Deadly Combinations

Visualizing the Growing Role of Cocaine and Fentanyl in Overdose Deaths in Cuyahoga County, Ohio

Data Brief, February 2025



Begun Center for Violence Prevention Research and Education

This data brief visualizes how select drug combinations in drug-related deaths have changed from 2016 to 2023 in Cuyahoga County, Ohio. Figure 1 illustrates these changes, showing how different drug combinations appeared in overdose deaths over time and across demographic groups, including non-Hispanic White, non-Hispanic Black, and Hispanic populations. The thickness of the lines connecting these six major drug-types (see the reference aid below) indicates how often (the frequency) the drugs were present together in toxicology results of persons who died from drug-related causes. The circle size indicates the relative number of deaths associated with specific drugs. Table 1 presents death rates by 100,000 population.

Key Takeaways

2016 Fentanyl Surge. The rapid introduction of fentanyl into Ohio's drug supply drove a sharp rise in fentanyl-involved deaths across the county and state, particularly among the non-Hispanic White population. Fentanyl rapidly replaced heroin in the illicit market. Figure 1 illustrates heroin's decline and fentanyl's rise.

Cocaine + Fentanyl. Over time, cocaine combined with fentanyl has become the leading combination of drugs causing death across all groups. The Hispanic and non-Hispanic Black population have seen consistent increases, reaching record high death rates in 2023 (see Table 1).

Table 1. Fentanyl & Cocaine-Related Deaths by Race/Ethnicity, Cuyahoga County, 2016–2023 (frequency and rate per 100K pop*)

Year	non-Hispanic White	non-Hispanic Black	Hispanic
2016	117 (14.7)	31 (8.1)	1 (1.1)
2017	134 (16.8)	48 (12.5)	9 (9.9)
2018	112 (14.1)	36 (9.4)	10 (11)
2019	94 (11.8)	62 (16.1)	10 (11)
2020	70 (8.8)	49 (12.7)	13 (14.3)
2021	122 (15.3)	62 (16.1)	16 (17.6)
2022	116 (14.6)	90 (23.4)	17 (18.7)
2023	120 (15.1)	102 (26.5)	24 (26.4)

*Crude death rates based on 2020 U.S. Census population data

Funding Acknowledgement: This data brief was supported by grant, #15PBJA-22-GG-04436-COAP, awarded to the Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board of Cuyahoga County and funded by the Bureau of Justice Assistance. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Bureau of Justice Assistance or the ADAMHS Board.

Rx Opioids

Rx Opioids

Methamphetamine

Heroin

Cocaine

Fentanyl

Benzodiazepines

In partnership with

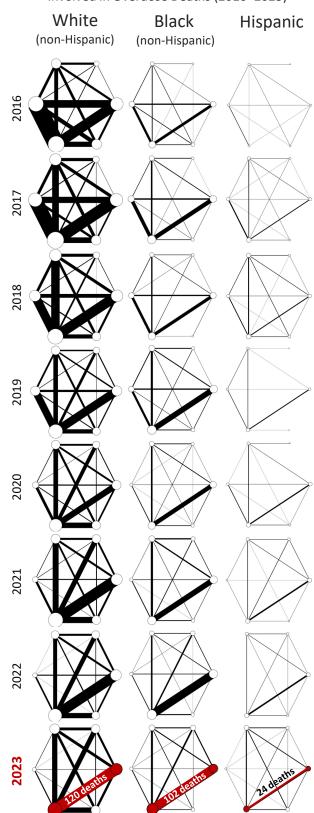
ADAMHS
BOARD OF CUYAHOGA COUNTY
ALCOHOL, DRUG ADDICTION & MENTAL HEALTH SERVICES







Figure 1. Year-by-Year Changes in Drug Combinations Involved in Overdose Deaths (2016–2023)



Data were provided by the Cuyahoga County Medical Examiner's Office; they include all drug-related deaths (intentional and unintentional, county residents and non-resident)