Department of Health

Office of Drug User Health, AIDS Institute

State Unintentional Drug Overdose Reporting System (SUDORS)

Characteristics of Fatal Drug Overdoses in New York State

Deaths that occurred between January and December 2024

THE NEW YORK STATE DEPARTMENT OF HEALTH RESPECTFULLY ACKNOWLEDGES THAT EVERY DATA POINT IN THIS REPORT REPRESENTS A HUMAN LIFE AND THE LOSS OF A LOVED ONE.

THE INTENTION OF THIS REPORT IS TO HELP OUR COMMUNITIES, AND THEIR LEADERS, DEVELOP A DEEPER UNDERSTANDING OF THE CIRCUMSTANCES SURROUNDING DRUG OVERDOSE DEATHS TO INFORM STATEWIDE AND COMMUNITY-LEVEL OVERDOSE PREVENTION PROGRAMS ACROSS NEW YORK STATE.

This publication is supported by Cooperative Agreement Number 1 NU17CE010215-01-00, Overdose Data to Action in New York State, from the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of Centers for Disease Control and Prevention, the Department of Health and Human Services, nor the Federal Government.

DATA SOURCES AND COMPLETENESS

Information collected for deaths occurring January to December 2024 in New York State

The State Unintentional Drug Overdose Reporting System (SUDORS) program is an enhanced public health surveillance reporting system, supported by the Centers for Disease Control and Prevention, that aims to collect comprehensive information on fatal drug overdose cases to inform public health action.

Case Inclusion Criteria:

- Cause of death: Drug poisoning/overdose deaths that occurred *in* New York State
- Manner of death: Unintentional/accidental or undetermined
- Location of death: Occurrent (within the jurisdiction), regardless of residence of decedent and location of injury (overdose).

A complete case includes information from:

- Death certificate
- Toxicology report
- Forensic or coroner/medical examiner report

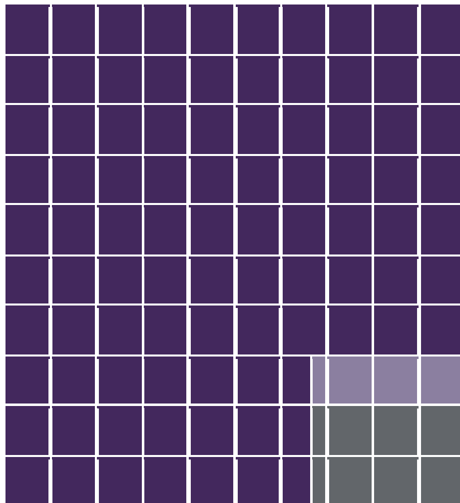


Figure 1. State Unintentional Drug Overdose Reporting System successfully collects multiple data sources.

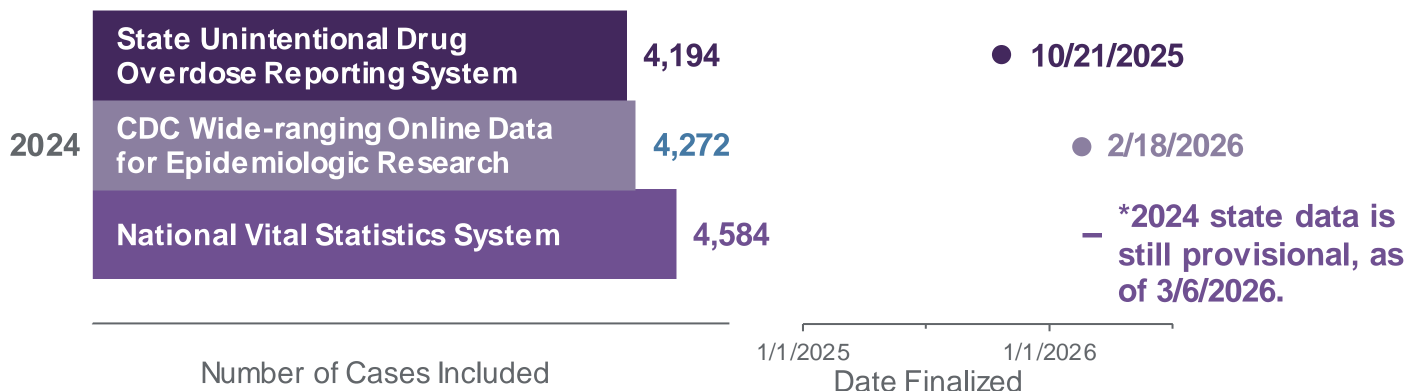
90.1% of case reports include a death certificate, a toxicology report, and a coroner or medical examiner report.

