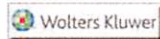


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Review Curr Opin Psychiatry. 2021 Jul 1;34(4):344-350. doi: 10.1097/YCO.0000000000000717.

## The rise of illicit fentanyl, stimulants and the fourth wave of the opioid overdose crisis

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Affiliations

PMID: 33965972 PMID: PMC8154745 (available on 2022-07-01)

DOI: 10.1097/YCO.0000000000000717

### Abstract

**Purpose of review:** This review provides an update on recently published literature on the rise of illicit fentanyl, risks for overdose, combinations with other substances, e.g. stimulants, consequences, and treatment.

**Recent findings:** Overdose due to illicit synthetic opioids (e.g. fentanyl and fentanyl analogs) continues to rise in the US both preceding and during the COVID-19 pandemic. Fentanyl-related overdose is rising in new geographic areas e.g. the western USA. Stimulant-related overdose is also increasing nationwide driven by methamphetamine and cocaine. Polysubstance use, e.g. the use of a stimulant along with an opioid is driving stimulant-related overdose. Other medical consequences of injection drug use are rising including HIV and hepatitis C infections. Medication approaches to treating opioid use disorder remain the standard of care and there are new promising pharmacological approaches to treating methamphetamine use disorder.

**Summary:** A 'fourth wave' of high mortality involving methamphetamine and cocaine use has been gathering force in the USA. Availability and use of illicit fentanyl are still the major drivers of overdose deaths and the current rise in stimulant-related deaths appears entwined with the ongoing opioid epidemic.

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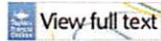
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Subst Use Misuse. 2021;56(2):333-337. doi: 10.1080/10826084.2020.1858107. Epub 2020 Dec 16.

## Misuse of Prescription and Illicit Drugs in Middle Adulthood in the Context of the Opioid Epidemic

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Affiliations

PMID: 33325317 DOI: 10.1080/10826084.2020.1858107

### Abstract

**Background:** The United States' opioid epidemic continues to escalate overdose deaths. Understanding its extent is complicated by concurrent misuse of other prescription or illicit drugs, increasing risk for overdose. Current surveillance using electronic medical records and police data has limitations and frequently fails to distinguish middle-aged adults from other age groups in reporting. **Objectives:** The purpose of this analysis is to (1) describe characteristics of middle-aged US adults who report misusing prescription and illicit drugs and (2) evaluate if misusing prescription opioids increases risk of misusing other drugs. **Methods:** We analyzed data from 12,300 adults ages 32-42 from Wave V of the Add Health study collected from 2016 to 2018. Self-reported past 30-day misuse of prescription sedatives, tranquilizers, stimulants, and opioids as well as cocaine, crystal methamphetamine, heroin, and other illicit drugs were analyzed for associations with demographic characteristics in weighted bivariate analysis and multivariable logistic regression. **Results:** Those misusing prescription opioids were more likely to misuse prescription sedatives, tranquilizers, and stimulants compared to those not misusing prescription opioids. Those misusing prescription opioids were also more likely to misuse heroin, crystal meth, cocaine, and other illicit drugs. Higher levels of education and personal income were protective for prescription opioid misuse, any prescription drug misuse, and any illicit drug misuse. Race/ethnicity was not significantly associated with prescription opioid misuse. **Conclusions/Importance:** Our analysis shows those misusing prescription opioids are at high risk of misusing other prescription and illicit drugs. Practitioners and researchers should consider concurrent drug misuse when treating and studying opioid misuse disorders.

**Keywords:** Add Health; Opioid epidemic; concurrent drug misuse; polydrug misuse; prescription opioids.

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Clin Toxicol (Phila). 2021 Feb;59(2):142-151. doi: 10.1080/15563650.2020.1781150. Epub 2020 Jul 16.

## Adult opioid poisonings by drug, intent, and resource use from the United States National Poison Data System from 2005–2018

Megan E Land <sup>1</sup>, Martha Wetzel <sup>2 3</sup>, Robert J Geller <sup>2 4</sup>, Alaina R Steck <sup>4 5</sup>, Jocelyn R Grunwell <sup>1</sup>

Affiliations

PMID: 32673123 DOI: 10.1080/15563650.2020.1781150

### Abstract

**Introduction:** Deaths due to an opioid overdose nearly doubled from 2013 to 2017. Our objective is to describe the trends in intent, healthcare resource use, and clinical outcomes among adults with opioid exposures.

