2025

Opioids

Epidemiological Profile

Developed: September 2025

CONNECTICUT
Mental Health & Addiction Services

CPES
Center for Prevention Evaluation and Statistics

Table of Contents

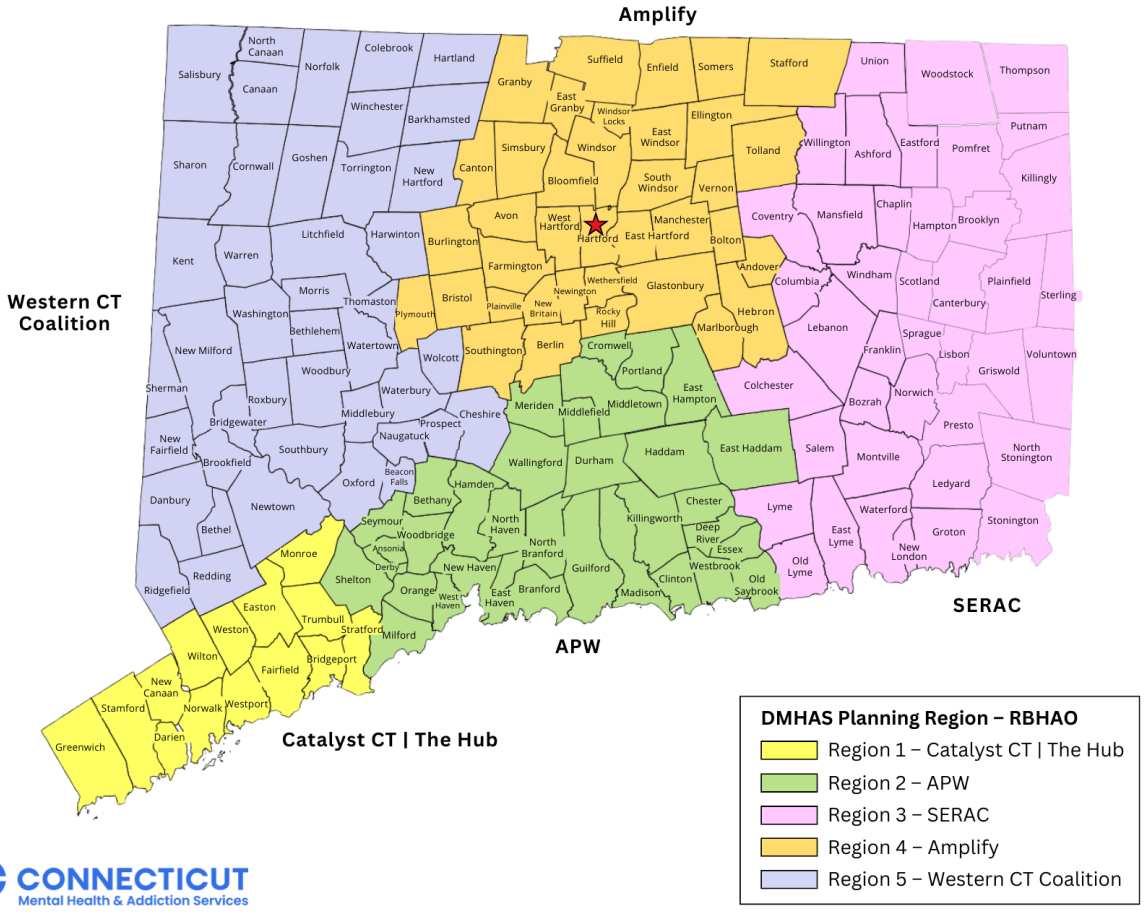
INTRODUCTION	02
PREVALENCE	04
RISK & PROTECTIVE FACTORS	08
EFFECTS & CONSEQUENCES	10
CONCLUSIONS & CONSIDERATIONS	14
ADDITIONAL RESOURCES	15
GLOSSARY	16
REFERENCES	19

INTRODUCTION

In this profile, the term "opioids" refers to a group of natural, semi-synthetic, and synthetic drugs, which include both prescription and illegal narcotics.[1] This class of drugs includes heroin, fentanyl, and opioids (narcotic analgesics e.g., oxycodone and hydrocodone) diverted from the medical drug supply or illegally manufactured and distributed.[2]

This epidemiological profile explores opioid use and misuse in Connecticut. Data on consumption, impact, and risk factors at the state and regional levels have been synthesized to present a high-level summary of this issue.

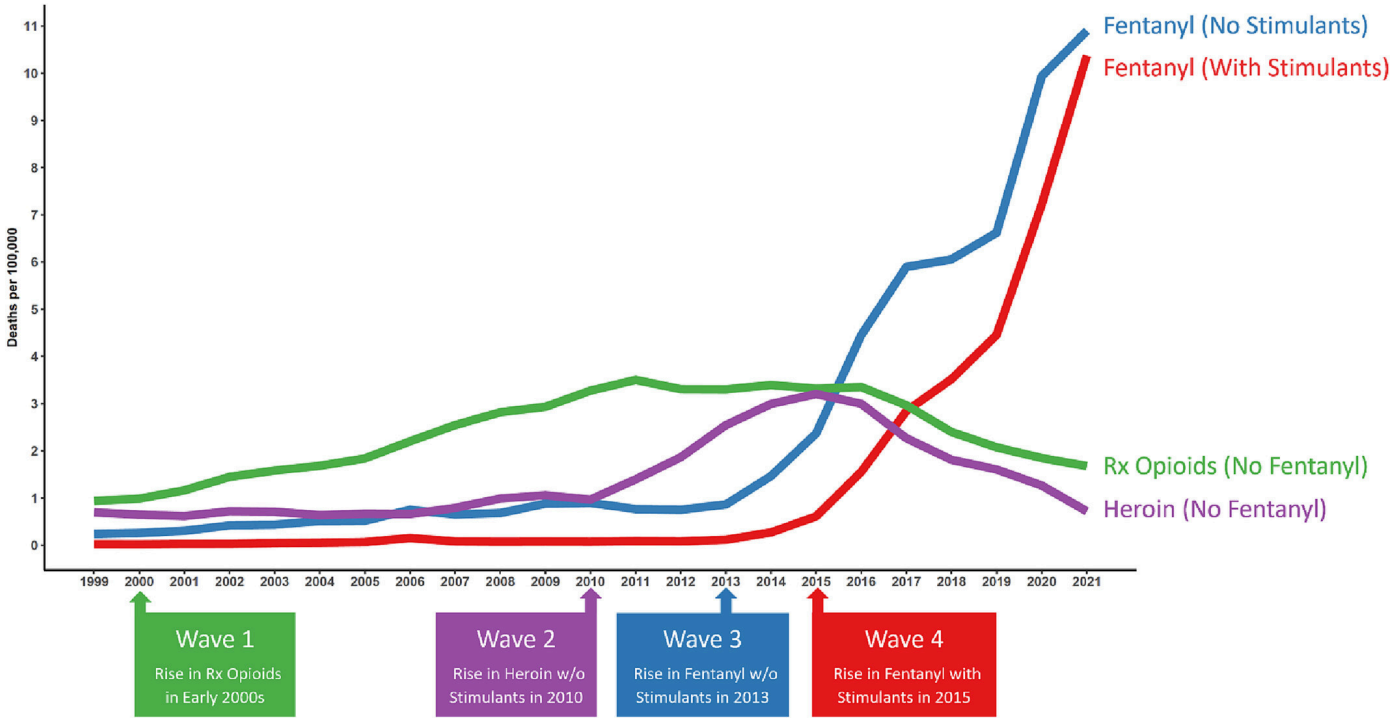
Connecticut consists of five planning regions, designated by DMHAS, each of which is managed by a Regional Behavioral Health Action Organization (RBHAO).



