2019 Connecticut Epidemiological Profile: Prescription Drugs

A product of the State Epidemiological Outcomes Workgroup (SEOW)

Non-medical use of prescription drugs is a problem that continues to be a concern in the U.S., including within Connecticut. The types of prescription drugs that are most commonly misused include painkillers (opioids), tranquilizers, sedatives, benzodiazepines, and stimulants. Oxycodone (OxyContin), oxymorphone, tramadol, and hydrocodone are examples of opioid pain medications. **Opioid painkillers** work by mimicking the body's natural pain-relieving chemicals, so the user experiences pain relief. Opioids can also induce a feeling of euphoria by affecting the parts of the brain that are involved with feeling pleasure.

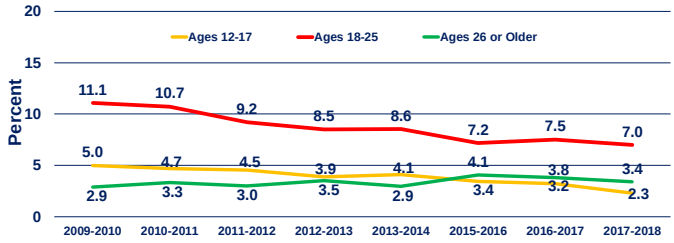
Tranquilizers, sedatives and benzodiazepines are central nervous system depressants often prescribed for anxiety, panic attacks and sleep disorders. Examples include Xanax, Valium, Klonopin, Ativan and Librium. These drugs can also slow normal brain function.

Stimulants increase alertness, attention and energy by enhancing the effects of norepinephrine and dopamine in the brain. They can produce a sense of euphoria and are prescribed for attention-deficit/ hyperactivity disorder (ADHD), narcolepsy and depression.[1]

Prevalence and Use

- Among prescription medications, pain relievers are the most frequently used for non-medical purposes in the US. The 2017-2018 National Survey of Drug Use and Health (NSDUH) reported that during the past year, 3.9% of the US population aged 12 and older (an estimated 9.9 million) had used prescription pain relievers non-medically, 2.4% used sedatives and tranquilizers (6.4 million), and 1.9% stimulants (5.1 million).[2]
- In Connecticut, the 2017-2018 NSDUH found that 3.7% of individuals aged 12 or older reported nonmedical use of pain relievers during the past year. The highest rate of pain reliever misuse was reported by 18-25 year olds (7%), followed by those 26 or older (3.4%), and youth ages 12-17 (2.3%). The 2018 national NSDUH data show that the majority of persons misusing prescription pain relievers report obtaining those drugs from families and friends (51.3%), or being prescribed them by medical providers (36.7%).[2]
- NSDUH data indicates that the prevalence of past year non-medical use of pain relievers in Connecticut has decreased among 12-17 and 18-25 year-olds since 2009, but has not decreased among adults aged 26 and older (Figure 1).

Figure 1. Past Year Non-Medical Use of Pain Relievers by Age: Connecticut, 2009-2018



- According to the 2019 Connecticut School Health Survey (CT's Youth Risk Behavior Surveillance survey), 10.1% of high school students reported ever taking prescription drugs without a doctor's prescription.[3] Non-medical use of prescription drug (NMUPD) rates were highest for 12th graders at 10.5%. Hispanic students had the highest rates (14.2%), significantly higher than White non-Hispanic (8.0%). The rates among Black students (12.8%) were also significantly higher than White non-Hispanics. The NMUPD rates were slightly higher among females (11.3%) than males (9.1%).

Who is at risk?

- Persons at risk of misusing prescription drugs include[4]:
  - Those with past year use of other substances, including alcohol, heroin,

[1] https://www.ncadd.org/about-addiction/drugs/prescription-drugs
[2] NSDUH (2017-2018)
[3] Connecticut School Health Survey, 2019 (CT YRBSS)
[4] Bali V. Research in Social and Administrative Pharmacy 2013; 9(3): 276–287.