3.3% had a death certificate and either a toxicology report *or* a coroner or medical examiner report.

6.6% of case reports included only a death certificate.

Figure 2. State Unintentional Drug Overdose Reporting System prioritizes data timeliness.

State Unintentional Drug Overdose Reporting System 2024 data was finalized at least 120 days prior to other federal fatal drug overdose data sources, with fewer cases included.



SUMMARY FINDINGS

- In New York State, in 2024, **4,194 individuals died** of an accidental or undetermined intent drug overdose and were reported to the State Unintentional Drug Overdose Reporting System.
- **Men**, especially **working-aged** men, accounted for the **largest portion** of fatal overdoses.
- The **highest rate** of fatal overdose by race and ethnicity was among **Black, non-Hispanic** people.
- **Black, non-Hispanic** overdose decedents were **typically older** than decedents of other races and ethnicities.
- Drug overdoses are often the result of an **acute polydrug intoxication**, most often involving **fentanyl**.
- While drug overdose **deaths decreased by 30%** from 2023 to 2024, overdose deaths involving **stimulants without opioids increased by 16%** from 654 to 761 cases.
- Fatal overdoses often occur in **private, residential** settings, leading to a **delay in response**.
- There are **missed opportunities** among individuals **responding to overdose**, with 42% of potential bystanders not responding.
- Persons who died of drug overdose are often living with a **substance use disorder** and have **multiple medical needs** including **mental health** and other chronic **medical conditions**.
- **Smoking**, followed by **snorting**, was the most frequent route of drug use among cases with a coroner or medical examiner report.
- **Addressing access** to food, housing, transportation, and health care are important in **preventing overdose**.

DEMOGRAPHICS

MOST OVERDOSE DEATHS OCCUR AMONG MEN, ESPECIALLY OLDER MEN

In New York State, in 2024, 74% of persons who died of an overdose were male; most were working-aged (25 to 64 years).

Figure 3a. Proportion of overdose deaths, by sex, 2024.