CONNECTICUT Mental Health & Addiction Services

BACKGROUND

The opioid epidemic in the United States has evolved in the past few decades and continues to shift. Currently, experts describe the epidemic as in its fourth "wave," characterized by an increase in fentanyl-related overdose deaths that also involve stimulants. Nationally, about one third (32.3%) of overdose deaths in 2021 involved fentanyl with stimulants, compared to 2015 when only 3.8% of deaths involved this combination of substances.[3] In 2023, nearly half (46.5%) of the overdose deaths across the US (including Connecticut, D.C., and 36 other states) involved both opioids and stimulants.[4]



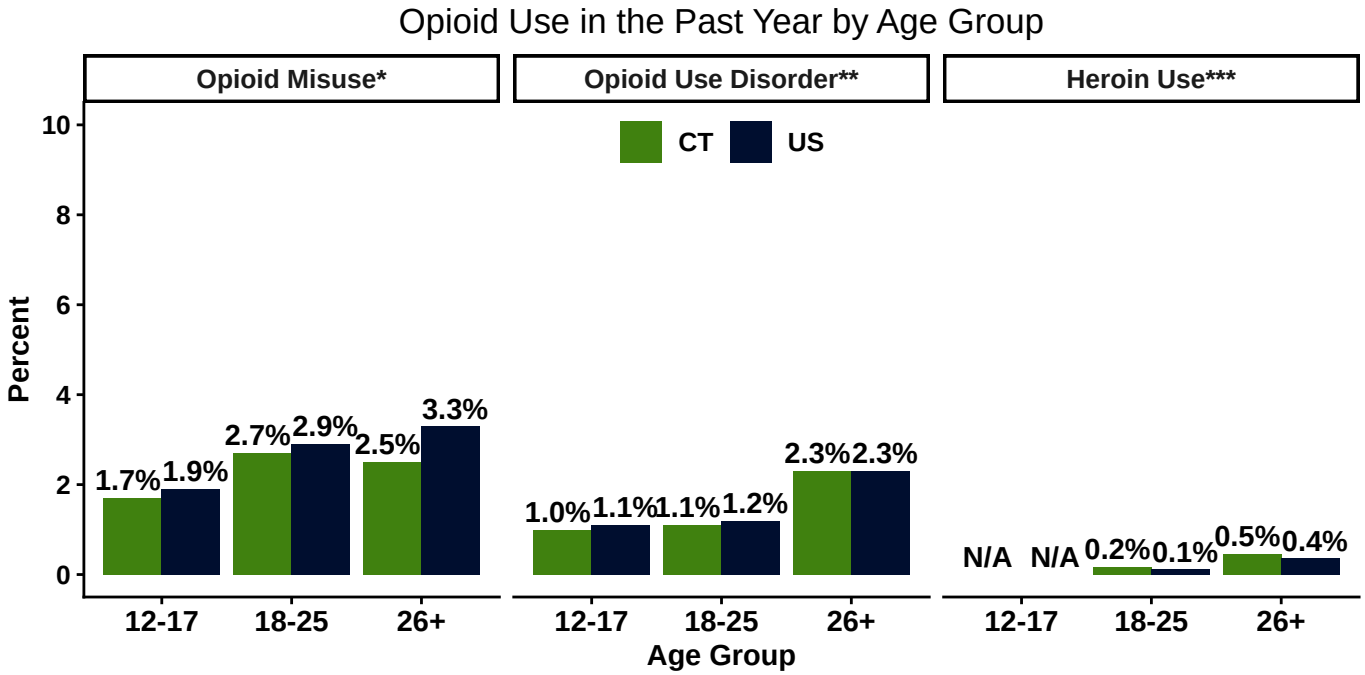
Source: Friedman J, Shover CL. Charting the fourth wave: Geographic, temporal, race/ethnicity and demographic trends in polysubstance fentanyl overdose deaths in the United States, 2010–2021. Addiction. 2023; 118(12): 2477–2485. https://doi.org/10.1111/add.16318

Fentanyl and stimulant co-involved overdose deaths have increased in Connecticut. Between 2015 and 2018, heroin was the substance most commonly involved with fentanyl-related overdose deaths. However, starting in 2019 and through 2021, cocaine has replaced heroin as the most commonly involved substance in fentanyl-related deaths.[3] This combination of substances has continued to appear; 34.5% of overdose deaths in CT involved *illegally-made fentanyls* (IMF) and cocaine in 2023.[4]

