

Easing of the Opioid Epidemic

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Key Takeaways

- + Homicides and fatal opioid overdoses in the United States both saw significant declines from 2020 through 2025, but it is unlikely that unique changes to the opioid epidemic exerted downward pressure on the national homicide rate.
- + Opioids are a strong depressant that are not pharmacologically associated with violent behavior among people who use drugs.
- + The overall number of people with opioid use disorder remained stable during the period, precluding significant changes in the number of addiction-driven crimes that could result in homicide.
- + Parallel national trends in overdose and homicide mask significant heterogeneity in those trends at the regional, state, and municipal levels, undermining the case for a causal relationship.
- + Naloxone saturation, changes in the consumption behavior of people who use illicit opioids, and fentanyl supply shocks plausibly explain a drop in overdoses.

Recent Opioid Death and Homicide Trends

During the COVID-19 pandemic and its aftermath, homicides and opioid overdose deaths both rose dramatically in the United States. Fatal drug overdoses peaked in 2022 at an all-time high of 107,941 deaths, of which 81,806 (76%) involved opioids.¹ Of those opioid deaths, 78,838 (96%) were caused by fentanyl and other potent synthetic drugs, resulting in the highest overdose death rate in the world.² This rise was accompanied by a historic surge in homicides, which peaked at 26,031 in 2021³ and 24,849 in 2022.⁴ After these peaks, both underwent equally dramatic declines: approximately 51% for homicides,⁵ and 37% for overdoses.⁶ These trends pose the question of whether one phenomenon may have contributed to the other, or if external factors drove both changes in tandem.

Theoretical Mechanism

Goldstein's conceptual framework⁷ illustrates a directional relationship between substance use disorder and violence through three distinct mechanisms:

1. The direct **pharmacological** effect of a drug on its consumer's behavior, which in the case of some substances can increase a person's propensity for violence;
2. The violence that can result from a person's efforts to subsist in addiction under **economic duress**, either because of the related crimes they commit or attempts to directly seize drugs (e.g., robbery, theft, or burglary resulting in violence);
3. The **structural** features inherent to the manufacture, distribution, and sale of illicit drugs, and the regulation of an illicit drug market.

The analysis here will focus on the explanatory power of the first two factors; the third is the subject of a related brief in this series, produced by Greg Midgette and Beau Kilmer.

Established Evidence

Pharmacology

There is no evidence that opioid use pharmacologically predisposes people to commit violence. Opioids are a strong depressant;⁸ this is why overdose results in acute respiratory depression, unconsciousness, and cardiac arrest. In contrast with methamphetamines, alcohol, or PCP, which are associated with an increased propensity for aggression,^{9,10,11,12} even acute opioid misuse does not provide a pharmacological pathway for violent behavior. Given that, changes in the volume or severity of the opioid epidemic would not pharmacologically affect the nation's volume of homicides.

Economic Duress

Despite the decrease in fatal overdoses witnessed since 2023, there is little cause to believe fewer people in the U.S. are experiencing addiction-related economic duress now as compared to when homicides were at their height. Although surveys based on self-reporting do not fully capture unhoused populations and people with the most acute cases of substance use, a recurring national survey finds that the U.S. rate of opioid use disorder has remained consistent at approximately 2% of the population for the past several years.¹³ Assuming nothing during this period caused people with opioid use disorder to experience a notable reduction in their economic duress, this steady rate of addiction means the observed drop in homicides cannot be confidently attributed to fewer people with opioid use disorder committing duress-related crimes.

State and Regional Heterogeneity in Trends

Despite national-level parallel trends between homicides and fatal opioid overdose, there is significant heterogeneity at the state and regional levels. Whereas homicide rose and then fell across all regions and nearly all states in a similar manner over the past few years,¹⁴ changes in fatal opioid overdose are principally the result of acute fentanyl-driven spikes that first affected the Northeast around 2015, then spread across the nation to the West by 2021,¹⁵ persevering in some states while others began to experience significant declines.¹⁶ At more granular levels of analysis (e.g., states and metropolitan areas), the seemingly parallel relationship between homicide and fatal overdose at the national level becomes much less uniform, further undermining the case for a causal relationship.

Factors Contributing to the Decline in Fatal Opioid Overdoses

Certain changes to the opioid epidemic may explain a decline in overdoses for reasons that fall outside the nexus between problematic substance use and violence. First, distribution of naloxone, the medication that effectively reverses opioid overdose, increased from 7.65 million units distributed nationwide in 2018 to 29.7 million units in 2023,¹⁷ suggesting naloxone saturation played at least some role.¹⁸ Second, the spread of illicit fentanyl across the U.S. was complete by 2021.^{19,20} This resulted in a wave of death that ran its course by 2023, began to peter out, and may have led many surviving drug users to engage in more cautious consumption. Finally, recent changes to China's fentanyl precursor export policies may have rendered the U.S. illicit drug supply less lethal during this period.²¹ It is possible that these developments reduced overdose deaths without exerting downward pressure on homicides.

Emerging Questions and Future Directions

While it is unlikely that the nation's opioid overdose epidemic exerted a causal influence on homicides, they may share underlying causes that deserve further study. Some of the forces at work during the COVID-19 pandemic— isolation, social upheaval, declining mental health, and the interruption of social services—may have increased both the prevalence of substance use disorder and a propensity for violence. Research should endeavor to identify the factors that can drive population-level changes in multiple causes of mortality.

