

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

Non-medical use of prescription drugs is a problem that is of increasing concern in the U.S., as well as Connecticut.

The types of prescription drugs that are most commonly misused include painkillers (opioids), tranquilizers and sedatives, and stimulants. Oxycodone, Hydrocodone, Methadone and Oxymorphone are examples of opioid pain medications. Opioids work by mimicking the body's natural pain-relieving chemicals, so the user stops feeling pain. Opioids can induce a feeling of euphoria by affecting the parts of the brain that are involved with feeling pleasure. Tranquilizers and sedatives are nervous system depressants often prescribed for anxiety, panic attacks and sleep disorders. Examples are Xanax, Valium and Librium. Benzodiazepines (e.g., Xanax, Lorazepam, Clonazepam, and Diazepam) are central nervous system depressants that 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.<sup>1</sup>

### Consumption

The 2014-2015 National Survey of Drug Use and Health (NSDUH) found that 7.1% of the US population aged 12 and older (or 18.9 million) had used prescription drugs non-medically in the past year, including pain relievers (12.5 million users), sedatives and tranquilizers (7.5 million users), and stimulants (5.3 million users), with over 2% reporting current use of the substances. In Connecticut, the 2014-2015 NSDUH found that 655,000 youths in Connecticut ages 12-17 reported nonmedical use of prescription drugs (NMUPD).

In 2013-2014, NSDUH data showed that the prevalence of past year non-medical use of pain relievers in

Connecticut was 2.9% for 12-17 year olds, 8.6% for young adults ages 18-25, and 4.1% for adults ages 26 or older. There has been a slight trend toward less misuse of prescription drugs among both young adults and older adults, although use among adolescents remained relatively stable since 2009-2010.

According to the 2015 Connecticut Youth Risk Behavior Surveillance survey (YRBSS), 12.0% of high school students reported ever taking prescription drugs without a doctor's prescription. Non-medical use of prescription drug (NMUPD) rates were highest for 12<sup>th</sup> graders at 16.3%. Although not statistically significant, Hispanic/Latino students had the highest rates of NMUPD (13.6% compared to 11.4% among White non-Hispanic and 10% among Black non-Hispanic students. The NMUPD rates were similar for both male and female students.

In addition, the state's 2015 YRBSS found that 6.3% of high school students reported having taken over-the-counter drugs to get high. The rates of misusing over-the-counter drugs reported across race/ethnicity groups were 8.4% for Hispanics/Latinos, 5.8% for Whites, and 4.6% for Blacks.

### At-Risk Populations

- Persons at risk of misusing prescription drugs include:
  - Those with past year use of other substances, including alcohol, heroin, marijuana, inhalants, cocaine and methamphetamines;
  - Individuals with family incomes less than \$20,000 and \$40,000-\$74,999;<sup>2</sup>
  - People who take high daily dosages of opioid pain relievers;
  - Persons with mental illness;<sup>3</sup>

<sup>1</sup> <https://www.ncadd.org/about-addiction/drugs/prescription-drugs>

<sup>2</sup> Determinants of nonmedical use, abuse or dependence on prescription drugs, and use of substance abuse treatment, Research in Social and Administrative Pharmacy, Volume 9, Issue 3, May-June 2013, Pages 276-287 Vishal Bali, M.S. et al.

<sup>3</sup> OPIOID ABUSE IN THE U.S. AND HHS ACTIONS TO ADDRESS OPIOID-DRUG RELATED OVERDOSES AND DEATHS, 03/26/2015

- People who obtain multiple controlled substance prescriptions (especially the combination of opioid analgesics and benzodiazepines) from multiple providers;
- Analyses of the 2015 national NSDUH data show that the majority of persons misusing prescription drugs report obtaining those drugs from families and friends, or being prescribed them by medical providers.
- Between 2012-2015, the majority of opioid overdoses in Connecticut occurred among non-Hispanic whites, with male deaths occurring 2-3 times more frequently than females in each racial/ethnic group;<sup>4</sup>
- Among those in treatment for non-heroin opiate use disorder, males and non-Hispanic whites are overrepresented.
- Misuse of prescription drugs may be the most common form of drug abuse among the elderly who use prescription medications approximately three times as frequently as the general population and have been found to have the poorest rates of compliance with directions for taking a medication.
- The national 2015 NSDUH data showed that past year users of other substances (alcohol, heroin, cocaine, marijuana, inhalants, methamphetamines) were more likely than others to have misused prescription drugs, as were adults 18 and over with mental illness.
- Over half of other opiate treatment admissions in 2016 were between the ages of 21 and 35 years old, 80% were white, and 60% were male.<sup>5</sup>

## Consequences

- According to OCME reports, Connecticut saw 853 opioid-involved fatalities in 2016, including 111 that involved Oxycodone, 7 involving Oxymorphone, 20 with Hydrocodeine, 85 with Methadone, 17 with Tramadol, and 25 with Morphine.
- According to Connecticut Treatment Admission data from TEDs, other opiate use problems accounted for 4.2% of treatment admissions in 2016.<sup>5</sup> “Other opiates” includes admissions for non-prescription use of methadone, codeine, morphine, oxycodone, hydromorphone, meperidine, opium, and other drugs with morphine-like effects.<sup>6</sup>
- Substance abuse treatment admissions for other opiates increased dramatically from 889 in 2001 to nearly 3,000 in 2016.<sup>5</sup>
- Severe respiratory depression, which can lead to hypoxia, reduced oxygen to the brain, can have short- and long-term psychological and neurological effects, including coma, permanent brain damage and death.<sup>7</sup>
- Opioid poisoning ER visits and hospital admissions are costly. Between 2006 and 2011, the average charge per ER visit nationally was \$3515.27 for those discharged and \$27,491.87 for those admitted.<sup>8</sup> It has been estimated that the cost of opioid analgesic abuse in the US in 2007 was \$55.7 billion.<sup>9</sup>

<sup>4</sup> CT OCME Accidental Drug OD Death 2012-2015, 9.22.16; <https://data.ct.gov/browse?q=medical%20examiner&sortBy=relevance&utf8=%E2%9C%93>

<sup>5</sup> <https://www.dasis.samhsa.gov/webt/quicklink/CT16.htm>

<sup>6</sup> <https://www.dasis.samhsa.gov/webt/definitions.htm>

<sup>7</sup> NIDA-“What are the consequences of Opioid Abuse?” November 2014 <https://www.drugabuse.gov/publications/research-reports/prescription-drugs/opioids/what-are-possible-consequences-opioid-use-abuse>

<sup>8</sup> Tadros MD, et al., Emergency Visits for Prescription Opioid Poisonings, *The Journal of Emergency Medicine*, Volume 49, Issue 6, December 2015, Pages 871–877

<sup>9</sup> Roland CL, et al. **Societal costs of prescription opioid abuse, dependence, and misuse in the United States.** *Pain Med.* 2011 Apr;12(4):657-67. doi: 10.1111/j.1526-4637.2011.01075.x. Epub 2011 Mar 10.

## Selected Indicators

- NSDUH
- CT School Health Survey (YRBSS)
- Other Opiates/Opioids Substance Abuse Treatment Admissions (TEDS)
- Emergency Room Visits
- Opioid-involved fatalities
- Drug overdose deaths
- CT Prescription Monitoring and Reporting System (CPMRS)
- School attendance rates
- School suspensions/expulsions