Opioid-related emerging concerns in Connecticut include carfentanil (a very potent fentanyl analog), nitazenes (synthetic opioids), and *BTMPS* (a new contaminant in illicit opioids). In 2024, carfentanil and nitazenes were each involved in 10 fatal overdoses.[5] BTMPS—originally developed for use in plastic manufacturing and not intended for human consumption—has been recently detected in the illicit drug supply in CT and is an emerging concern.[6]

PREVALENCE

The *prevalence* of *Opioid Use Disorder* (OUD) and heroin use in Connecticut is similar to national trends. However, *opioid misuse* in CT is slightly lower than the United States (US). OUD and heroin use are more prevalent among adults ages 26 and older compared to younger age groups. The prevalence of opioid misuse is slightly higher among young adults (18-25) and adults (26+) compared to youth (12-17).[7]



*Respondents were classified as misusing opioids in the past year if they reported using heroin or misusing prescription pain relievers in the past year.
**Opioid Use Disorder is defined as meeting the criteria for heroin or pain reliever use disorder.
***Estimates for youths aged 12 to 17 are not available for past year heroin use because this outcome was extremely rare among youths aged 12 to 17 in the 2022 and 2023 National Surveys on Drug Use and Health.
Source: National Survey on Drug Use and Health (NSDUH), 2022-2023

Past month heroin use has historically been similar across DMHAS planning regions.

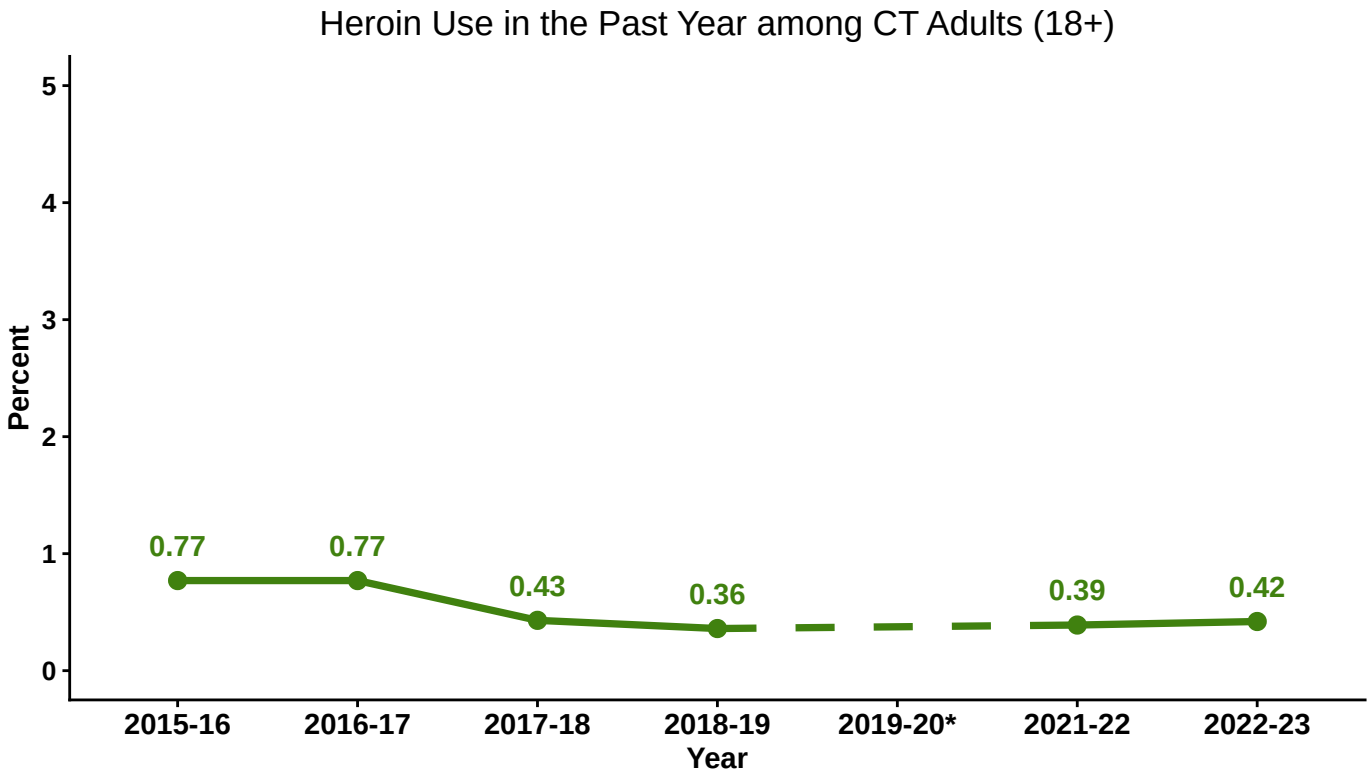
NSDUH 2016-2018 Substate Estimates[8]: Percent Reporting Past Month Use of Heroin by Age Group

Age	CT	Region 1	Region 2	Region 3	Region 4	Region 5
12-17	0.05	*	*	*	*	*
18-25	1.04	0.69	1.09	1.13	1.09	1.23
26+	0.59	0.50	0.56	0.60	0.68	0.58