Our era's opioid epidemic may also offer insights into how a modern illicit opioid market may (or may not) breed violence. One of its features has been a transition from the overprescribing of opioids to a surge in illicit heroin and fentanyl.²² Studying the effects of this transition from a lawful market to an illicit one can clarify whether modern methods of sale and distribution, including the internet and cryptocurrency, have had a dampening effect on traditional drug market violence.

Prepared for CCJ Homicide Decline Research Summit

The United States has experienced a sharp decline in homicide since the middle of 2022. This dramatic and largely unexpected shift has sparked a high-stakes debate about what is driving it. To examine the plausibility of dozens of potential factors, CCJ convened a two-day summit in September 2026 with about 50 researchers from criminology, economics, public health, psychology, sociology, and related disciplines. This brief was prepared to inform discussions during the convening.

Endnotes

- ¹ Garnett, Matthew F, and Arialdi M Miniño. "Drug Overdose Deaths in the United States, 2003–2023." (2024).
- ² Gumas, Evan. "U.S. Overdose Deaths Remain Higher Than in Other Countries " The Commonwealth Fund, 2025, accessed July 27, 2026, <https://www.commonwealthfund.org/blog/2025/us-overdose-deaths-remain-higher-other-countries-trend-tracking-and-harm-reduction>.
- ³ Murphy, Sherry L, Kenneth D Kochanek, Jiaquan Xu, and Elizabeth Arias. "Deaths: Final Data for 2021." *National Vital Statistics Reports*, no. 8 (2024): CS351103.
- ⁴ Xu, Jiaquan, Sherry L Murphy, Kenneth D Kochanek, and Elizabeth Arias. "Deaths: Final Data for 2022." *National Vital Statistics Reports*, no. 4 (2025): 1.
- ⁵ Lopez, Ernesto, and Bobby Boxerman. *Crime Trends in U.S. Cities: Mid-Year 2026 Update*. Council on Criminal Justice, 2026. <https://counciloncj.org/crime-trends-in-u-s-cities-mid-year-2026-update/>.
- ⁶ NCHS. *U.S. Overdose Deaths Decrease for Third Consecutive Year in 2025*. Centers for Disease Control and Prevention - National Center for Health Statistics (Hyattsville, MD: 2026/05/13 2026). <https://www.cdc.gov/nchs/pressroom/releases/20260513.html>.
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- ⁸ Kiyatkin, Eugene A. "Respiratory Depression and Brain Hypoxia Induced by Opioid Drugs: Morphine, Oxycodone, Heroin, and Fentanyl." *Neuropharmacology* 151 (2019): 219–26.
- ⁹ Homer, Bruce D., Todd M. Solomon, Robert W. Moeller, Amy Mascia, Lauren DeRaleau, and Perry N. Halkitis. "Methamphetamine abuse and impairment of social functioning: a review of the underlying neurophysiological causes and behavioral implications." *Psychological bulletin* 134, no. 2 (2008): 301
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- ¹¹ Parker, Robert Nash. *Alcohol and Homicide: A Deadly Combination of Two American Traditions*. State University of New York Press, 1995.
- ¹² Homer, Bruce D., Todd M. Solomon, Robert W. Moeller, Amy Mascia, Lauren DeRaleau, and Perry N. Halkitis. "Methamphetamine abuse and impairment of social functioning: a review of the underlying neurophysiological causes and behavioral implications." *Psychological bulletin* 134, no. 2 (2008): 301.
- ¹³ SAMHSA. "Key Substance Use and Mental Health Indicators in the United States: Results from the 2019 National Survey on Drug Use and Health ". *HHS Publication No. PEP25-07-007, NSDUH Series H-60 - Substance Abuse Mental Health Services Administration* (2025).
- ¹⁴ See note 5.

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- ¹⁵ Zoorob, Michael J., Ju Nyeong Park, Alex H. Kral, Barrot H. Lambdin, and Brandon del Pozo. "Drug Decriminalization, Fentanyl, and Fatal Overdoses in Oregon." *JAMA Network Open* 7, no. 9 (2024): e2431612–e12. <https://doi.org/10.1001/jamanetworkopen.2024.31612>.
- ¹⁶ Mann, Brian. "U.S. Street Drug Deaths Keep Dropping, but Some Western States See Deadly Overdose Surge." *Morning Edition*, May 28 2026. <https://www.npr.org/2026/05/27/nx-s1-5836300/u-s-street-drug-deaths-keep-dropping-but-some-western-states-see-deadly-overdose-surge>.
- ¹⁷ Woods, Corinne, Grace Chai, Jae Wook Yoo, and Gerald Dal Pan. "Naloxone Distribution in the United States, 2018–2023." *American Journal of Public Health* 0, no. 0 (2026): e1–e4. <https://doi.org/10.2105/ajph.2026.308541>.
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- ¹⁸ Fischer, Leah S., Alice Asher, Renee Stein, Jeffrey Becasen, Amanda Doreson, Jonathan Mermin, Martin I. Meltzer, and Brian R. Edlin. "Effectiveness of Naloxone Distribution in Community Settings to Reduce Opioid Overdose Deaths among People Who Use Drugs: A Systematic Review and Meta-Analysis." *BMC Public Health* 25, no. 1 (2025/03/25 2025): 1135. <https://doi.org/10.1186/s12889-025-22210-8>.
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- ²⁰ See note 14.
- ²¹ Vangelov, Kasey, Keith Humphreys, Jonathan P. Caulkins, Harold Pollack, Bryce Pardo, and Peter Reuter. "Did the Illicit Fentanyl Trade Experience a Supply Shock?". *Science* 391, no. 6781 (2026): 134–36. <https://doi.org/doi:10.1126/science.aea6130>.
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