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marijuana, inhalants, cocaine and methamphetamine;
    - People who take high daily dosages of opioid pain relievers;
    - Persons with mental illness;
    - People who use multiple controlled prescription medications, often prescribed by multiple providers.
    - Individuals with disabilities are at increased risk of prescription opioid misuse and use disorders.[5]
- Among all fatal overdoses involving prescription opioids in Connecticut in 2019, the majority occurred among non-Hispanic whites, with male deaths occurring 1.3-2.8 times more frequently than females in each racial/ethnic group;[6]
- The elderly population may be at risk of consequences of prescription drug misuse, as they use prescription medications more frequently compared to the general population and may be at higher risk of medication errors.[7]
- Almost 2 in 3 (64%) non-heroin opiate treatment admissions in 2017 were between the ages of 21 and 40 years old, 70% were white, and 61% were male.[8]

Impact

- Prescription opioid misuse is a risk factor for heroin and other illicit opioid misuse, including illicitly manufactured fentanyl. While the estimated proportion of individuals who transition to heroin following prescription opioid misuse is low (<5%), a majority of those who use heroin initiated opioid use with NMUPD.[9,10]
- According to reports from the Office of the Chief Medical Examiner (OCME), Connecticut experienced 1,127 opioid-involved fatalities in 2019, including 131 that involved a prescription opioid; 92 involved oxycodone, 20 oxymorphone, 14 hydrocodone, 15 tramadol, and 14 hydromorphone.[5]
- Approximately 12% of all opioid overdose fatalities involved a prescription opioid, but only 15% of those overdoses involved only the prescription opioid. The majority involved multiple substances; 54% also involved fentanyl, 38% involved benzodiazepines, and 20% involved heroin.
- According to data from the Treatment Episode Data Set (TEDS), substance misuse treatment admissions for non-heroin opiates in Connecticut increased dramatically from 889 in 2001 to 2,919 in 2017, accounting for 4.2% of all treatment admissions in 2017.[6] In Connecticut, non-heroin or "other opiates" admissions includes admissions for non-prescription use of methadone, codeine, morphine, oxycodone, hydromorphone, meperidine, opium, and other drugs with morphine-like effects.[11]
- Severe respiratory depression, which can lead to hypoxia, or reduced oxygen to the brain, can have short- and long-term psychological and neurological effects, including coma, permanent brain damage and death.[12]
- Opioid poisoning ER visits and hospital admissions are costly. Between 2006 and 2011, the average charge per ER visit nationally was $3,515.27 for those discharged and $27,491.87 for those admitted.[13] It has been estimated that the cost of opioid analgesic abuse in the US in 2007 was $55.7 billion.[14]

Connecticut SEOW Prevention Data Portal

For more data and information on substance use in Connecticut, visit the
Connecticut SEOW Prevention Data Portal
http://preventionportal.ctdata.org/

[5] Lauer EA et al. Disability and Health Journal 2019;12(3):519-522.
[6] Office of the Connecticut Chief Medical Examiner
[7] Perez-Jover V et al. Int J of Environmental Research and Public Health 2018; 15:310.
[8] Treatment Episodes Data Set (2017). https://www.samhsa.gov/data/sites/default/files/cbhsq-reports/TEDS-2017.pdf
[9] Jones CM. Drug Alcohol Depend 2013; 132:95-100.
[10] Muhuri PK et al. CBHSD Data Review, 2013. https://www.samhsa.gov/data/sites/default/files/DR006/DR006/nonmedical-pain-reliever-use-2013.htm
[11] https://wwwdasis.samhsa.gov/webt/definitions.htm
[12] NIDA-"What are the consequences of Opioid Abuse?" November 2014
[13] Tadros MD, et al., Emergency Visits for Prescription Opioid Poisonings, The Journal of Emergency Medicine, Volume 49, Issue 6, December 2015, Pages 871–877
[14] Roland CL, et al. Pain Med. 2011 Apr;12(4):657-67. doi: 10.1111/j.1526-4637.2011.01075.x. Epub 2011 Mar 10.