# Drug Overdose Data and Prevention

Denver Dept. of Public Health & Environment Safety Committee Wednesday, December 11, 2024

Tristan Sanders, MPH
Cassie Williams, MSW
Jessy Jiao, MPH
Community and Behavioral Health

Sterling J. McLaren, MD | Forensic Pathologist Ethan Jamison, MPH Denver Office of the Medical Examiner

#### **Empowering Denver's communities to live better, longer**



# Agenda

- 1. Overdose fatalities
- 2. Nonfatal overdoses
- 3. Programmatic responses

## Overdose Fatalities

Overdose deaths that occurred in Denver

Data from the Denver Office of the Medical Examiner



### Important Note on 2024 Overdose Fatality Data

All data for 2024 is preliminary and subject to change.

The numbers provided reflect the data confirmed to date.

Final figures will be updated and finalized in the spring of 2025.

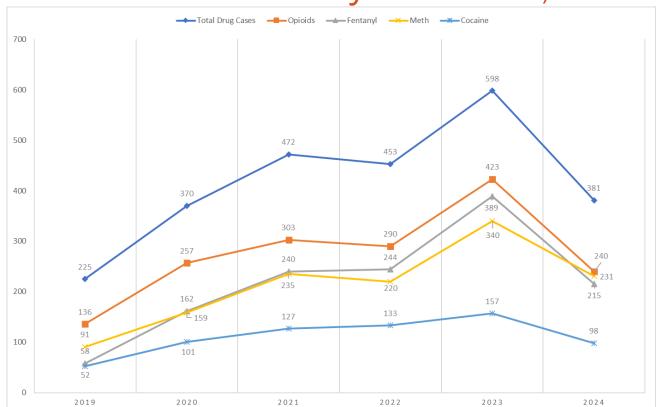
#### Contributing to the delay in data are:

- An 18 week return time on toxicology
- Ongoing investigation connected with the death,
- Complex circumstances

Annual year-end quality assurance is conducted before the release of the final data



### Drivers of deaths by overdose, 2019-present



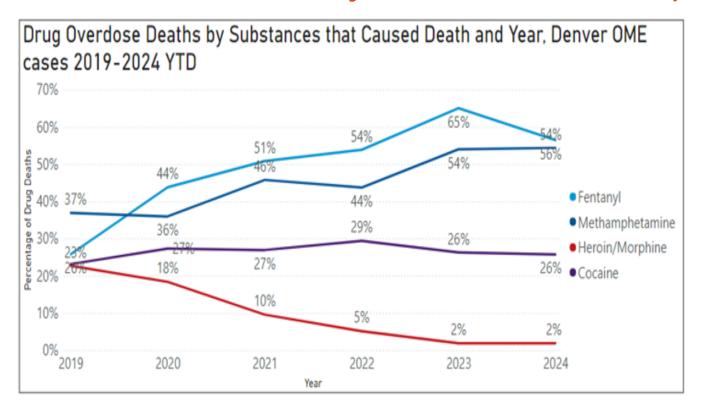
#### TOTAL:

DENVER EXPERIENCED
THE LOSS OF 2,499
PEOPLE TO DEATH BY
OVERDOSE SINCE 2019.

Opioids: Includes any opioid, including fentanyl, fentanyl analogs, morphine, heroin, oxycodone, and more.
Fentanyl: Refers specifically to deaths where fentanyl was present, which may overlap with other categories.



### Drivers of deaths by overdose, 2019-present



TOTAL:
DENVER EXPERIENCED
THE LOSS OF 2,499
PEOPLE TO DEATH BY
OVERDOSE SINCE
2019



# Drivers of deaths by overdose, 2019-present

- Usually more than one substance or "poly substances" – cause overdose death.
- In 2023, 70.8% of overdose deaths were caused by more than one substance.
- 2 substances is most common, found in 35.2% of deaths



## How are substances being used?

For fatal overdoses, the Office of the Medical Examiner reports the following:

- Fentanyl is mostly found in the form of a pill which is smoked off of a foil or in a glass pipe.
- According to studies in the National Library of Medicine, fentanyl injection has declined while smoking has increased.
  - Denver may see the opposite trend based on a changing drug supply from pill form to powder form, TBD
- Methamphetamine is usually a crystal and can be smoked or injected with a needle.
- Cocaine is usually a white powder and can be snorted, smoked, injected, or taken orally.
- Overall, injection is seen ~23%, smoking ~73%



# Who is dying by overdose in Denver?

25–34-year-olds are most common, followed by 35–44-year-olds.