**Materials and methods:** This study is a retrospective analysis of data from the 55 U.S. poison control centers. Adults, >19 years, with an opioid as the primary poisoning agent between 2005 and 2018 were included. These years were divided into three epochs (2005-2009, 2010-2014, and 2015-2018) to describe the trends in frequency, intent, severity, healthcare resource use, and regional differences in U.S. adults affected by prescription and illicit opioid exposures.

**Results:** A total of 546,049 (54.4%) of the 1,002,947 opioid-related cases reported to the U.S. poison centers met inclusion criteria. The percentage of patients with a moderate/major clinical effect increased in each epoch (24.4, 29.13, and 35.3%) as did the proportion of patients with illicit opioids (coded as heroin) as their primary substance (2.89, 5.47, and 13.95%). Illicit opioid use was associated with increased frequency of moderate/major clinical effects (54.2 vs. 27.4%), need for an ICU procedure (11.4 vs. 6.8%), and death (3.9 vs. 1.2%) compared with prescription opioid use. Suicidal intent (34.88%) followed by misuse/abuse (26.26%) were the most frequent intents. Misuse/abuse increased in frequency over each epoch in the study period (23.1 vs. 26.12 vs. 30.3%). **Discussion and conclusions:** The severity of clinical effects and death following acute opioid poisonings increased over the study period, driven by suicidal intent and an increasing proportion of illicit opioid cases. This study highlights the importance of developing strategies to address suicide prevention in addition to the continued focus on opioid use disorder.

**Keywords:** Opioid; addiction; buprenorphine; fentanyl; heroin; intensive care; overdose.

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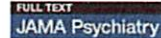
[NCI CPTC Antibody Characterization Program](#)

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Review JAMA Psychiatry. 2019 Feb 1;76(2):208-216. doi: 10.1001/jamapsychiatry.2018.3126.

## Prevention and Treatment of Opioid Misuse and Addiction: A Review

Nora D Volkow <sup>1</sup>, Emily B Jones <sup>1</sup>, Emily B Einstein <sup>1</sup>, Eric M Wargo <sup>1</sup>

Affiliations

PMID: 30516809 DOI: 10.1001/jamapsychiatry.2018.3126

### Abstract

**Importance:** More than 42 000 Americans died of opioid overdoses in 2016, and the fatalities continue to increase. This review analyzes the factors that triggered the opioid crisis and its further evolution, along with the interventions to manage and prevent opioid use disorder (OUD), which are fundamental for curtailing the opioid crisis.

**Observations:** Opioid drugs are among the most powerful analgesics but also among the most addictive. The current opioid crisis, initially triggered by overprescription of opioid analgesics, which facilitated their diversion and misuse, has now expanded to heroin and illicit synthetic opioids (fentanyl and its analogues), the potency of which further increases their addictiveness and lethality. Although there are effective medications to treat OUD (methadone hydrochloride, buprenorphine, and naltrexone hydrochloride), these medications are underused, and the risk of relapse is still high. Strategies to expand medication use and treatment retention include greater involvement of health care professionals (including psychiatrists) and approaches to address comorbidities. In particular, the high prevalence of depression and suicidality among patients with OUD, if untreated, contributes to relapse and increases the risk of overdose fatalities. Prevention interventions include screening and early detection of psychiatric disorders, which increase the risk of substance use disorders, including OUD.

**Conclusions and relevance:** Although overprescription of opioid medications triggered the opioid crisis, improving opioid prescription practices for pain management, although important for addressing the opioid crisis, is no longer sufficient. In parallel, strategies to expand access to medication for OUD and improve treatment retention, including a more active involvement of psychiatrists who are optimally trained to address psychiatric comorbidities, are fundamental to preventing fatalities and achieving recovery. Research into new treatments for OUD, models of care for OUD management that include health care, and interventions to prevent OUD may further help resolve the opioid crisis and prevent it from happening again.

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