

## RESOURCE GUIDE

Personal Responsibility  
Education Program

# Opioids and Adolescent Health

September 2023



The U.S. opioid crisis is affecting youth of all backgrounds and is not limited to youth of a specific socioeconomic status, race, gender, or geographic location, although the crisis has affected some adolescent demographic groups more than others (Byregowda et al., 2023). This resource guide provides an overview of opioid use, impacts of and factors driving use, treatments for opioid use disorder and overdose, and tips and resources to help youth-serving professionals address adolescent opioid use. Recent data indicate that although illicit drug use among youth is decreasing, fatal overdose risk among adolescents has increased (Tanz et al., 2022). Nearly three-quarters of overdose deaths among adolescents between 2019 and 2021 involved illegally manufactured fentanyl (Tanz et al., 2022).

## WHAT CAN ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH PROFESSIONALS DO ABOUT ADOLESCENT OPIOID USE?



[Get Educated and  
Educate Others](#)



[Be Alert and  
Ready to Help](#)



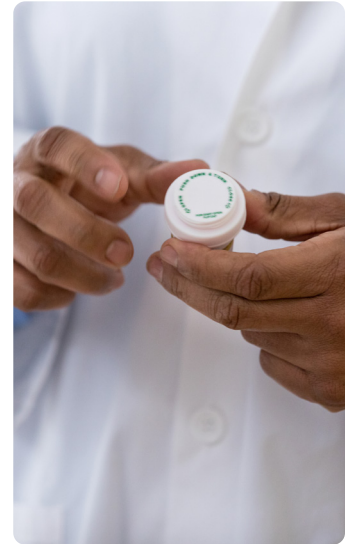
[Organize, Collaborate,  
and Advocate](#)

## WHAT ARE OPIOIDS AND HOW DO THEY WORK?

Opioids are prescription drugs primarily used to alleviate pain (e.g., after surgery) (CDC, 2022a). Some examples of commonly prescribed opioids are oxycodone, codeine, fentanyl, morphine, and hydrocodone. Heroin, an illegal drug in the United States, is also an opioid. Although opioids can be referred to by their prescription names, there are also street names for each of these drugs (youth.gov, n.d.). For example, in some places heroin might be referred to as White Horse or H, and Codeine might be referred to as Captain Cody. For more information about the prescription names and street names see [NIH's street name library](#).

The chemicals in opioids attach to opioid receptor cells in the brain, spinal cord, and other organs in the body that are involved in feelings of pain and pleasure. When opioids bind to these receptor cells, they release large amounts of dopamine throughout the body and block pain (NIDA, 2021). Opioids can make people feel relaxed and euphoric. Other side effects of opioid use can include sleepiness, clouded thinking, slowed breathing, nausea, and constipation (NIDA, 2021). It takes approximately 15–30 minutes to feel pain relief and a sense of euphoria if an opioid is taken by mouth and less time if it is taken by intravenous injection or snorted.

Opioid pain relievers are generally safe when taken for a short time and as prescribed. However, because they produce feelings of euphoria in addition to pain relief, they are often misused (e.g., administered in a different way, taken in a larger quantity than prescribed, or taken without a prescription). Regular, long-term opioid use, even as prescribed by a doctor, can lead to tolerance, which occurs when a person no longer responds to a drug in the way they did initially (NIDA, 2021). When a person builds an opioid tolerance, they need higher doses to achieve the same effect. Drug dependence occurs when the neurons adapt so they only function normally in the presence of the drug and the absence causes severe physiological reactions (NIDA, 2021).



## WHO IS USING OPIOIDS?



There are several nationally representative surveys that assess drug use among adolescents and adults, including the [Monitoring the Future Survey](#) (middle and high school students), the [National Survey on Drug Use and Health](#) (participants ages 12 and up), and the [Youth Risk Behavior Survey](#) (high school students). Across these three data sources, surveys suggest that adolescent opioid use peaked in the early 2000s and has since been decreasing (Byregowda et al., 2023; Johnston et al., 2023). However, a recent increase in overdose deaths among adolescents suggests that the toxicity of drugs has increased (Tanz et al., 2022). According to a study by Byregowda and colleagues, more than half of youth who reported any lifetime nonmedical use of prescription opioids (NMUPO) reported using opioids three times or more during their lifetime. Further analysis of youth who report NMUPO in the past 30 days suggest that NMUPO is associated with current alcohol and cannabis use (Byregowda et al., 2023).

The NMUPO remains high among adolescents and poses a significant risk to adolescent health. A recent analysis of the 2019 Youth Risk Behavior Survey (YRBS) estimated that 15% of all U.S. high school seniors have had nonmedical exposure to opioids with wide variation by state of residence, ranging from 7% in Nebraska to 19% in Alabama (CDC, n.d.-a). Opioids are a problem for youth across the nation and in the U.S. territories, regardless of location. For more detailed information about state specific NMUPO visit [CDC's Youth Risk Behavior Surveillance System](#) web page.