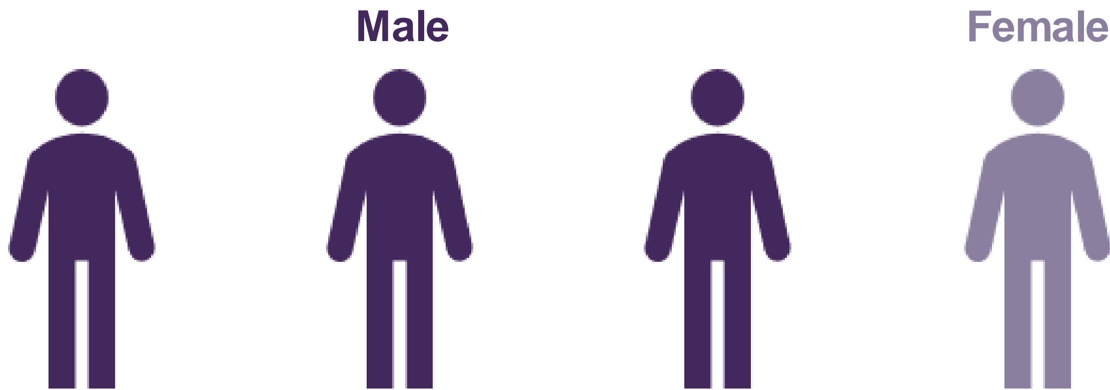
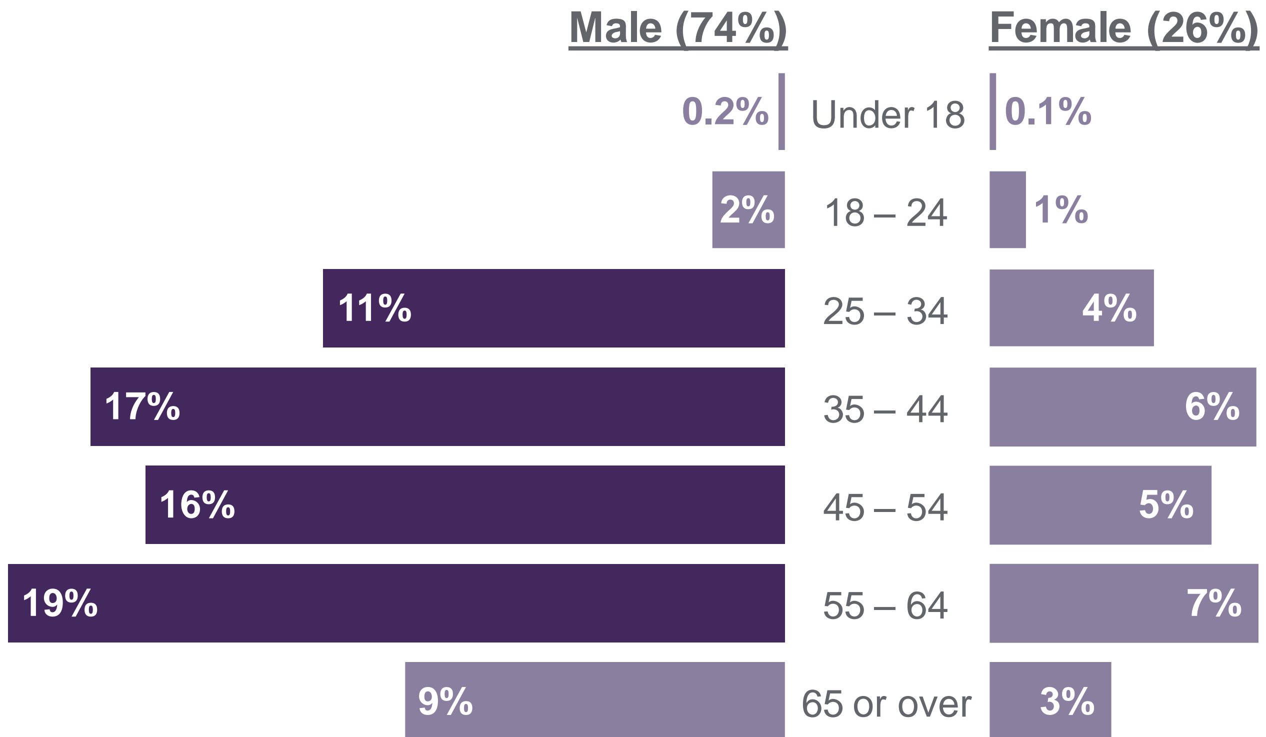


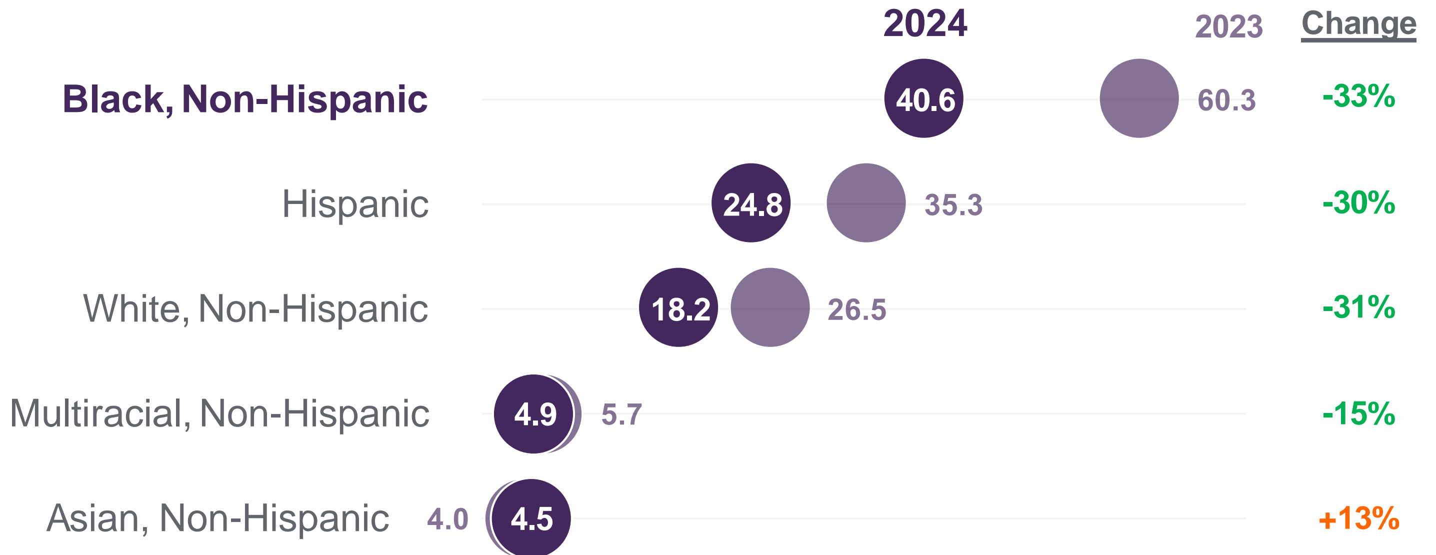
Figure 3b. Percent of overdose deaths, by sex and age, 2024.



