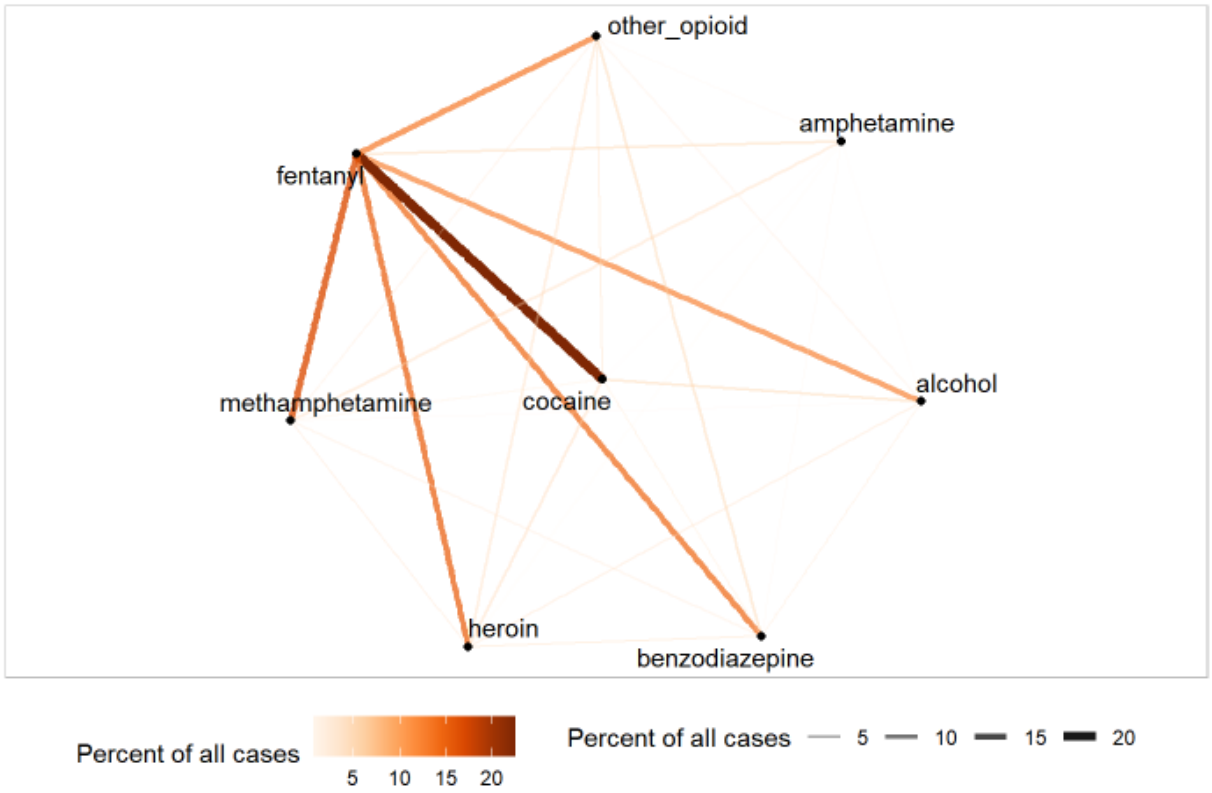
Wisconsin OFR
Overdose Fatality Review

# Fatal Drug Combinations in OFR Cases

Out of 885 cases reviewed by Overdose Fatality Review (OFR) teams in Wisconsin since 2018, 764 had one or more drug types identified for the cause of death. Of these 764 cases, 550 overdose fatalities have been attributed to multiple substances (approximately 72 percent). Overall, fentanyl was the most common substance found in combination with other drugs. Out of the 764 cases reviewed, 172 cases involved a combination of fentanyl and cocaine, 128 cases involved a combination of fentanyl and methamphetamine, and 117 cases involved a combination of fentanyl and heroin.