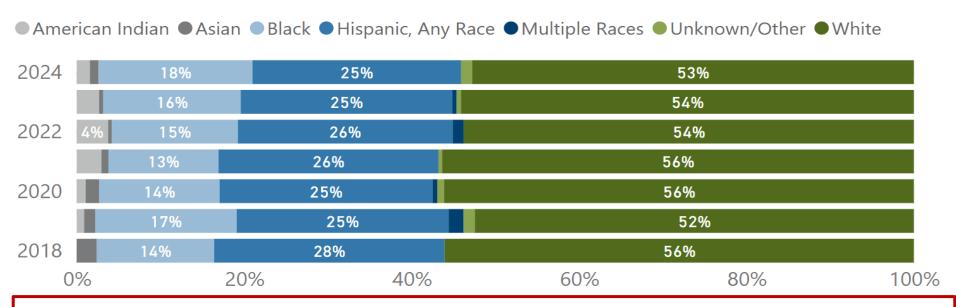
45–64-year-olds are next, with 0–24-year-olds and those 65+ having the least incidents of death by overdose.

AGE	25-34	35-44
2019	24%	22%
2020	25%	22%
2021	24%	22%
2022	21%	25%
2023	23%	27%
2024	21%	25%



# Who is dying by overdose in Denver?

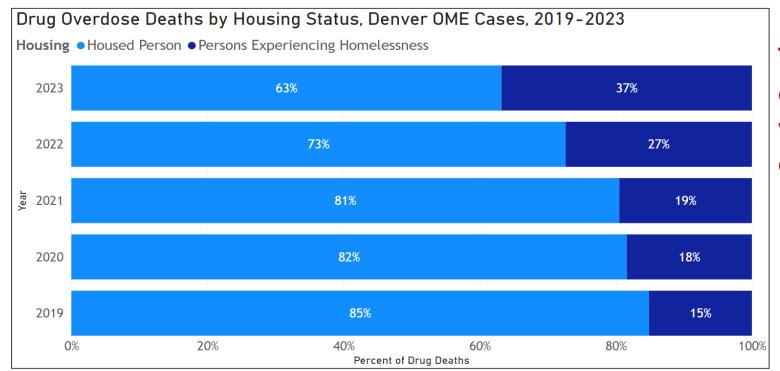
#### Race of Medical Examiner Cases



**KEY TAKEAWAY:** White individuals make up the majority of drug-related deaths, followed by Hispanic and Black individuals. This distribution largely mirrors the ethnic composition of Denver's population.



# Who is dying by overdose in Denver?



The majority of people who die by overdose in Denver are housed.



### Nonfatal Overdoses

Suspected Drug Overdoses Not Resulting in Death

Data from Denver Emergency Departments (Electronic Surveillance System for the Early Notification of Community-Based Epidemics)



#### **SOURCES:**

National Syndromic Surveillance Program (NSSP) Electronic Syndromic Surveillance for Early Notification of Community-based Epidemics (ESSENCE)

#### NSSP (National)

Tracks public health trends in real time by collecting data from hospitals, clinics, and emergency departments.

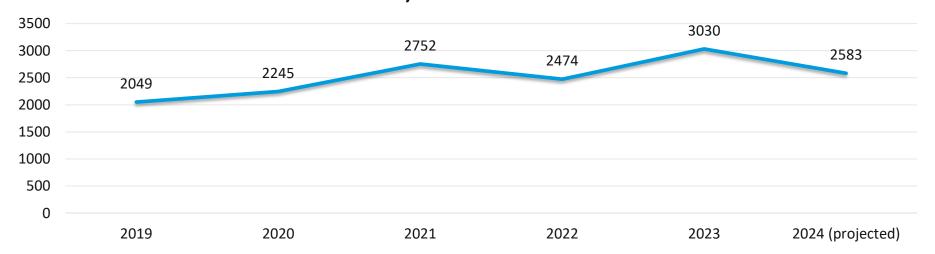
#### **ESSENCE** (State and Local)

This is a tool used to monitor and detect early signs of health problems or epidemics in communities. It uses electronic health data (like what's recorded in hospitals) to watch for unusual trends or spikes in specific symptoms,



#### **Annual Totals**

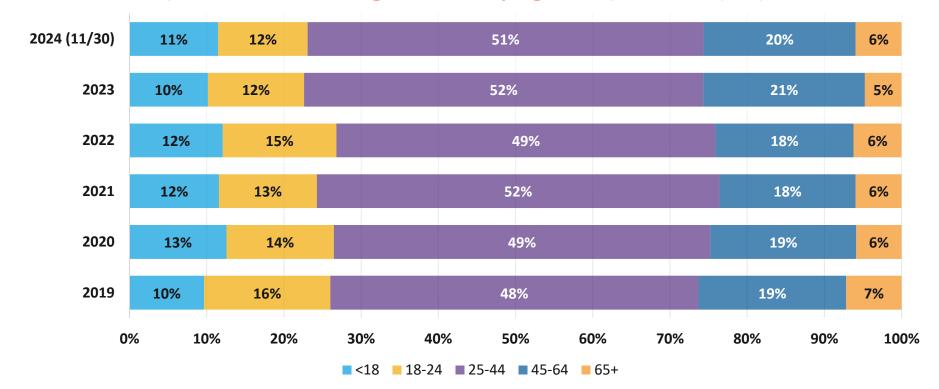
# Suspected Nonfatal Drug Overdose in ED by Year, 2019-2024



