



Emerging Drug Trends Report

June 2017 | Shedding new light, every month, on America's No. 1 public health problem

Widening the Lens on the Opioid Crisis

Overview

The United States is in the midst of an unprecedented opioid crisis, which is receiving attention as a top public health priority. Between 1999 and 2014, drug overdose deaths almost tripled, and in 2015, more than 60% of all drug overdose deaths involved an opioid (Rudd, Seth, David, & Scholl, 2016). A recent *New York Times* article estimated that drug overdose deaths rose 19% from 2015 to 2016, possibly the largest annual jump in overdose deaths in U.S. history (Katz, 2017). Designing effective strategies to curb this problem requires that we understand how it fits into the broader context of substance use behaviors. Because research studies tell us that most individuals with opioid use disorder engage in other substance use, comprehensive and long-term addiction treatment must be provided. Moreover, because of the high degree of overlap between nonmedical prescription drug use and the use of alcohol and other drugs, resources and efforts directed toward preventing risky substance use at its earliest stages, especially among youth, will help curb the opioid overdose epidemic at its roots. Finally, improvements are needed with respect to real-time surveillance of opioid overdose deaths and the evaluation of programs and policies that are put in place to combat this epidemic.

Opioid overdose deaths often involve other drugs

A National Vital Statistics Report from 2016 (Warner, Trinidad, Bastian, Minino, & Hedegaard, 2016) analyzed death certificates to identify the specific drugs involved in overdose deaths between 2010 and 2014. Results showed a 23% increase in drug overdose deaths from 2010 to 2014, and six of the top 10 drugs most frequently involved in overdose deaths were opioids (i.e., fentanyl, heroin, hydrocodone, methadone, morphine and oxycodone). More than half of the deaths caused by each of these opioids involved use of another drug at the same time, and opioid-related overdose deaths involved the use of two other drugs on average. Benzodiazepines were involved in approximately one-third of opioid overdose deaths, and alcohol consumption was involved in 21% of heroin overdose deaths in 2014.

Overdose deaths involving a combination of cocaine and opioids are rising

Cocaine and opioids are sometimes used concurrently and/or during the same drug-taking session (i.e., "speedballing"). Since 2010, the rate of cocaine overdose deaths involving opioids has more than doubled—from 0.57 per 100,000 to 1.36 per 100,000 in 2015 (McCall Jones, Baldwin, & Compton, 2017). Cocaine was involved in 20% of heroin overdoses in 2014 (Warner et al., 2016) and more than one third of fentanyl overdoses from 2012 to 2014 (Mercado et al., 2017). Other research has found that individuals with both cocaine and opioid addiction have more severe drug use compared to people with either one of those substance use disorders alone (Rodríguez-Cintas et al., 2016). To address rising overdose deaths related to both drugs, efforts should focus on providing comprehensive long-term addiction treatment that addresses all forms of substance use.

Most individuals who nonmedically use prescription opioids have a history of other drug involvement or are currently using other drugs

According to national substance use treatment admissions data for individuals ages 12 and older in 2014, only 9.6% of all individuals admitted to addiction treatment with a primary opioid problem did not have another type of drug problem at the time they were admitted. The most common accompanying drug problems involved marijuana (20.5%), cocaine (19.5%), alcohol (16.4%), and tranquilizers (11.1%) (Substance Abuse and Mental Health Services Administration, 2016). The overlap between

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opioid problems and other drug problems is also evident in a study by Yarborough et al. (2016), who conducted personal interviews with opioid overdose survivors and their family members. They found that half of individuals who had accidentally overdosed had either current or past problems with alcohol or other drugs, and the majority (75%) of the accidental overdoses they experienced involved poly-substance use.

Cicero et al. (2017) studied the prior drug use of 4,493 individuals admitted to addiction treatment who were first exposed to opioids through a physician's prescription and then developed a subsequent opioid use disorder. Figure 1 shows that 94.6% of this sample had "significant experience" with other drugs prior to or coincident with their first opioid exposure from a physician. Nearly all of these individuals drank alcohol (92.9%), and used nicotine (89.5%) or marijuana (87.4%) before or coincident with their initial opioid prescription.

