

OPIOIDS

Overview

Opioids are derived from the seed pod of the Asian opium poppy plant. When opioids enter the brain they bind to “opioid receptors.” These receptors are located throughout the brain and are involved in how we perceive pain and reward. There are also opioid receptors in the brain stem that affect critical life processes such as blood pressure and respiration. **Excess opioids in the brain can interfere with**

respiration, leading to overdose and possible death.¹ Opioids are used in a variety of illicit and licit ways. Patients with severe acute or chronic pain may be prescribed opioid-based medications such as morphine, oxycodone, or hydrocodone as a means to relieve patients’ pain and discomfort. Others may use these pain relievers non-medically to achieve a euphoria or “high.”¹ For the purposes of discussing problem use and addiction issues, this fact sheet refers specifically to the non-medical use of opioid pain relievers. Heroin is also derived from poppy plants. Heroin is usually found as a white or brown powder or black sticky substance and can be injected, inhaled, or smoked, all of which deliver a rapid dose to the brain contributing to its high risk of overdose and other serious health consequences.¹ Heroin can also be laced with other substances adding additional health risks.

Opioid Use: A Closer Look

Treatment Admissions: In 2012, 9.8% of individuals admitted to treatment in the U.S. reported opioid pain relievers as their primary substance of abuse, and 16.3% reported heroin as their primary substance of abuse.²

NSDUH 2013 Data:

Past Month Use of Illicit Drugs, U.S. Population

12 and Older

Illicit Drugs	Use % (estimate)
Marijuana	7.5% (19,800,000)
Psychotherapeutics*	2.5% (6,500,000)
Opioid Pain Relievers	1.7% (4,500,000)
Cocaine	0.6% (1,500,000)
Hallucinogens	0.5% (1,300,000)
Inhalants	0.2% (500,000)
Heroin	0.1% (300,000)

**Psychotherapeutics* are prescription medications such as opioid pain relievers, tranquilizers, stimulants, and sedatives.

Past Month Use, Nonmedical Users of Opioid Pain Relievers/ Heroin Users

By Age

Age	Use % (estimate)
Nonmedical Users of Opioid Pain Relievers	
12-17	9% (425,000)
18-25	25% (1,132,000)
26-34	25% (1,115,000)
35 and older	41% (1,849,000)
Heroin Users	
12-17	4% (12,000)
18-25	32% (92,000)
26-34	41% (119,000)
35 and older	23% (66,000)

By Gender, 12 and Older

Gender	Use % (estimate)
Nonmedical Users of Opioid Pain Relievers	
Female	47% (2,123,000)
Male	53% (2,398,000)
Heroin Users	
Female	40% (116,000)
Male	60% (173,000)

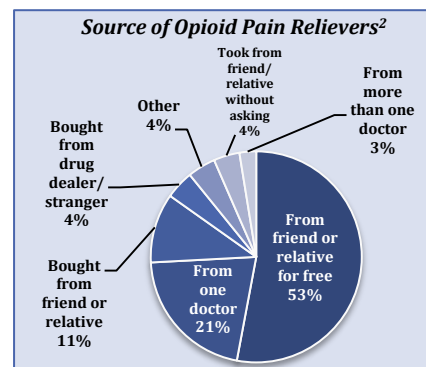
By Race/Ethnicity, 12 and Older

Primary Race/Ethnicity	Use % (estimate)
Nonmedical Users of Opioid Pain Relievers	
White	66% (2,968,000)
Black	13% (573,000)
Hispanic	17.4% (788,000)
Am. Indian/AK Native	0.4% (19,000)
Asian	1.6% (74,000)
Heroin Users (By Treatment Admissions)	
White/Hispanic	70% (205,000)
Black	15% (44,000)
Am. Indian/AK Native	0.9% (2,600)
Asian	0.6% (1,700)

According to results from the 2013 National Survey on Drug Use and Health (NSDUH), almost **5 million Americans aged 12 or older used opioids during the past month** – 4.5 million used opioid pain relievers non-medically and 300,000 used heroin.³ In addition, opioid pain relievers were cited as the primary substance of abuse in 9.8% (176,907) of treatment admissions and heroin was cited in 16.3% (292,934).²

Opioid Pain Relievers

An estimated 1.5 million Americans aged 12 and older used opioid pain relievers non-medically for the first time in 2013, making it the second most initiated illicit drug behind marijuana.³ The average age of first use for opioid pain relievers was 21.7 years in 2013 (Americans aged 12-49).³ The vast **majority of Americans who misuse opioid pain relievers receive them from a friend or relative for free** (53%) or from one doctor (21%).³ Roughly 1.9 million Americans met criteria for dependence or abuse for opioid pain relievers in 2013, a slight decline from 2012.³ **Admissions to treatment for opioid pain relievers increased by 500% from 2000-2012.**²



The physical effects of opioid pain relievers can be similar to heroin when taken for non-medical purposes. In some communities, heroin may be less expensive and easier to obtain than prescription opioids. **Recent research suggests that pain reliever misuse may lead some individuals to initiate heroin use.**⁴ A recent review of data by the Substance Abuse and Mental Health Services Administration (SAMHSA) found a strong association between using opioid pain relievers and initiating heroin, with the heroin incidence rate 19 times higher among people who reported prior use of opioids compared to those who did not.⁵ The study also noted that most individuals who used opioids did not transition to heroin.⁵ Trained prescribers and pharmacists are in a unique position to identify and refer at risk patients to substance use disorder services before they shift toward cheaper alternatives like heroin.