*****Low precision; no estimate reported.*
Table will be updated when most recent data are released.

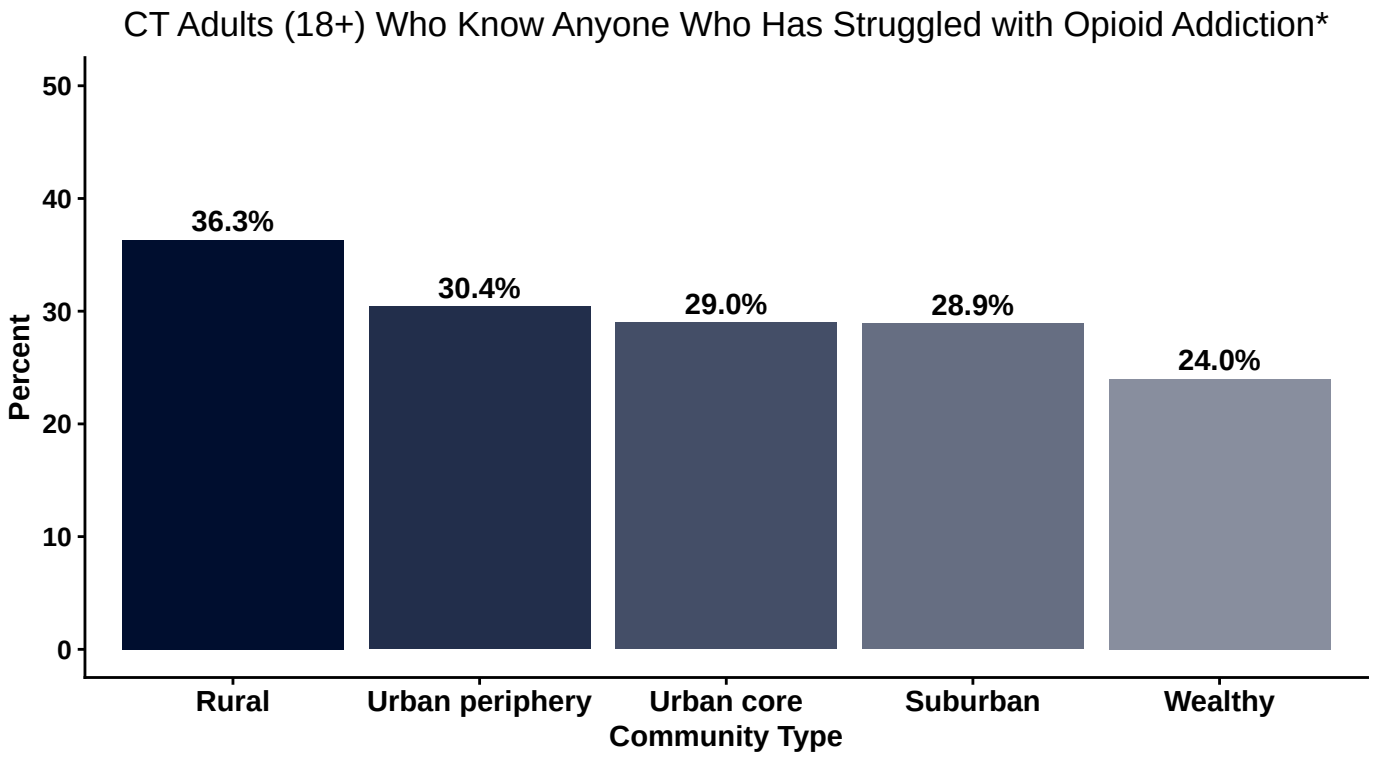
ADULT USE (AGES 18+)

Since a decrease in 2017, the low prevalence (< 0.5%) of past-year heroin use has remained relatively consistent in Connecticut.[9]



*State estimates for these years are no longer available due to impact of COVID-19 on survey methodology.
Source: National Survey on Drug Use and Health (NSDUH), 2015-2023

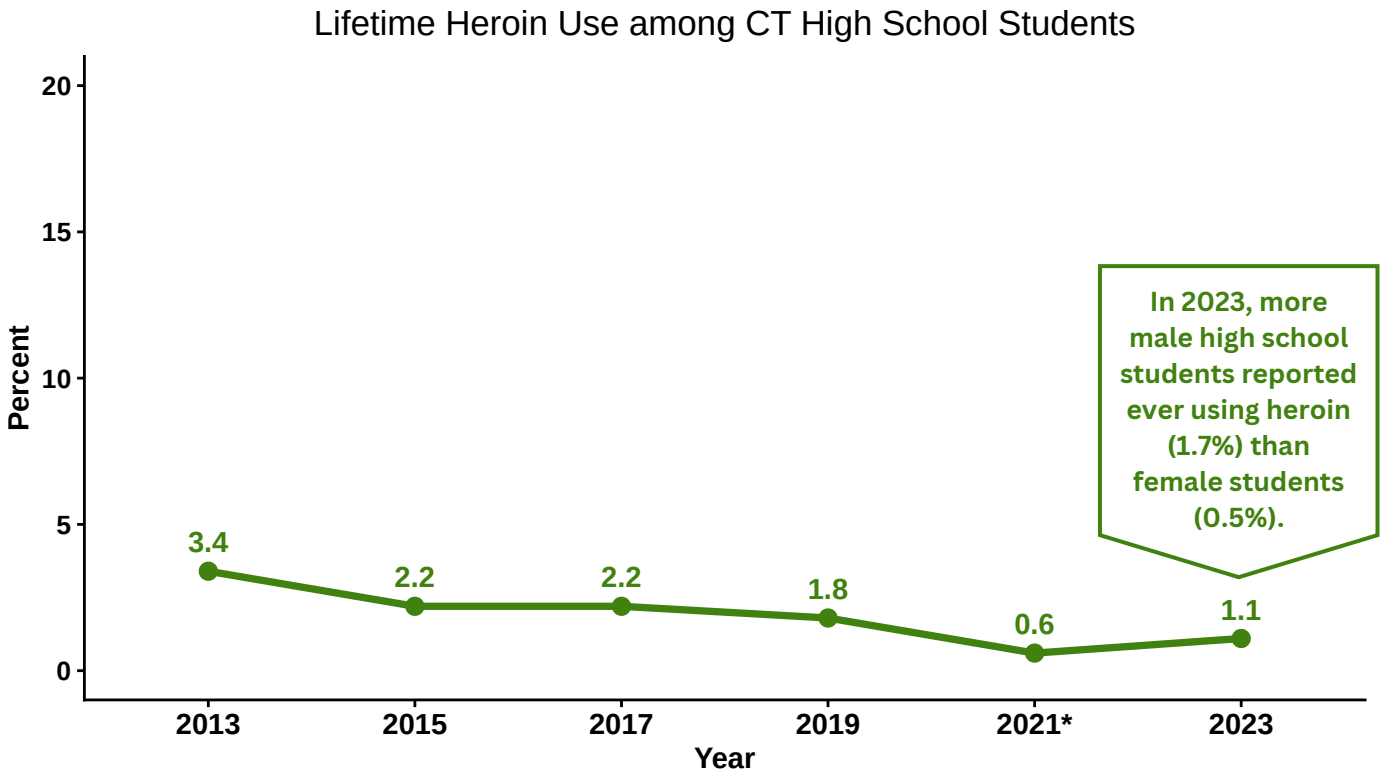
More than one third (36.3%) of adult residents in rural communities reported knowing someone who struggled with an opioid addiction in the past three years. For each of the other *community types*, a lower percentage of residents reported knowing someone who struggled with opioid addiction, with wealthy communities having the lowest at 24.0%.[10]