BLACK, NON-HISPANIC, OVERDOSE MORTALITY RATE STILL HIGHEST IN 2024

Black, non-Hispanic, communities experienced the highest overdose mortality rate in 2023 and 2024. From 2023 to 2024, rates for the three largest race and ethnicity groups dropped by 30-33%.

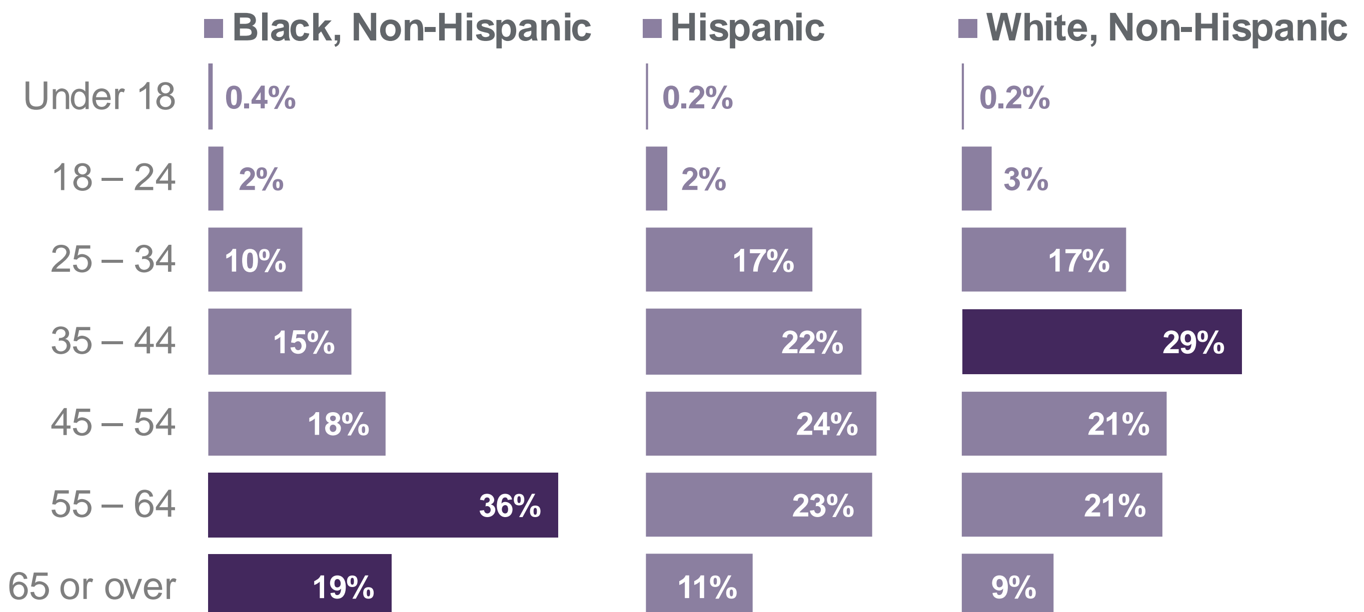
Figure 4a. Overdose mortality rate, per 100,000 population, by race/ethnicity, 2023-2024.



BLACK, NON-HISPANIC, OVERDOSE DECEDENTS WERE OLDER THAN OTHERS

55% of Black, non-Hispanic, people who died of an overdose were 55 years or older. 29% of White, non-Hispanic, people who died of an overdose were 35 to 44 years old.

Figure 4b. Percent of overdose deaths, by race/ethnicity and by age group, 2024.