Heroin

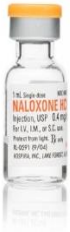
Roughly 169,000 Americans aged 12 or older used heroin for the first time in 2013.³ The average age of first use for heroin in 2013 was 24.5 years for Americans aged 12-49.³ **More than 500,000 Americans met criteria for heroin dependence or abuse during 2013.**³ The share of admissions to treatment for heroin increased by 16% from 2010 to 2012, and according to 2014 NASADAD data, 37 States reported increases in treatment admissions to heroin during the past two years.^{2,16} The National Institute on Drug Abuse estimates that approximately 23% of individuals who use heroin will become dependent on it.¹ Given that heroin is often injected, users are at higher risk of contracting blood/bodily fluid borne diseases such as HIV and hepatitis C.¹ This higher risk can be mitigated by not sharing or reusing needles and other injection drug equipment, along with abstinence. Individuals who use heroin chronically may also develop collapsed veins, heart infections, abscesses, gastrointestinal cramping, liver disease, or kidney disease.¹

Evidence-Based, Cost-Effective Treatment

Medication-Assisted Treatment

Treatment plans should be designed based on individual patient needs and include the full spectrum of clinically appropriate care (e.g.; comprehensive screening and assessment, detoxification, cognitive behavioral therapy, contingency management), access to appropriate settings (e.g.; outpatient, residential, therapeutic community), and adequate lengths of stay. Medication-assisted treatment (MAT) is one such intervention that should be available to patients with opioid use disorders. There are currently three FDA-approved medications to treat opioid dependence: methadone, buprenorphine, and injectable naltrexone. They are each available in various clinical settings including regulated opioid treatment programs (methadone, buprenorphine) and physicians' offices (buprenorphine, naltrexone). There is significant scientific research demonstrating that these **medications can increase retention in treatment, improve social functioning, decrease drug use, reduce infectious disease transmission, reduce criminal activity, and reduce the risk of overdose and death.**⁶ Medications should be included in a menu of treatment options as an adjunct to support cognitive behavioral therapies that are selected based on individual patients' needs and clinical presentation. In 2013, NASADAD approved a policy statement supporting the use of medications in treatment.¹⁴

Reversing Overdose, Saving Lives



Opioid overdose is a serious risk for any user of opioids. It causes respiratory depression and can become fatal.⁷ According to the Centers for Disease Control and Prevention (CDC), deaths from opioid pain relievers exceeded overdose deaths from all illegal drugs for Americans 15 and older in 2011.⁸ In 2013, almost **17,000 Americans lost their lives to an opioid pain reliever overdose and more than 8,000 to a heroin overdose.**⁹ According to NASADAD data from 2014, 27 States saw increases in fatal heroin overdose rates during the past two years.¹⁶ Naloxone is a prescription medication that is used to reverse the effects of an opioid overdose. Naloxone has long been the standard of care in emergency rooms and has been successfully administered by trained bystanders, including law enforcement, friends, or family members.^{7,10} As of December 2014, 27 States and the District of Columbia have passed laws to increase access to naloxone.¹¹ In 2014, NASADAD approved a policy statement supporting strategies to prevent overdose deaths.¹⁵

The Role of State Substance Abuse Agencies in Substance Use Disorder Prevention, Treatment, and Recovery

State Substance Abuse Agency Directors design, manage, and evaluate the publicly funded substance abuse prevention, treatment, and recovery system in each State. State Directors provide leadership by promoting standards of care, evidence-based services, and continuous quality improvement innovations. State Directors also ensure that public dollars are dedicated to programs that work through the use of performance data management and reporting, contract monitoring, corrective action planning, on site-reviews, and technical assistance.

