Controlled Prescription Dispensations Preceding Fatal Overdoses (2022-2024)

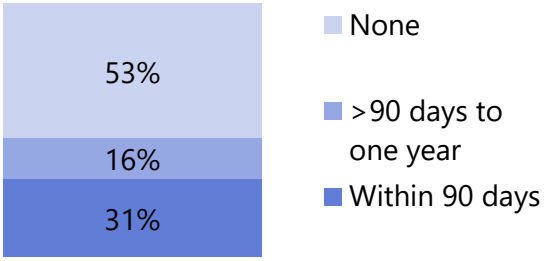
Overview

Individuals who have been prescribed controlled substances,[i] especially opioids and benzodiazepines, are at greater risk of a fatal overdose. To understand prescribing patterns among fatal overdose decedents and risk factors preceding fatal overdoses, the Indiana Department of Health (IDOH) has partnered with the Indiana Management Performance Hub (MPH) to link mortality and prescription drug monitoring program (PDMP) data.[ii]

At-a-Glance

Of the 6,549 overdose decedents captured in the linked dataset from 2022 to 2024,[iii] 47% had a controlled benzodiazepine, opioid, or stimulant prescription filled in the year prior to death (Figure 1). Of those with a controlled prescription filled in the year prior to death, two thirds (67%) filled a controlled prescription in the 90 days prior to death. **These data point to the 90 days and year following dispensation as a potential window to implement preventative measures.**

Figure 1. Overdose decedents with a controlled prescription filled within a year of death, 2022-2024.

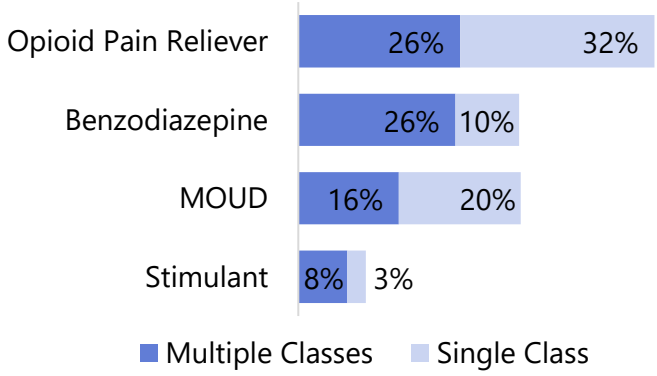


Dispensation Patterns

Among decedents with controlled prescriptions filled within a year of death, more than half (58%) had an opioid prescription filled, more than a third had a benzodiazepine (36%) or buprenorphine as a medication for opioid use disorder (MOUD)[iv] (36%) filled, and 11% had a stimulant filled (Figure 2).

More than a third of decedents (35%) who received a controlled prescription prior to death received prescriptions for multiple controlled drug classes.

Figure 2. Decedents with a controlled prescription filled within a year of death, by prescription class.



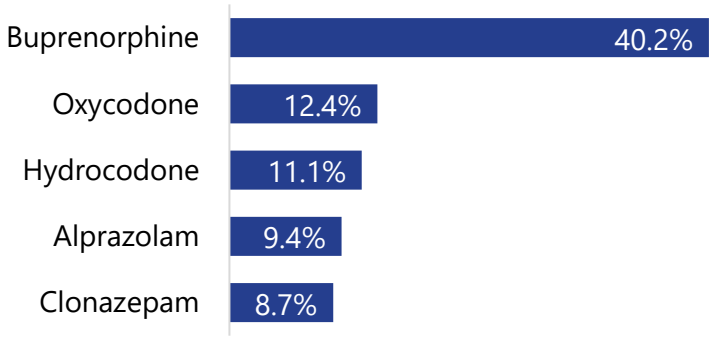
Broken down by prescription type, 45% of those prescribed opioid pain relievers, 72% of those prescribed benzodiazepines, 44% of those prescribed MOUD, and 73% of those prescribed stimulants were also prescribed another substance class.[v] The most common combination of prescriptions among all decedents who received multiple substance classes were opioid pain relievers and benzodiazepines (39%), opioid pain relievers and MOUD (17%), and benzodiazepines and MOUD (14%).

Frequency and Timing of Dispensation

After accounting for frequency of dispensation, the most common substance dispensed within a year of death was buprenorphine (40%).

The overwhelming majority of these dispensations were for MOUD (99%). After buprenorphine, the most commonly prescribed substances were oxycodone (12%) and hydrocodone (11%) (Figure 3).

Figure 3. Most dispensed controlled prescriptions.



Prevention

Linked PDMP and fatal overdose data reveal that dispensation of controlled substances in the year prior to death was common among persons who died of overdose, with nearly half receiving a controlled substance in the year prior to death. Healthcare encounters involving prescription or dispensation of controlled substances therefore present substantial opportunities for overdose prevention.

Preventive approaches include offering comprehensive approaches to treating pain and adhering to the *CDC Clinical Practice Guidelines for Prescribing Opioids for Pain*. Prior to prescribing opioids to patients at risk of overdose, or prescribing opioids concurrently with benzodiazepines, clinicians may consider co-prescribing naloxone or offering screenings and linkages to care for substance use and mental health disorders.

For overdose prevention resources for clinicians, please visit the following links from:

- CDC: https://www.cdc.gov/overdose-prevention/hcp/index.html
- IDOH: https://www.in.gov/health/overdose-prevention/resources-for-medical-providers/

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[i] Controlled substances are regulated under federal law through the Controlled Substances Act.

[ii] Data in this report link fatal overdoses in vital records mortality data with controlled prescriptions for benzodiazepines, opioids, and stimulants in Indiana Professional Licensing Agency's Indiana Scheduled Prescription Electronic Collection and Tracking (INSPECT) records. Due to differences in linkage timeframes, this report may differ from the MPH Data-Driven Addiction, Prevention, and Recovery (DDAPR) Project. Data in this report are preliminary and subject to change. Interpret with caution.

[iii] This report reflects all fatal overdoses in Indiana, regardless of residence, which differs from the Indiana Drug Overdose Dashboard.

[iv] For this report, opioids prescriptions include buprenorphine intended for pain relief, while buprenorphine to manage withdrawal was coded as MOUD. The type of buprenorphine dispensed was determined using RxNorm, produced by the National Library of Medicine.

[v] Prescription classes are not mutually exclusive.

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