added to fentanyl or heroin, can induce central nervous system and respiratory depression that is resistant to naloxone, increasing overdose mortality risk.

Impact

- According to OCME data, in 2021, fentanyl was involved in 1,312 overdose deaths, the highest number since 2012.⁶
- Since 2012 there has been a consistent increase in fentanyl-involved deaths, reaching the highest rate in 2021 with a mortality rate of 36.3 per 100,000 population. In 2021, 3 out of 4 decedents were male, 61% were white non-hispanic, with 20% hispanic and 18% black. Slightly over half were

Number of Fentanyl-Involved Deaths by Year with Other Substances: Connecticut, 2012-2021



- Although fentanyl-involved deaths have occurred throughout the state, the greatest numbers of fentanyl-involved deaths occur in Connecticut's urban areas. The municipalities in Connecticut with the most resident deaths involving fentanyl in 2021 were Hartford with 108, New Haven 105, Bridgeport 86, Waterbury 84, New Britain 48, and Bristol, 42.
- Heroin was the primary substance in 30.6% of all Connecticut treatment admissions in 2019. Of these, 70% were male, and 71% were White, non-Hispanic, and 67% were 25-44 years old.⁸

⁵ CDC. Overdose: Heroin. <https://www.cdc.gov/drugoverdose/opioids/heroin.html>

⁶ Office of the Chief Medical Examiner, <https://portal.ct.gov/OCME/Statistics>

⁷ TEDS, 2019 Treatment Admissions

⁸ <https://www.cdc.gov/hepatitis/populations/idu.htm>

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- People who inject drugs are at risk for Hepatitis B virus (HBV) and Hepatitis C virus (HCV) infection through the sharing of needles and drug-preparation equipment.⁸ 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 fentanyl and heroin are highly addictive, and their misuse has multiple medical and social consequences including increased risk for HIV/AIDS, property and violent crime, arrest and incarceration, unemployment, disruptions in family environments, and homelessness.
- Chronic opioid use 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. Poor health conditions and depressed respiration from heroin use can cause lung complications, including various types of pneumonia and tuberculosis.
- Opioid misuse during pregnancy can result in a miscarriage or premature delivery, as well as neonatal abstinence syndrome (NAS), and exposure in utero can increase a newborns' risk of sudden infant death syndrome (SIDS).

Prevention Data Portal

For more data and information on fentanyl and opioid use in Connecticut, visit the **Connecticut SEOW Prevention Data Portal** <http://preventionportal.ctdata.org/>