*Individuals who personally know someone who struggled with an addiction to heroin or other opiates at any point during the past 3 years.
Source: DataHaven Community Wellbeing Survey (DCWS), 2024

YOUTH USE (12-17)

A very low percentage of CT high school students report having ever used heroin. According to the 2023 Connecticut School Health Survey, a higher percentage of male high school students reported having ever used heroin (1.7%) than female students (0.5%).[11]



*Caution should be taken when comparing 2021 results to other years due to differences in survey methodology.
Source: Connecticut School Health Survey (CSHS), 2013-2023

RISK & PROTECTIVE FACTORS

Opioid misuse is influenced by various conditions and circumstances. Risk factors are characteristics at the individual, social, and environmental level that can increase risk for opioid misuse.

Risk Factors for Opioid Misuse [12,13,14,15,16]

Individual	Social & Environmental
• Biological factors • Age • Family history of substance use or substance use disorder (SUD) • History of misusing other substances (licit or illicit) • Prior or current substance use • Mental health conditions • Difficulty coping with stress, trauma, or emotions • History of *adverse childhood experiences (ACEs)* • Exposure to opioids in childhood and adolescence • Low perception of risk of harm • Taking prescription opioids long term for chronic pain • Impulsivity and sensation seeking • Academic and/or behavioral health problems in school	• Social, family, and/or peer norms that encourage or tolerate opioid use • Lack of parental supervision and involvement • Proximity to local access points for illicit opioids • Childhood trauma • Exposure to stressors in living environment or neighborhood • Limited access to basic resources • Stressful life situations

Protective factors are conditions or circumstances that protect individuals against opioid misuse. Similar to risk factors, protective factors exist at various levels relative to the individual.

Protective Factors against Opioid Misuse [12]

Individual	Social & Environmental
• Effective coping and problem-solving skills • Healthy lifestyle (e.g., sufficient exercise, diet, and sleep, etc.) • Religious or spiritual practices	• Social connectedness and/or support • Supportive relationships • Secure attachments in childhood • Participation in group activities outside of work and school • Adequate access to resources

EFFECTS & CONSEQUENCES

Opioids have detrimental effects on physical and mental health.
These effects may depend on duration of use and dosage amount, type of opioid and its potency, and route of administration (e.g., injection or inhalation acts faster than oral ingestion).[1]

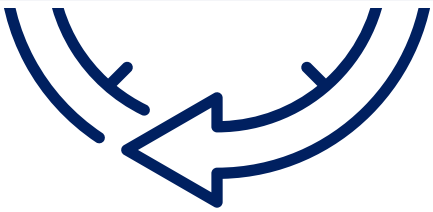
Short-term Effects [1,17,18]

- Brain stimulation ("high")
- Altered mood
- Impaired judgement
- Reduced heart rate, blood pressure, and respiration
- Heart arrhythmia (e.g., atrial fibrillation)
- Sleepiness or sleep problems
- Dizziness
- Nausea and vomiting
- Constipation
- Cardiac arrest
- Unintentional overdose and death



Long-term Consequences [1,18]

- Mental health issues
- Use of other substances
- Opioid Use Disorder (OUD) or other Substance Use Disorder (SUD)
- Cardiovascular disease (e.g., atherosclerosis)
- Weakened immune system
- Sexual dysfunction
- Drug-related fatality



Long-term Consequences of Injection Use

- Skin Infections
- Hepatitis B, C
- HIV

Warning Signs of an Opioid Overdose

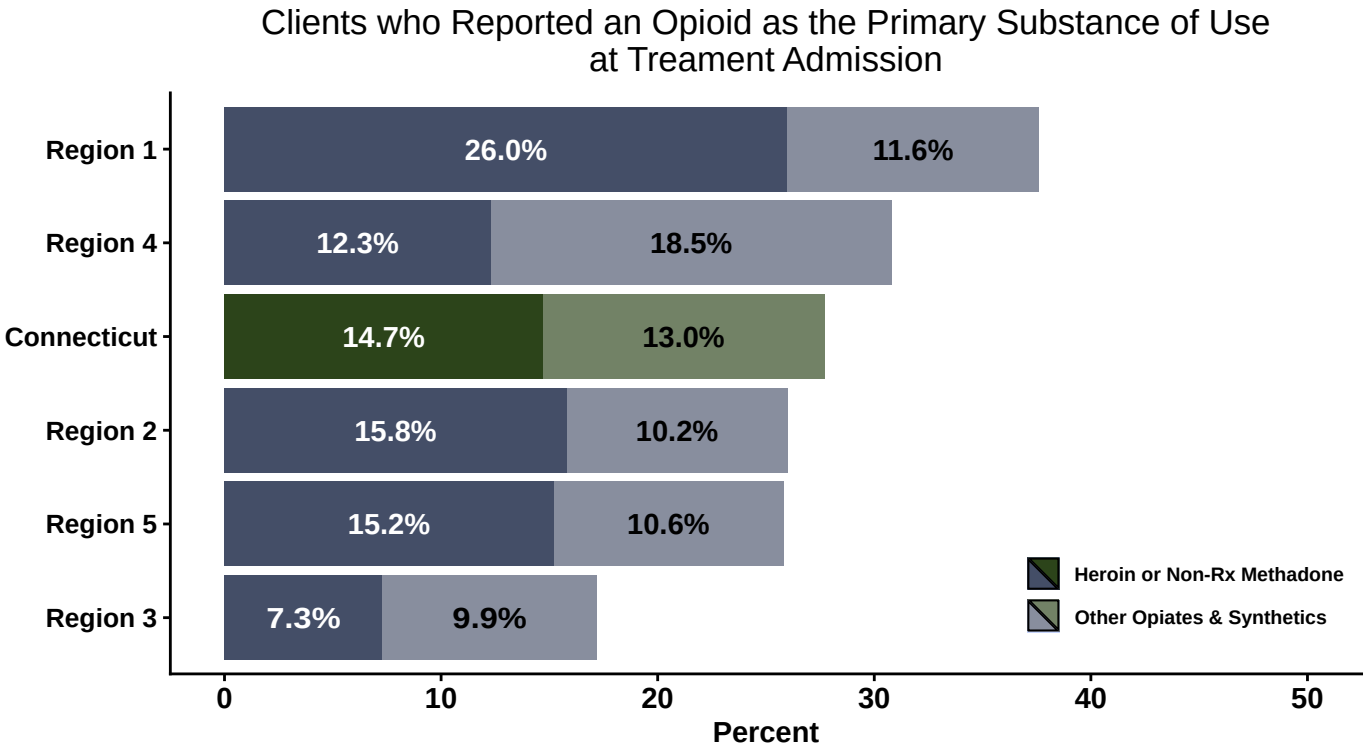
The following signs may indicate that a person is experiencing an *opioid overdose*.[1, 19]