"The goal of our research was to identify patterns of behavior and drug use habits that may help physicians identify patients at risk for misuse," said Theodore J. Cicero, PhD, professor of psychiatry at the Washington University School of Medicine in St. Louis. "It is important to stress that physicians should not throw up their hands, so to speak, and stop prescribing opioids for pain, a possible outcome given our efforts to limit diversion of opioid analgesics. Physicians need guidance for appropriate prescribing patterns for these therapeutically useful medications with an appropriate recognition that misuse is always a possibility, and patients should be monitored closely, not deprived."

The notion that nonmedical prescription opioid use is linked to other forms of substance use is also supported by national data at the population level. A recent study by Ihongbe and Masho (2016) found that among a national sample of young adults who had used heroin during the past month, 97% used cigarettes, 89% drank alcohol, and 82% used marijuana during the past year.

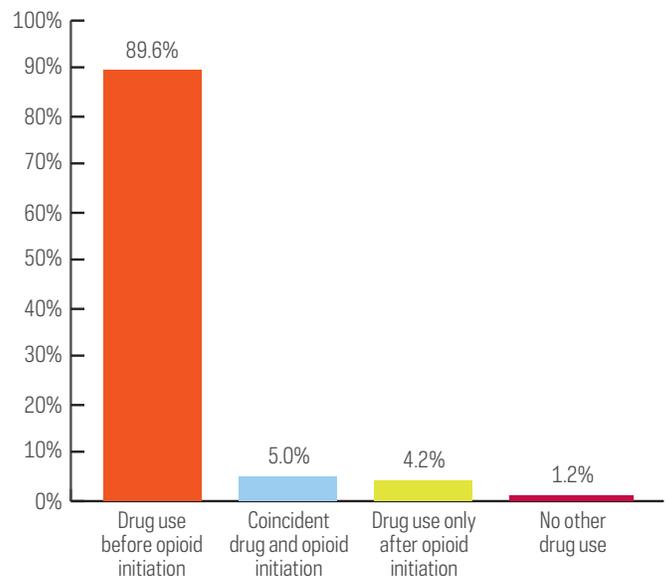
It is well known that individuals with pre-existing substance use disorders are more likely to misuse opioids (Alford & Livingston, 2013; Pergolizzi Jr et al., 2012; Turk, Swanson, & Gatchel, 2008). However, these individuals also appear to be prescribed opioids at higher doses than their peers without a substance use disorder (Edlund et al., 2010), and a similar phenomenon has been observed with the prescribing of another risky class of prescription medications, benzodiazepines (Kroll, Nieva, Barsky, & Linder, 2016). In a different study examining adolescents who received prescription opioids for an injury they experienced, Whiteside et al. (2016) compared adolescents who reported marijuana use before their injury with those who did not use marijuana. The study found that marijuana use was associated with a higher risk for subsequent sustained opioid use after the injury. The implication of this research is that physicians who prescribe opioids for their patients for therapeutic purposes should comprehensively screen for patients' drug use histories and carefully monitor for signs of addiction in all patients.

Taken together, the research evidence supports a high degree of overlap between nonmedical prescription opioid drug use and the use of alcohol and other drugs. Therefore, from a prevention perspective, identifying adolescents and young adults who engage in any form of substance use and routing them toward intervention programs will help put the brakes on the opioid crisis.

Real-time surveillance systems are critically needed

Combatting any public health crisis requires real-time surveillance. Unfortunately, there is typically a two- to three-year lag between when a death occurs and when it is published by national data systems. For instance, the most recent tracking data available for opioid use and overdose is typically two to three years old (Mercado et al., 2017; Rudd et al., 2016; Substance Abuse and Mental Health Services Administration, 2016; Warner et al., 2016). Surveillance of morbidity and mortality empowers decision makers to understand the effectiveness of policies put in place to combat the opioid crisis, as well as shift or expand resources to manage the problem. Unfortunately, surveillance cannot be used as intended if it is outdated.