## WHAT ARE SOME OF THE CONSEQUENCES OF NMUPO?

Opioid misuse can have several negative health consequences. A recent study determined there is an increased risk of heroin use among adolescents who initiated NMUPO (McCabe et al., 2021). This increased risk can lead to increased exposure to HIV and hepatitis. NMUPO can also lead to withdrawal symptoms (e.g., restlessness, muscle and bone pain, insomnia, diarrhea, vomiting, cold flashes) or overdose that can lead to death (NIDA, 2021; Tanz et al., 2022).

Additionally, adolescents who misuse opioids are more likely to attempt suicide, have lower academic performance, be absent from school, drop out of school, associate with antisocial peer groups, and engage in sexual risk behavior than adolescents who do not misuse opioids (Bhatia et al., 2020; Clayton et al., 2016; Paolini, 2016). When pregnant people use opioids, there are serious risks to the pregnant person and infant including preterm birth, still birth, maternal mortality, and neonatal abstinence syndrome (CDC, n.d.-b.; 2022a). In 2019, 10% of surveyed teens who delivered a baby in the past 3 months reported prescription opioid use during pregnancy (Ko et al., 2020). It is important for pregnant people to work with health care providers to determine the best treatment during and after pregnancy (CDC, n.d.-b.; 2022a).



## WHAT FACTORS ARE DRIVING OPIOID MISUSE AND OVERDOSE AMONG ADOLESCENTS?

**Prescriptions for Opioids.** In the early 2000s, there was consistent growth in the number of prescriptions written for opioids in the United States, peaking at 255 million prescriptions dispensed in 2012. Since 2012, the number of prescriptions overall and the rate of prescriptions written per person has declined but remains high and varies by county (CDC, 2021b). Concerns about prescribing practices and the link between prescription use of opioids and NMUPO led to additional scrutiny and prescribing guidelines disseminated by the Centers for Disease Control and Prevention (Dowell et al., 2022).

**Influence of Social and Psychological Factors.** Adolescents often misuse opioids for the same reasons they misuse other illicit substances (e.g., curiosity, boredom, peer pressure, wanting to get high, self-medication of physical or emotional pain, lack of school connectedness, alienation, rebelliousness, history of posttraumatic stress disorder, sexual abuse, witnessing violence, and lower socioeconomic status) (Miech et al., 2017; Paolini et al., 2016). Youth who experienced a major depressive episode in the past year were more likely to use some substances—including opioids—in the past year than their peers who did not experience a major depressive episode. This suggests that mental health and substance use are connected (SAMHSA, 2022). Other social factors that can influence opioid misuse are lack of parental involvement, parental use of opioids, and favorable parental attitudes toward opioid use (Griesler et al., 2021; Miech et al., 2015).

**Ease of Obtaining Opioids.** Opioids are relatively easy for youth to access. According to one study, adolescents aged 12–17 who reported nonmedical opioid use obtained opioids for free (46%) or purchased them (20%) from a friend or relative (Volkow, 2009). Other sources of opioids include legal prescriptions, persons who sell drugs, and online (Volkow, 2009). Some teens (and adults) will turn to heroin because it can be purchased on the street for a significantly lower cost than prescription opioids, especially if they build a tolerance to a prescription opioid and can no longer obtain a prescription from their physician.





**Combining Opioids with Other Substances.** Adolescents may mix prescription opioids with other substances (e.g., marijuana or alcohol) (NIDA, 2013). They may also use opioids intensely, such as in higher doses or by snorting or injecting. Both mixing substances and intense use can lead to a higher risk of unintentional overdose. Recent data on increases in overdose deaths among adolescents suggest that more potent drugs, such as illegally manufactured fentanyl, which are produced to mimic pills like oxycodone or alprazolam, are leading to overdose (Tanz et al., 2022).

**Lack of Services.** There is a lack of prevention and treatment services for opioid use disorder, especially for adolescents. There are not enough facilities that provide medications for opioid use disorder (MOUD), and those that are operating are stretched thin (Krawczyk et al., 2022). Recent data show that in 2021, 7.1% of adults ages 26 or older with an illicit drug or alcohol use disorder received treatment compared with 3.5% of youth ages 12 to 17 (SAMHSA, 2022).

## HOW IS OPIOID USE DISORDER TREATED?

Opioid use disorder is a chronic disorder diagnosed based on a problematic pattern of opioid use. Opioids can lead to physical dependence in a relatively short time (4 to 8 weeks). Physical dependence is when the body has difficulty functioning without opioids and stopping opioid use can result in withdrawal symptoms (APA, 2022).