- Extremely pale and/or clammy face
- Small constricted pupils (i.e., don't react to light)
- Unconsciousness
- Slow, shallow, or stopped breathing
- Vomiting
- Very slow or stopped heart beat
- Blue or purplish discoloration of fingernails or lips

Opioids can be addictive. Opioids enhance brain activity that affect mood and thinking by binding to specific brain receptors triggering the release of the dopamine neurotransmitter associated with pleasure and reward. The activation of these receptors result in feelings of euphoria, pain relief and relaxation, which in turn reinforce the desire to use the drug again.[1, 20]

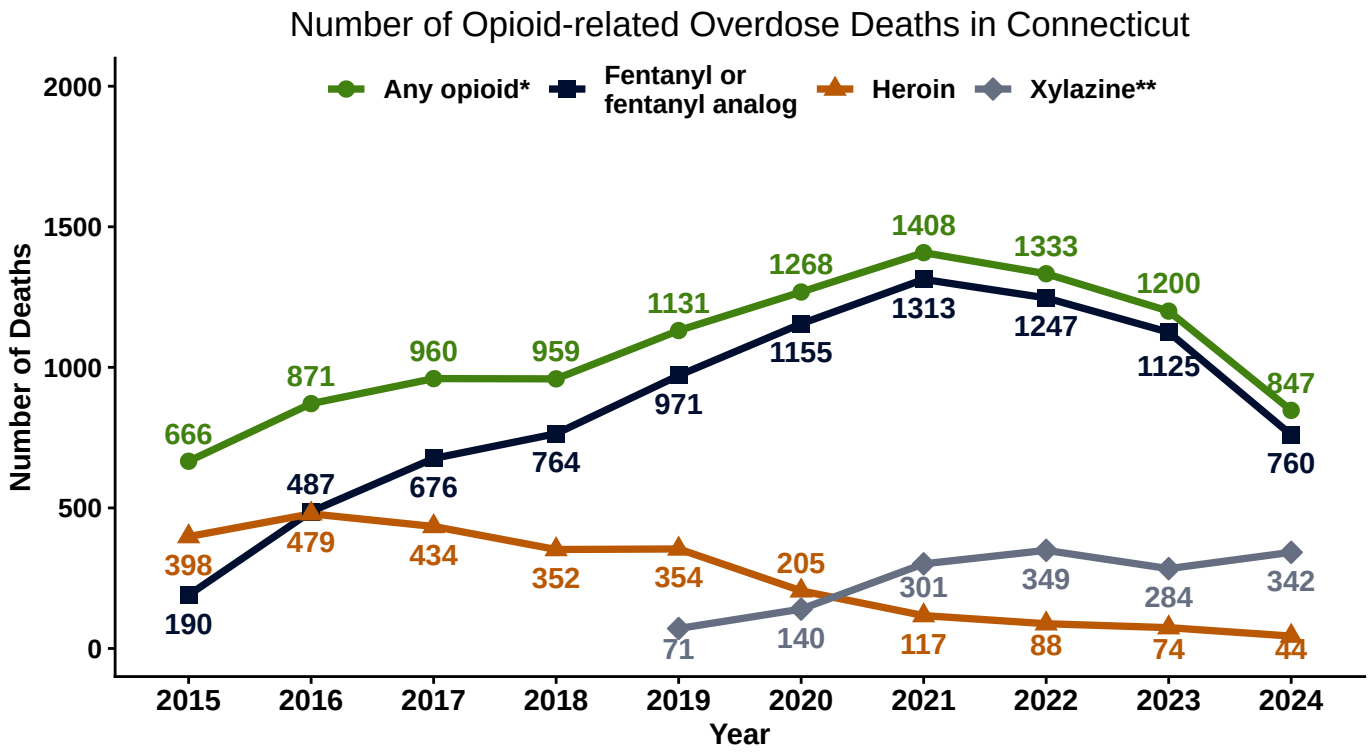
About a quarter (26.0%) of clients admitted to treatment in Region 1 reported heroin or non-prescription methadone as the primary substance of use. Other regions' admission rates with heroin or non-prescription methadone as the primary substance of use are lower, with Region 3 being the lowest at 7.3%.[21]

About one fifth (18.5%) of clients admitted to treatment in Region 4 reported an *opiate* (other than heroin or non-prescription methadone) as the primary substance of use. Other regions' *unduplicated treatment admission* rates with other opiates as the primary substance of use are lower, with Region 3 being the lowest at 9.9%.[21]



Note. The data represented here is solely based on DMHAS-funded and -operated substance use and mental health programs and does not reflect data on all individuals receiving treatment in the state.
Source: DMHAS Evaluation, Quality Management & Improvement (EQMI) Division, FY24

The number of fentanyl-related deaths in CT has decreased since 2021.
Overall, the number of deaths that involve any opioid has decreased since the height of deaths in 2021. Heroin-related deaths have decreased since 2016 as fentanyl-involved deaths continued to rise, with fentanyl-involved deaths accounting for over 90% of opioid-related deaths between 2020 and 2023. The number of xylazine-related deaths increased between 2019 and 2021, and this number has stayed relatively consistent in recent years (xylazine is not an opioid but is included here because it often co-occurs with fentanyl in fatal overdoses).[22]



*Any opioid includes fentanyl, heroin, prescription opioids, and any other opioids involved in overdose deaths.
**Xylazine is not an opioid but it is included here because it often co-occurs with fentanyl in fatal overdoses.
Source: Drug Overdose Deaths in Connecticut Data Dashboard, 2015 to 2025 (CT DPH). Accessed July 25, 2025.