## Frequency of Fatal Drug Combinations in OFR Cases, 2018-2024

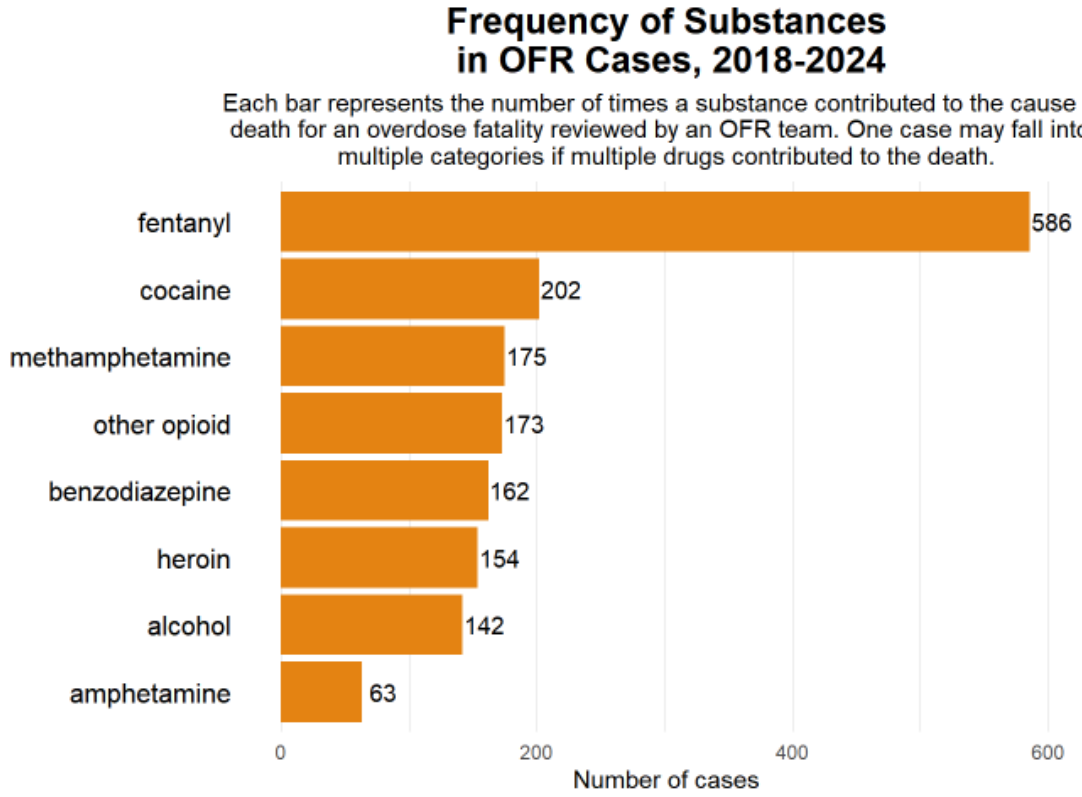
Each line represents a potential pairing of drugs that was involved in an overdose fatality.
The thickness and color indicate the percentage of all OFR cases (where a substance was identified) in which that drug combination was present, as indicated on the death certificate.
In fatalities in which more than two substances were involved, the substances were divided into unique combinations of two.




*Single drug deaths are not displayed, but percentages are calculated out of ALL OFR cases where a substance could be identified.*
*N cases = 764. N multi-drug cases = 550.*

## Substances in All OFR Cases

Across all 885 cases, fentanyl was observed in the most overdose fatalities, recorded as present in more than half of the incidents. In both single and multiple drug deaths, fentanyl, cocaine, methamphetamine, and other opioids were most likely to be involved. After other opioids, benzodiazepines were involved in the most deaths reviewed by OFR teams.




## Methodology

Substances were grouped into categories based on terms contained in the cause of death or the description of the cause of death collected in the Wisconsin OFR database. Terms included both generic and brand names of substances. The analysis includes the most commonly listed substances listed among the causes of overdose deaths reviewed by OFR teams in Wisconsin. This visualization is not an exhaustive list of all drug combinations in OFR cases.

Once each case was classified into one or more categories, those categories were then grouped into unique pairings for each case. For example, If the toxicology indicated heroin, cocaine, alcohol and fentanyl, then each unique combination would be represented: heroin - cocaine, heroin-alcohol, heroin-fentanyl, cocaine-alcohol, cocaine-fentanyl, and alcohol-fentanyl. For this reason, the combinations displayed are not mutually exclusive, as one fatal overdose may fall into multiple combination categories. Once each case was grouped into unique combinations, those combinations were aggregated to display the frequency of each combination across all OFR cases.

Data represents reviews conducted from January 18, 2018 to May 21, 2024. The cases in this analysis are those reviewed by OFR teams as well as cases abstracted through Dane County's OFR process. The figures presented here do NOT represent a random sample of overdose deaths in Wisconsin.

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