\*Data indicated is incidences of ER visits, not unique individuals

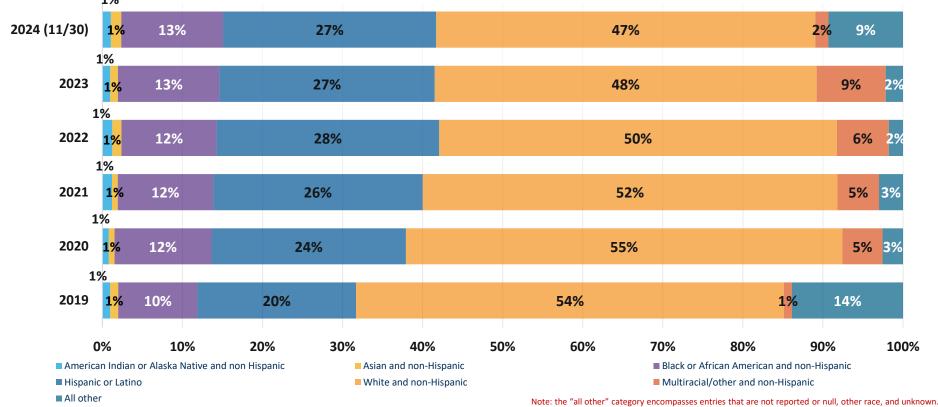


#### Suspected Nonfatal Drug Overdose by Age Group, 2019-11/30/2024





#### Suspected Nonfatal Drug Overdose by Race and Ethnicity, 2019-11/30/2024





# Program Response

DDPHE Response to Overdose Trends



# Denver Opioid Abatement Funding (OAF)

 Funds programs that promote public health, improve access to care, and strengthen education and prevention efforts.

# Overdose Data to Action (OD2A)

- 5-year grant to reduce fatal and nonfatal overdoses.
- Improve access to behavioral health and substance use treatment in Denver.
- Gathers comprehensive data on nonfatal and fatal overdoses.

#### **Overdose Prevention**

- Mail-based program of Naloxone kits, Fentanyl test strips, and mouth barrier kits.
- Overdose Prevention training
- Stigma Reduction
- Outreach & linkage to care





# Substance Use Navigation (SUN) Program

 Deploys behavioral health specialists with Denver Police Department outreach teams to link individuals to substance misuse services.

#### Wellness Winnie

- Mobile unit offering basic support, assistance, and resources.
- Narcan/Naloxone distribution, needle disposal, referral to services,

# Syringe Access Programs (SAPs)

- Annual operations funding to three SAP providers in Denver.
- Providers offer a variety of harm reduction resources.
- Referral to treatment and linkages to care when possible.



# Summary

- Overdose Trends
- Overdose Prevention

# Questions?

Community and Behavioral Health
Tristan Sander, MPH
Tristan.sanders@denvergov.org
Cassie Williams, LCSW
Cassandra.williams@denvergov.org
Jessy Jiao, MPH
jessy.jiao@denvergov.org

Office of the Medical Examiner
Sterling McLaren, MD
sterling.mclaren@denvergov.or
g
Ethan Jamison, MPH
ethan.jamison@denvergov.org



### EXTRA: Preliminary Findings: Novel Substances

OME uses NMS labs for toxicological testing, a national leader in the identification of Novel Psychoactive Substances

#### Drug Related Deaths by Year and Select Substances Noted as Causing Death\*

Year	All Drug Deaths	Any Opioid	Fentanyl	Methamphetamine	Xylazine	"Nitazenes"*	Para-flourofentanyl
2020	370	257	163	139			
2021	472	304	242	224			8
2022	453	292	251	208	2	5	4
2023	598	424	391	329	3		16
2024	372	236	211	206	4	2	20
Total	2265	1513	1258	1106	9	7	48



# EXTRA: Types of Suspected Nonfatal Drug Overdose: Suspected Nonfatal Drug Overdoses

Suspected Nonfatal Drug Overdoses by Types (non-mutually exclusive)

Year	Total	Any opioid	Any stimulant	Any depressants	Any cannabinoid
2019	2049 (includes unspecified types of drugs)	646	71	239	133
2020	2245 (includes unspecified types of drugs)	868	65	242	116
2021	2752 (includes unspecified types of drugs)	1208	53	247	109
2022	2474 (includes unspecified types of drugs)	1112	55	271	82
2023	3030 (includes unspecified types of drugs)	1678	68	224	100
2024 (11/30)	2367 (includes unspecified types of drugs)	1194	44	166	68