CONCLUSIONS & CONSIDERATIONS

Key takeaways:

- Compared to the US, the prevalence of opioid misuse is slightly lower in Connecticut across all age groups. However, Connecticut and the nation share the same prevalence of Opioid Use Disorder, which is highest among adults (26+).
- The prevalence of heroin use is low, and the prevalence has historically been similar across regions. Young adults (18-25) in Region 1 have historically reported slightly lower prevalence compared to young adults in other regions.
- Knowing someone who has struggled with an opioid addiction is more common among adult residents in Connecticut's rural communities.
- Very low prevalence of heroin use was reported among high school students and, in 2023, a higher percentage of male students reported ever using heroin compared to female students.
- Heroin use was reported by approximately a quarter of clients as the primary reason for admission to a treatment facility.
- Heroin-involved deaths have continued to decline since 2016 as illicit opioid sales shifted from heroin to fentanyl, which is more potent.
- Overdose deaths involving any opioid peaked in 2021 and then steadily declined. A similar pattern has been seen in fentanyl-involved deaths, which accounted for over 90% of opioid-involved deaths in 2021.

Considerations:

- This profile makes use of multiple data sources; the most recent data available from these sources are utilized in developing this profile.
- Due to changes in federal guidance, analyses based on some sociodemographic *subpopulations* are not included.
- National and state level perception of risk data does not currently exist for opioid use.
- Prevalence estimates from the 2021 Connecticut School Health Survey data should be interpreted with caution and should not be considered an accurate timepoint in trend analyses due to a COVID-precipitated shift to Fall semester administration from its traditional Spring administration. Prevalence estimates from the 2021 data should be interpreted with caution because (1) the reporting of risk behaviors tends to be lower in the fall semester and (2) the survey asked about students' behavior in the past 12 months which included a time when there were restricted opportunities for social interaction due to COVID-19.
- Prevalence estimates are omitted from this profile if they meet the following criteria:
  - **CSHS:** (a) cell count < 30 OR (b) coefficient of variation > 0.30
- The treatment data presented in this profile represents data collected from DMHAS-funded and -operated substance use and mental health programs and does not reflect data on all individuals receiving treatment in the state.

ADDITIONAL RESOURCES

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

Connecticut SEOW Prevention Data Portal: http://preventionportal.ctdata.org/

CTData Collaborative: https://www.ctdata.org/

CT Department of Public Health (DPH) Opioid and Drug Overdose Statistics: https://portal.ct.gov/dph/health-education-management--surveillance/the-office-of-injury-prevention/opioid-and-drug-overdose-statistics

CT DPH Drug Overdose Deaths in Connecticut Data Dashboard: https://public.tableau.com/app/profile/heather.clinton/viz/SUDORS_Dashboard_final2/OverdoseDashboard?publish=yes

DataHaven: https://ctdatahaven.org/

GLOSSARY

Term	Definition
Adverse childhood experiences (ACEs)	Potentially traumatic events that occur in childhood (e.g., abuse, neglect, and household challenges) that may increase the risk for mental health problems, chronic illnesses, health-risk behaviors, and adverse social outcomes later in life.
BTMPS	Refers to Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate which is an industrial chemical commonly used as a hindered amine light stabilizer in plastics and other materials to protect against UV degradation.
Community type	Method of classifying communities using the Five Connecticuts (5CT), a classification system originally developed by Don Levy, Orlando Rodriguez, and Wayne Villemez. For more information, visit DataHaven's website.
Fentanyl	A powerful synthetic opioid that can be up to 100 times more potent than *morphine*. It is prescribed for pain in some situations, but it is also made illegally. It is often involved in drug overdose deaths in the US and sometimes mixed with other illicit drugs without the user's knowledge.
Heroin	A semi-synthetic opioid used illicitly and not for medicinal purposes. The seed pods of opium poppy plants make morphine, which is used to create heroin.
Illegally-made fentanyls (IMF)	The SUDORS dashboard classifies fentanyl as likely illegally made using toxicology, scene, and witness evidence. In the absence of sufficient evidence to classify fentanyl as illicit or prescription, SUDORS data classifies fentanyl as illegally made. All fentanyl analogs except alfentanil, remifentanil, and sufentanil (which have legitimate human medical use) are included as "Illegally-made fentanyls."

GLOSSARY

Term	Definition
Misuse of prescription opioids	Using prescription pain relievers in ways not directed by a doctor.
Morphine	A non-synthetic narcotic derived from opium, sometimes used as a prescription pain reliever.
Narcotic analgesics	Semi-synthetic opioids, sometimes prescribed by doctors for pain relief such as oxycodone and hydrocodone.
Opiate	A subset of opioids that are derived directly from the opium poppy plant. Morphine, codeine, opium, and thebaine are included in this category.
Opioid misuse (NSDUH 2022-23)	NSDUH respondents were classified as misusing opioids in the past year if they reported using heroin or misusing prescription pain relievers in the past year. Prescription pain relievers are a type of prescription psychotherapeutic. Misuse of prescription psychotherapeutics is defined as use in any way not directed by a doctor, including use without a prescription of one's own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor. Prescription pain relievers do not include over-the-counter drugs but may include non-opioid prescription drugs. Note: Does not include illegally made fentanyl.
Opioid overdose	An opioid overdose occurs when a person takes a higher drug dose than their body can handle. Opioids affect the brain centers that control breathing. When a person takes a high dose of an opioid, breathing can slow to life-threatening levels.

