Opioid Overdose Crisis

Revised March 2018

Every day, more than 115 people in the United States die after overdosing on opioids. The misuse of and addiction to opioids—including prescription pain relievers, heroin, and synthetic opioids such as fentanyl—is a serious national crisis that affects public health as well as social and economic welfare. The Centers for Disease Control and Prevention estimates that the total "economic burden" of prescription opioid misuse alone in the United States is $78.5 billion a year, including the costs of healthcare, lost productivity, addiction treatment, and criminal justice involvement.

How did this happen?

In the late 1990s, pharmaceutical companies reassured the medical community that patients would not become addicted to prescription opioid pain relievers, and healthcare providers began to prescribe them at greater rates. This subsequently led to widespread diversion and misuse of these medications before it became clear that these medications could indeed be highly addictive. Opioid overdose rates began to increase. In 2015, more than 33,000 Americans died as a result of an opioid overdose, including prescription opioids, heroin, and illicitly manufactured fentanyl, a powerful synthetic opioid. That same year, an estimated 2 million people in the United States suffered from substance use disorders related to prescription opioid pain relievers, and 591,000 suffered from a heroin use disorder (not mutually exclusive).

What do we know about the opioid crisis?

- Roughly 21 to 29 percent of patients prescribed opioids for chronic pain misuse them.
- Between 8 and 12 percent develop an opioid use disorder.
- An estimated 4 to 6 percent who misuse prescription opioids transition to heroin.
- About 80 percent of people who use heroin first misused prescription opioids.
- Opioid overdoses increased 30 percent from July 2016 through September 2017 in 52 areas in 45 states.
The Midwestern region saw opioid overdoses increase 70 percent from July 2016 through September 2017. ¹⁰

Opioid overdoses in large cities increase by 54 percent in 16 states. ¹⁰

This issue has become a public health crisis with devastating consequences including increases in opioid misuse and related overdoses, as well as the rising incidence of neonatal abstinence syndrome due to opioid use and misuse during pregnancy. The increase in injection drug use has also contributed to the spread of infectious diseases including HIV and hepatitis C. As seen throughout the history of medicine, science can be an important part of the solution in resolving such a public health crisis.

What are HHS and NIH doing about it?

In response to the opioid crisis, the U.S. Department of Health and Human Services (HHS) is focusing its efforts on five major priorities:

1. improving access to treatment and recovery services
2. promoting use of overdose-reversing drugs
3. strengthening our understanding of the epidemic through better public health surveillance
4. providing support for cutting-edge research on pain and addiction
5. advancing better practices for pain management

The National Institutes of Health (NIH), a component of HHS, is the nation's leading medical research agency helping solve the opioid crisis via discovering new and better ways to prevent opioid misuse, treat opioid use disorders, and manage pain. In the summer of 2017, NIH met with pharmaceutical companies and academic research centers to discuss:
1. safe, effective, non-addictive strategies to manage chronic pain
2. new, innovative medications and technologies to treat opioid use disorders
3. improved overdose prevention and reversal interventions to save lives and support recovery

In April 2018 at the National Rx Drug Abuse and Heroin Summit, NIH Director Francis S. Collins, M.D., Ph.D., announced the launch of the HEAL (Helping to End Addiction Long-term) Initiative, an aggressive, trans-agency effort to speed scientific solutions to stem the national opioid public health crisis.

Related Resources

- HEAL Initiative Research Plan (NIH, June 2018)
- As Opioid Use Disorders Increase, Prescriptions for Treatment Have Not Kept Pace (NIDA Notes, June 2018)
- HHS Works to Improve Testing for Fentanyl (0:42) (May 2018)
- All Scientific Hands on Deck" to End the Opioid Crisis (Nora Volkow and Francis Collins, May 2017)
- National Drug Early Warning System (NDEWS) - New Hampshire HotSpot Study Finds Extensive Poly Drug Use in Fentanyl-related Deaths
- NIDA-Funded Opioid Research
- FDA grants marketing authorization of the first device for use in helping to reduce the symptoms of opioid withdrawal (FDA, November 2017)
- Illicit Drug Use, Illicit Drug Use Disorders, and Drug Overdose Deaths in Metropolitan and Nonmetropolitan Areas — United States (MMWR) (CDC, October 2017)
- Underlying Factors in Drug Overdose Deaths (JAMA, October 2017)
- NIH Director Francis Collins on America’s opioid crisis (5:08) (Washington Post, September 2017)
- Contribution of Opioid-Involved Poisoning to the Change in Life Expectancy in the United States, 2000-2015 (JAMA, September 2017)
- New Opioid Overdose Materials for Patients (CDC, August 2017)
- Blog - “All Scientific Hands on Deck” to End the Opioid Crisis (May 2017)
- Blog - Addressing America’s Fentanyl Crisis (April 2017)
- Blog - The CDC Provides Crucial New Guidance on Opioids and Pain (April 2016)
- Testimony - What Science tells us About Opioid Abuse and Addiction (January 2016)
• Testimony - What is the Federal Government Doing to Combat the Opioid Abuse Epidemic? (May 2015)

• Testimony - America’s Addiction to Opioids: Heroin and Prescription Drug Abuse (May 2014)