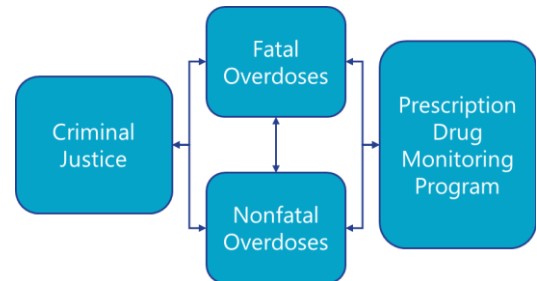


## Overview

Despite recent declines in drug overdose rates, overdose remains a leading cause of death among Hoosiers. Identifying touchpoints to connect people with services and treatment prior to a fatal overdose can help provide potentially lifesaving interventions for those at risk. The Indiana Department of Health (IDOH) partnered with the Indiana Management Performance Hub (MPH) to link data across multiple sources to key risk factors preceding overdose events and opportunities for prevention (Figure 1).<sup>1</sup>

Figure 1. Data linkage scheme.



## Linking Fatal and Nonfatal Overdose Data

Prior non-fatal overdose is a key risk factor for subsequent fatal overdose.<sup>2</sup>

- Of the 2,130 Hoosiers who died of an unintentional or undetermined intent overdose (UUDO) in 2023, one in seven (14%) experienced a nonfatal overdose within 12 months prior to death (Figure 2)
- Among patients who experienced a non-fatal overdose in 2023, one in 50 (2%) died of overdose within a year after the non-fatal overdose (Figure 3)

Figure 2. One in seven (14%) Hoosiers who died of an unintentional overdose in 2023 had a prior overdose in the 12 months before death.



Figure 3. One in 50 (2%) of patients with a non-fatal overdose in 2023 later died of overdose within the next 12 months.



For that reason, medical events, such as ED visits or EMS responses, are opportune touchpoints to connect with those at risk of fatal overdose with care and services such as take-home naloxone, overdose education, and buprenorphine induction. Additionally, peer navigators can be stationed in EDs to link people to care and recovery services. ED visits are also an opportunity to screen patients for substance misuse and connect them to care prior to experiencing an overdose.

<sup>1</sup> Data sources for nonfatal overdoses were emergency medical services (EMS) and emergency department (ED) records, for fatal overdoses were vital records mortality data, for criminal justice data were Indiana State Police arrest and Department of Corrections incarceration records, and for prescriptions were Indiana Professional Licensing Agency's Indiana Scheduled Prescription Electronic Collection and Tracking (INSPECT) program records. Data in this report link fatal overdoses with key events that occurred within the 12 months preceding death. Due to differences in timelines for data linkages, findings in this report may differ from data reported by the [MPH Data-Driven Addiction, Prevention, and Recovery \(DDAPR\) Project](#). Fatal overdoses in this report include only unintentional overdoses or overdoses of undetermined intent. As the [IDOH Drug Overdose Dashboard](#) includes all overdose deaths regardless of intent, fatal overdose data on the dashboard may differ from this report.

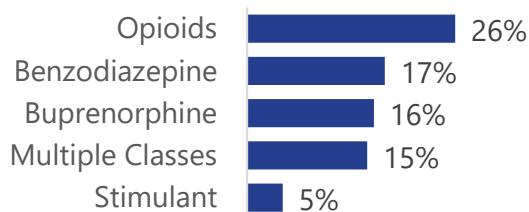
<sup>2</sup> Caudarella A, Dong H, Milloy MJ, Kerr T, Wood E, Hayashi K. Non-fatal overdose as a risk factor for subsequent fatal overdose among people who inject drugs. *Drug Alcohol Depend.* 2016;162:51-55. doi:10.1016/j.drugalcdep.2016.02.024

## Linking Fatal Overdose and Prescription Data

Those who have been prescribed controlled substances, specifically opioids and benzodiazepines, are at greater risk of fatal overdoses.<sup>3</sup> Within a year prior to death, among Indiana overdose decedents in 2023:

- 26% had a controlled opioid prescription
- 17% had controlled prescriptions for benzodiazepines
- 16% had controlled prescriptions for buprenorphine
- 15% had controlled prescriptions for multiple drug classes (opioids, benzodiazepines, buprenorphine, and/or stimulants)
- 5% had a controlled stimulant prescription

**Figure 4. Percentage of 2023 overdose decedents with controlled prescriptions within a year prior to death.**



Given these findings, clinicians can play a key role in preventing fatal overdose. Specifically, they may provide a comprehensive approach to treating pain, using resources such as the *CDC Clinical Practice Guidelines for Prescribing Opioids for Pain* or integrated strategies for pain management.

## Linking Fatal Overdose and Criminal Justice Data

Individuals who have been arrested<sup>4</sup> or released from prison<sup>5</sup> have greater risk of fatal overdose. For those released from prison, overdose risk is highest within two weeks of release. Of Indiana overdose decedents in 2023, within a year prior to death:

- 22% had any interaction with the criminal justice system
- 10% had a drug-related criminal justice system interaction
- 4% had a violence-related criminal justice system interaction

**Figure 3. Percentage of 2023 overdose decedents with criminal justice interactions within a year prior to death.**



Preventative approaches include deploying peer navigators to link individuals to services post-release or providing medication for opioid use disorder in jails. The Indiana Peer Education Program (INPEP) Extension for Community Health Outcomes (ECHO) offers peer-based education in correctional facilities and Safety & Health Integration in the Enforcement of Laws on Drugs (SHIELD) provides training to justice system staff to improve resilience and encourage integration with service providers.<sup>6</sup>

<sup>3</sup> Paulozzi LJ, Kilbourne EM, Shah NG, et al. A history of being prescribed controlled substances and risk of drug overdose death. *Pain Med.* 2012;13(1):87-95. doi:10.1111/j.1526-4637.2011.01260.x

<sup>4</sup> Krawczyk N, Schneider KE, Eisenberg MD, et al. Opioid overdose death following criminal justice involvement: Linking statewide corrections and hospital databases to detect individuals at highest risk. *Drug Alcohol Depend.* 2020;213:107997. doi:10.1016/j.drugalcdep.2020.107997

<sup>5</sup> Hartung DM, McCracken CM, Nguyen T, Kempny K, Waddell EN. Fatal and nonfatal opioid overdose risk following release from prison: A retrospective cohort study using linked administrative data. *J Subst Use Addict Treat.* 2023;147:208971. doi:10.1016/j.josat.2023.208971

<sup>6</sup> For more on IDOH's involvement in INPEP ECHO and SHIELD, please visit: <https://www.in.gov/health/overdose-prevention/home/>

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