**Treatment for opioid use disorder** (APA, 2022): Effective medications exist to treat opioid use disorder. *Agonists* like methadone (which activate opioid receptors) and *partial agonists* like buprenorphine (which also activate opioid receptors but produce a diminished response) can be used. Both of these medications stop and prevent opioid withdrawal symptoms and reduce opioid cravings, allowing the person to focus on other aspects of recovery. *Antagonists*, like naltrexone, block opioid receptors and interfere with the rewarding effects of opioids. Treatment also can include cognitive behavioral approaches and access to recovery services. The Substance Abuse and Mental Health Services Administration (SAMHSA) defines recovery as “a process of change through which individuals improve their health and wellness, live self-directed lives, and strive to reach their full potential” (SAMHSA, 2023). Recovery services help advance this definition through four main dimensions: health, home, purpose, and community (SAMHSA, 2023). It is worth noting that treatment for opioid use disorder is based on individualized needs and can change over time as those needs change.



## HOW IS OVERDOSE FROM OPIOIDS REVERSED?

Overdose can be reversed with the use of naloxone, which can be administered through a prefilled nasal spray or injection (CDC, 2023). CDC reports that during nearly 4 in 10 overdose episodes reported over the past year, someone else was present with the victim. This strongly supports the notion that having naloxone available is an important tool for saving lives (CDC, 2023). Recent research also suggests that policies supporting naloxone availability and distribution do not increase illicit drug use among adolescents (Bruzeliuss et al., 2023).

# WHAT CAN YOUTH-SERVING PROFESSIONALS DO ABOUT ADOLESCENT OPIOID USE?

## Get Educated and Educate Others



- Participate in professional development training about substance use broadly and opioid use and misuse specifically.
- Develop and provide educational activities for parents, schools, and the community that specifically address adolescent opioid use and misuse (as opposed to substance use in general).
- Develop, test, and promote effective messages about preventing opioid misuse in adolescent populations.
- Integrate specific messages and information about opioids into other health education efforts (e.g., sexual health, mental health, fitness).

## Be Alert and Ready to Help



- Recognize the signs of opioid misuse, including changes in a young person's relationships with family or friends, confusion, poor concentration, avoiding eye contact, pinpoint pupils, unexplained giggling, clumsiness, lack of coordination, slow gait, drowsiness, flushness of the face, mood changes, and changes in sleeping patterns.
- Recognize the signs of opioid overdose: small, constricted "pinpoint" pupils; falling asleep or loss of consciousness; slow, shallow breathing; choking or gurgling sounds; limp body; pale, blue, or cold skin (CDC, 2021a).
- Know the resources and services in your community and provide referrals when appropriate. Make sure the resources in your community provide evidence-based treatment for opioid use disorder.
- Know and abide by the [reporting requirements](#) that apply to your profession.
- Avoid stigmatizing or otherwise shaming, ridiculing, or blaming people who use drugs. Doing so will alienate adolescents and discourage them from asking for help.
- Remember that opioid use disorder is a chronic condition and should be treated as such. Some people who have opioid use disorder may need continuing care, including recovery support and MOUD (APA, 2022).

## Organize, Collaborate, and Advocate






- Convene and partner with adult and youth leaders (e.g., state and local governments, tribal councils, schools, universities, community-based organizations, health care organizations, treatment centers, funders, communities of faith, private businesses, police, and parents) to advocate for greater education to prevent youth opioid use and misuse.
- Advocate for improved access to opioid use disorder treatment for adolescents (including counseling, treatment centers, and treatment drugs) to address NMUPO in your community.
- Advocate for syringe service programs, which help reduce the risk of HIV and other infections and connect people to services (hiv.gov, 2020).
- Familiarize yourself with laws related to the overdose-reversing drug naloxone in your state (CDC, 2023). If you work with youth and state law allows it, obtain naloxone and become trained in its use.

## WHERE CAN I GET MORE INFORMATION?

### National Organizations

- National Institute on Drug Abuse (NIDA): [Parents and Educators](#) page
- NIDA: [Opioids](#)
- [Substance Abuse and Mental Health Services Administration \(SAMHSA\)](#)
- Centers for Disease Control and Prevention (CDC): [Opioids](#)
- [American Academy of Pediatrics](#) 
- [Community Anti-Drug Coalition of America \(CADCA\)](#) 
- [Partnership to End Addiction: The Medicine Abuse Project](#) 

### Helplines

- [988 Suicide & Crisis Lifeline](#) 
  - Dial 988
  - [Lifeline Chat and Text](#) 
- [SAMHSA's Helpline](#)
  - 800-662-HELP (4357): a free, confidential, 24/7, 365-day-a-year treatment referral and information service (in English and Spanish) for individuals and families facing mental and/or substance use disorders.
- [Crisis Text Line](#) 
  - Text "START" to 741-741

### Treatment Locators

- [SAMHSA Behavioral Health Treatment Services Locator](#)
- [SAMHSA Opioid Treatment Program Directory](#)
- Recovered.org: [Inpatient and Residential Rehab](#) 



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