GLOSSARY

Term	Definition
Opioid Use Disorder (OUD)	The chronic use of opioids that causes clinically significant distress or impairment. Symptoms of this disorder include an overpowering desire to use opioids, increased opioid tolerance, and withdrawal syndrome when opioids are discontinued.
Protective factors	Individual, social, or environmental characteristics that reduce individuals' vulnerability to negative health outcomes.
Prevalence	The proportion of a population who have a specific characteristic in a given time period. It may be reported as a percentage (5%, or 5 people out of 100), or as the number of cases per 10,000 or 100,000 people.
Risk factors	Characteristics at the biological, psychological, family, community, or cultural level that precede and are associated with a higher likelihood of negative outcomes.
Subpopulation	A subgroup of a larger population of individuals or cases. It describes a specific group of individuals with common characteristics (e.g., race/ethnicity, age, risk factors).
Unduplicated treatment admission	Each client admitted for treatment was counted only once, rather than counting every admission.

REFERENCES

1. National Institute on Drug Abuse (NIDA). Opioids. Published November 2024. https://nida.nih.gov/research-topics/opioids#opioids

2. CDC. National Center for Health Statistics. Illicit drug use. Last Reviewed August 16, 2024. https://www.cdc.gov/nchs/hus/sources-definitions/illicit-drug-use.html

3. Friedman J, Shover CL. Charting the fourth wave: Geographic, temporal, race/ethnicity and demographic trends in polysubstance fentanyl overdose deaths in the United States, 2010–2021. Addiction. 2023; 118(12): 2477–2485. https://doi.org/10.1111/add.16318

4. CDC Overdose Prevention. SUDORS dashboard: Fatal drug overdose data. Updated August 7, 2025. https://www.cdc.gov/overdose-prevention/data-research/facts-stats/sudors-dashboard-fatal-overdose-data.html

5. Connecticut Department of Public Health. Fatal Unintentional and Undetermined Intent Drug Overdose Report, Connecticut (Dec 2019-May 2025 report). Last updated July 22, 2025. https://portal.ct.gov/dph/health-education-management--surveillance/the-office-of-injury-prevention/opioid-and-drug-overdose-statistics

6. Lawlor R, Gasinski A. CT's Fourth Wave Drug Crisis: Emerging Trends and Treatment Pathways. PowerPoint and Lecture presented at: Overdose Response Strategy hosted by Carelon Behavioral Health; November 20, 2024; Virtual; Recording: CT's Fourth Wave Drug Crisis Emerging Trends and Treatment Pathways-20241120 1802-1 on Vimeo; Slides: PowerPoint Presentation.

7. Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health (NSDUH), 2022-2023. samhsa.gov. https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health/state-releases

8. Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health (NSDUH): NSDUH Substate Releases. samhsa.gov. https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health/substate-releases/2016-2018

9. Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health (NSDUH) 2015-2023. samhsa.gov. https://datatools.samhsa.gov/saes/state

REFERENCES

10 DataHaven and Siena College Research Institute. DataHaven Community Wellbeing Survey (DCWS). ctdatahaven.org. Published November 11, 2024. https://www.ctdatahaven.org/reports/datahaven-community-wellbeing-survey

11 Connecticut State Department of Public Health (DPH). Connecticut School Health Survey (CSHS). portal.ct.gov. Published 2023. https://portal.ct.gov/dph/health-information-systems--reporting/hisrhome/ connecticut-school-health-survey

12 NIDA. Prevention. National Institute on Drug Abuse website. Published September 14, 2023. Accessed December 19, 2025. https://nida.nih.gov/research-topics/prevention#risk-and-protective-factors-impact

13 NIDA. Co-Occurring Disorders and Health Conditions. National Institute on Drug Abuse website. Published September 30, 2024. Accessed December 19, 2025. https://nida.nih.gov/research-topics/co-occurring-disorders-health-conditions

14 CDC. About Adverse Childhood Experiences. Centers for Disease Control and Prevention website. Adverse Childhood Experiences (ACEs). Published September 24, 2025. Accessed December 19, 2025. https://www.cdc.gov/aces/about/index.html

15 Dowell D, Ragan KR, Jones CM, Baldwin GT, Chou R. CDC Clinical Practice Guideline for Prescribing Opioids for Pain — United States, 2022. MMWR. 2022;71(3):1-95. https://www.cdc.gov/mmwr/volumes/71/rr/rr7103a1.htm

16 Qeadan F, Thornquist R, Tingey B. Syndemic interactions of chronic pain, mental health problems, and opioid misuse and their association with academic performance and quality of life among college students. Soc Sci Med. 2025;381:118243. doi:10.1016/j.socscimed.2025.118243

17 NIDA. Commonly abused drugs chart. Published February 2007. Accessed January 13, 2026. https://nida.nih.gov/sites/default/files/cadchart.pdf

18 Toska E, Mayrovitz HN. Opioid impacts on cardiovascular health. Cureus. 2023;15(9):e46224. doi:10.7759/cureus.46224

19 Connecticut Department of Public Health (DPH). Opioids and Drug Overdose Prevention. https://portal.ct.gov/dph/health-education-management--surveillance/the-office-of-injury-prevention/opioids-and-prescription-drug-overdose-prevention-program#Signs. Accessed Aug 15, 2025.

REFERENCES

20 Volkow ND, Michaelides M, Baler R. The Neuroscience of Drug Reward and Addiction. Physiol Rev. 2019;99(4):2115-2140. doi:10.1152/physrev.00014.2018

21 Connecticut Department of Mental Health and Addiction Services. (2024, December 16). Data extracted from the DMHAS Enterprise Data Warehouse.

22 Connecticut Department of Public Health: Injury and Violence Surveillance. Drug overdose deaths in Connecticut data dashboard, 2015 to 2025. https://public.tableau.com/app/profile/heather.clinton/viz/SUDORS_Dashboard_final2/OverdoseDashboard. Published June 17, 2020. Updated July 25, 2025. Accessed July 25, 2025.