Key Federal Programs and Agencies

SAMHSA's **Substance Abuse Prevention and Treatment (SAPT) Block Grant** is a formula grant awarded to every State and Territory. The SAPT Block Grant accounts for an estimated 64% of State Substance Abuse Agencies' expenditures on prevention.¹² SAPT Block Grant funds enabled more than 1.6 million Americans to receive treatment services during the 2014 report year. In addition, more than 7.4 million Americans received SAPT Block Grant-funded prevention services in individual-based programs, and more than 285 million were served in population-based programs during the same period.¹³ During the 2014 report year, clients who were discharged from SAPT Block Grant-funded treatment services had the following outcomes: 92.9% reported having a stable living situation; 93.9% had no arrests during the past 30 days; 81.5% were abstinent from alcohol; and 72.1% were abstinent from illicit drugs.¹³

The FY 2015 federal budget deal or "cromnibus" includes \$12 million for discretionary grants to States within SAMHSA's **Center for Substance Abuse Treatment (CSAT)** to expand opioid treatment services, including medication-assisted treatment. SAMHSA's Division of Pharmacologic Therapies (DPT) oversees the accreditation and certification process for opioid treatment programs and physician waivers to prescribe buprenorphine.

SAMHSA's **Center for Substance Abuse Prevention (CSAP)** leads efforts to stop drug use before it starts. CSAP's Partnerships for Success Program provides funding for States to develop comprehensive Statewide approaches to address prescription drug abuse or other problems unique to that State.

The Office of National Drug Control Policy (ONDCP) provides federal leadership on addiction prevention, treatment, and recovery policy. Among its many initiatives designed to address the opioid crisis, ONDCP issued a comprehensive plan to address prescription drug abuse and led a White House Summit on the opioid problem in 2014.

References

1. National Institutes of Health (NIH), National Institute on Drug Abuse (NIDA). *Heroin*. Retrieved from <http://www.drugabuse.gov/publications/drugfacts/heroin>.
2. Substance Abuse and Mental Health Services Administration (SAMHSA), Center for Behavioral Health Statistics and Quality (CBHSQ). *Treatment Episode Data Set (TEDS)*. Data received through 10/24/14.
3. SAMHSA. *Results from the 2013 National Survey on Drug Use and Health: Summary of National Findings*, NSDUH Series H-48, HHS Publication No. (SMA) 14-4863. Rockville, MD: SAMHSA, 2014.
4. NIH, NIDA. *Prescription and Over-the-Counter Medications*. Retrieved from <http://www.drugabuse.gov/publications/drugfacts/prescription-over-counter-medications>.
5. SAMHSA, CBHSQ. *Associations of Nonmedical Pain Reliever Use and Initiation of Heroin Use in the United States*. CBHSQ Data Review. (2013). Retrieved from <http://www.samhsa.gov/data/sites/default/files/DR006/DR006/nonmedical-pain-reliever-use-2013.htm>.
6. SAMHSA. *Medicaid Coverage and Financing of Medications to Treat Alcohol and Opioid Use Disorders*. HHS Publication No. (SMA) 14-4854. Rockville, MD: SAMHSA, 2014.
7. Kim, D., et al. (2009). Expanded access to naloxone: Options for critical response to the epidemic of opioid overdose mortality. *American Journal of Public Health*, 99(3): 402-407.
8. Centers for Disease Control and Prevention (CDC). *Morbidity and Mortality Weekly Report*, 60(43): 1489, 2011.
9. CDC, National Center for Health Statistics. *Multiple Cause of Death 1999-2013 on CDC WONDER Online Database*, released 2015. Data are from the Multiple Cause of Death Files, 1999-2013, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/mcd-1cd10.html>.
10. Walley, A., et al. (2013). Opioid overdose rates and implementation of overdose education and nasal naloxone distribution in Massachusetts: interrupted time series analysis. *British Medical Journal*, 346: 1-12.
11. Davis, C. (2014). Legal interventions to reduce overdose mortality: Naloxone access and overdose good Samaritan laws. *The Network for Public Health Law*.
12. NASADAD estimate.
13. SAMHSA. Report from WebBGAS using 2014 SAPT Block Grant Reports. Accessed October 2014.
14. NASADAD. (2013). *Consensus Statement on the Use of Medications in Treatment of Substance Use Disorders*. Available at: <http://nasadad.org/wp-content/uploads/2010/12/NASADAD-Statement-on-MAT.pdf>.
15. NASADAD. (2014). *Policy Statement on Efforts to Prevent Fatal Overdose*. Available at: <http://nasadad.org/wp-content/uploads/2014/09/NASADAD-Overdose-Statement-Final.pdf>.
16. NASADAD. (2014). *State Substance Abuse Agencies, Prescription Drugs, and Heroin Abuse: Results from a NASADAD Membership Inquiry*. Available at: <http://nasadad.org/wp-content/uploads/2014/06/NASADAD-Prescription-Drug-and-Heroin-Abuse-Inquiry-Full-Report-Final.pdf>.



Contact Information: Robert Morrison, Executive Director, (202) 293-0090 or rmorrison@nasadad.org.
Colleen Haller, Public Policy Associate, (202) 293-0090 or challer@nasadad.org.

NASADAD • 1025 Connecticut Ave NW, Ste. 605 • Washington, DC 20036 • T: (202) 293-0090 • F: (202) 293-1250 • Website: www.nasadad.org