Figure 1. Experiences with other drug use among individuals in treatment initially exposed to an opioid through a physician's prescription (N=4,493) (Cicero, Ellis, & Kasper, 2017)



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Hazelden Betty Ford Foundation Perspectives

Dr. Joseph Lee, Medical Director, Hazelden Betty Ford Foundation Youth Continuum:

- “This research reinforces my strong belief that our nation’s approach to addiction must be more focused on people and less on specific drugs. People who are prone to misusing substances generally have a wider vulnerability to all substances. But our tendency is to concentrate on one drug today, another drug tomorrow. All the while, the problem of risk has always been within us and not outside us.”
- “Everyone who is prescribed an opioid does not have the same risk for developing problematic use. We seem to have realized that point about alcohol and even substances like gluten, but we’ve been slow to accept the same reality for more taboo substances. As a result, we see the pendulum swing back and forth on what society thinks about various substances while missing out on the bigger opportunity, which is to identify and mitigate individuals’ risk, and tailor prevention and treatment interventions accordingly. For example, we overprescribed opioids, and now we vilify opioids and look at anyone who takes opioids with great suspicion, when in reality the underlying problem is that some people are at high risk for misusing substances.”
- “People who are prone to misusing substances have a wider vulnerability, meaning their brains do not seek out one unique substance. They’re vulnerable to many substances of misuse. So, when we think about the opioid crisis, let’s avoid focusing too much on specific drugs and make sure we prepare ourselves for the future by zeroing in on the real problem—the heightened vulnerability that some people have to substance misuse and addiction.”
- “To address addiction long term, we must look at addiction from a health perspective. Risks vary person to person, just like the risks for other health conditions. When we restrict our lens to the already well-established fact that opioids and other substances can be harmful, addictive and deadly, we neglect the larger conversation—the more important and eventually less stigmatizing conversation—about people and their unique risks for developing problems with substances.”

Kiersten Hewitt, Executive Director, FCD Prevention Works, part of the Hazelden Betty Ford Foundation:

- “One pressing implication of this research is the urgent need to educate youth, families and the public about the risks of adolescent substance use—including alcohol and marijuana use—and its relationship to health problems like addiction, other drug use and death.”
- “Young people must be provided age-appropriate, evidence-based education and skill-building opportunities while they are still healthy and free from all substances. To protect against later opioid misuse and addiction, prevention must target entire populations and must start from the earliest years of a child’s education, both in the home and in school, continuing into young adulthood.”

Dr. Marvin D. Seppala, Chief Medical Officer, Hazelden Betty Ford Foundation:

- “An important takeaway from this body of research is that we must treat the disease of addiction, not just dependence on a specific drug. With poly-drug use and addiction, which is more the norm than the exception, we cannot rely solely on medications or any other one therapy, but must approach treatment comprehensively.”
- “Respiratory depressants like opioids, benzodiazepines and alcohol slow the breathing rate, which is the mechanism by which those substances can cause death. Combining them increases the risk for overdose death.”
- “There are also increasing reports of fentanyl—the primary ingredient of many pills sold illicitly as prescription opioids—being mixed with cocaine, sometimes without the user knowing, which poses a significant risk for accidental overdose.”
- “Prior alcohol and other drug use, especially at a young age, significantly increases the risk for developing problems with opioid use. Prescribers need to be able to identify or determine such risk factors before prescribing opioids for pain so that, when appropriate, they can provide increased attention, structure and monitoring for misuse.”

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Nick Motu, Vice President, Hazelden Betty Ford Institute for Recovery Advocacy:

- “One day, when the opioid crisis is behind us, I hope we have not simply moved on to the next drug crisis and instead have decided once and for all to address addiction as the longstanding public health problem that it is. Substance use disorders are, unfortunately, a part of the human condition and represent one of the most prevalent and devastating health and social problems in our country. We cannot afford for it to be marginalized within our health care system now—amid the tragedy of our opioid overdose epidemic—or later.”

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Our mission is to provide a trusted national voice on all issues related to addiction prevention, treatment and recovery, and to facilitate conversation among those in recovery, those still suffering and society at large. We are committed to smashing stigma, shaping public policy and educating people everywhere about the problems of addiction and the promise of recovery.