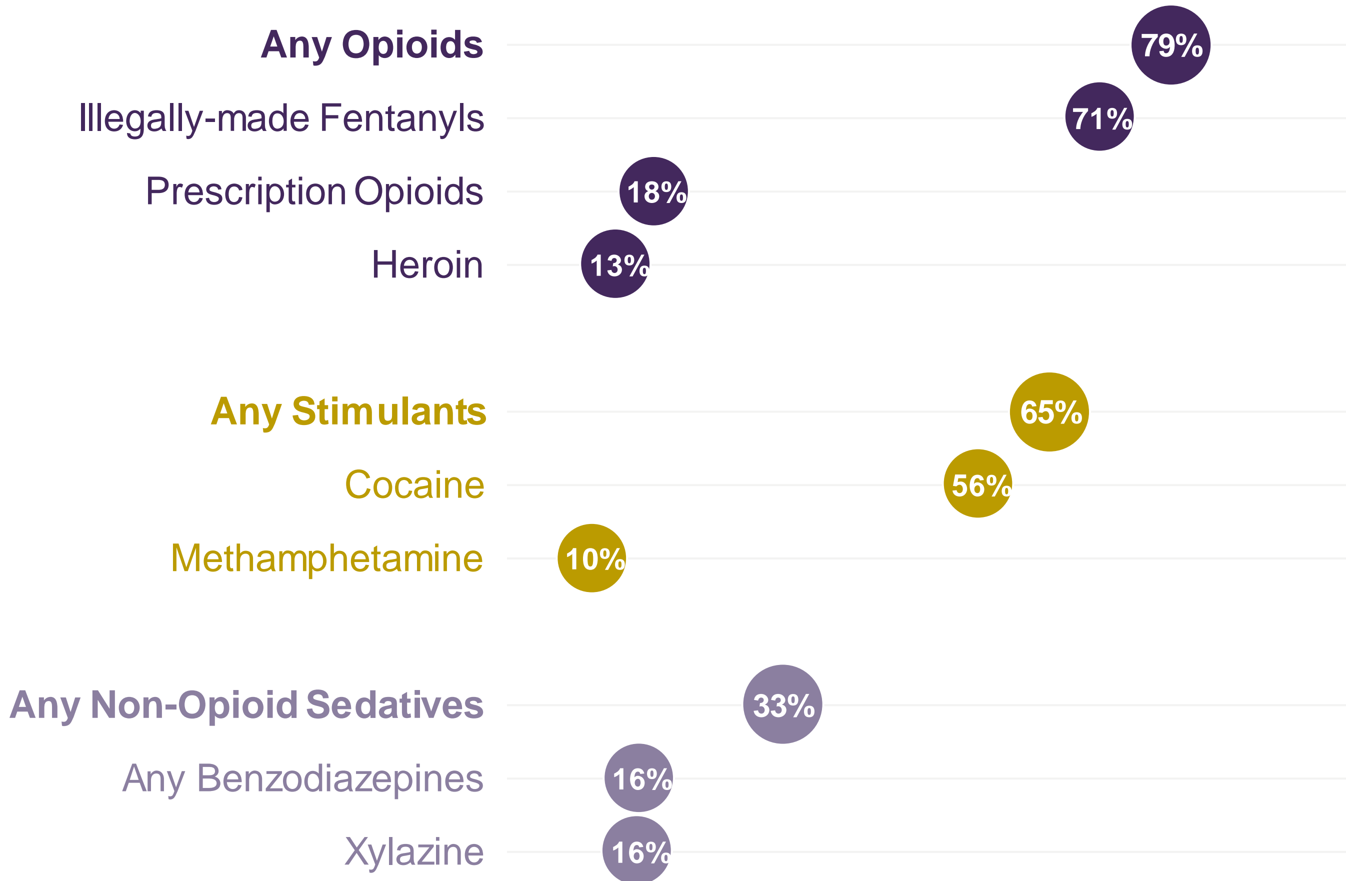


TOXICOLOGY

FENTANYL STILL DOMINANT CAUSE OF DEATH SUBSTANCE IN 2024

In 2024, fentanyl was involved as a cause of death in 71% of overdose deaths and cocaine was involved in 56% of overdose deaths.

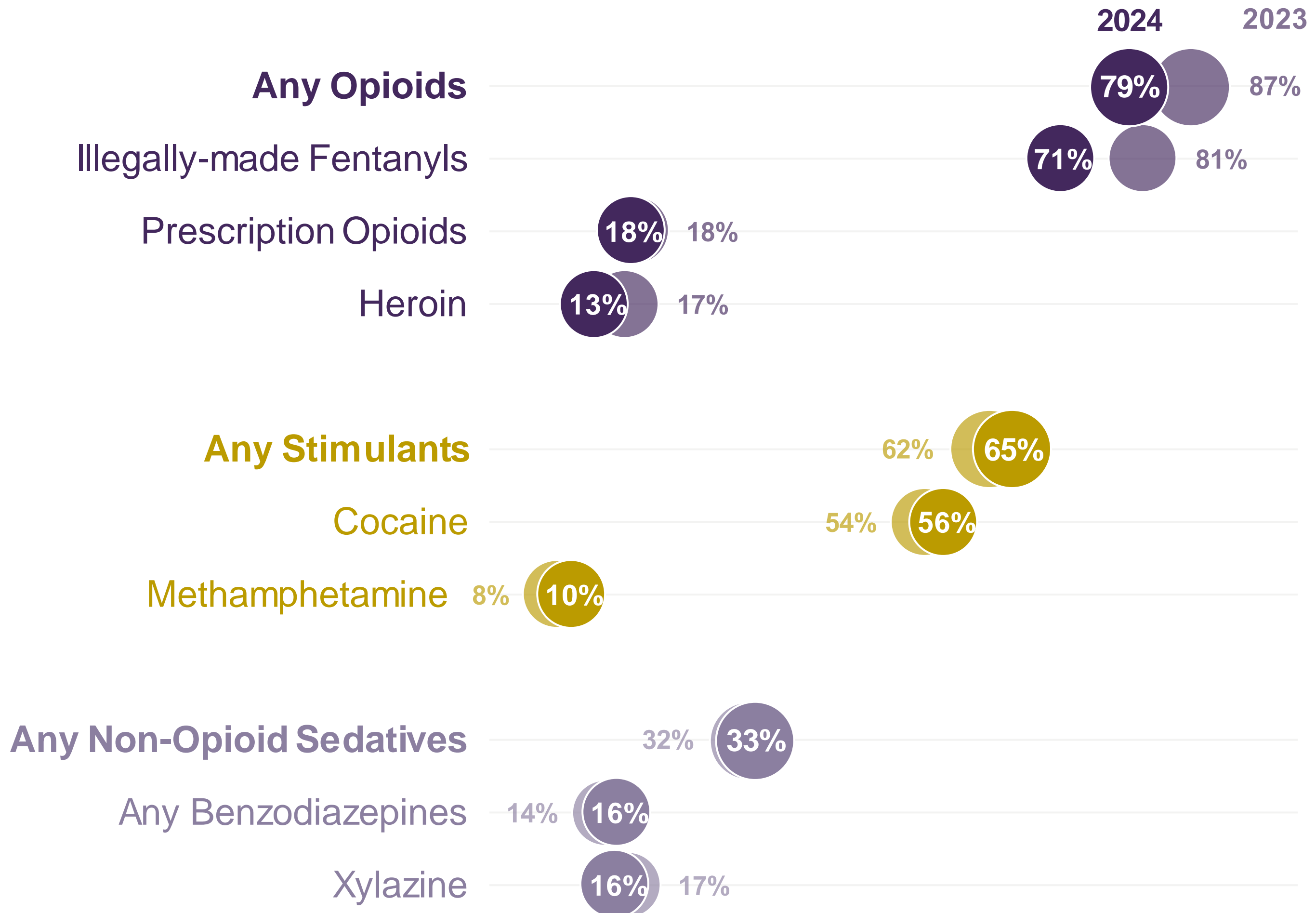
Figure 5a. Percent of overdose deaths where select drugs and drug classes were indicated as cause of death, 2024.



TOXICOLOGY PROFILE OF CAUSES OF DEATH IS CHANGING

From 2023 to 2024, opioid involvement in fatal overdoses decreased from 81% to 71%; stimulant involvement increased from 62% to 65%.

Figure 5b. Percent of overdose deaths where select drugs and drug classes were indicated as cause of death, 2023-2024.



RATES OF OVERDOSE DEATH GOING DOWN AMONG ALL SUBSTANCES

From 2023 to 2024, opioid involvement in fatal overdoses decreased by 36% from 25.7 to 16.4 per 100,000; stimulant involvement decreased by 27% from 18.3 to 13.4 per 100,000.

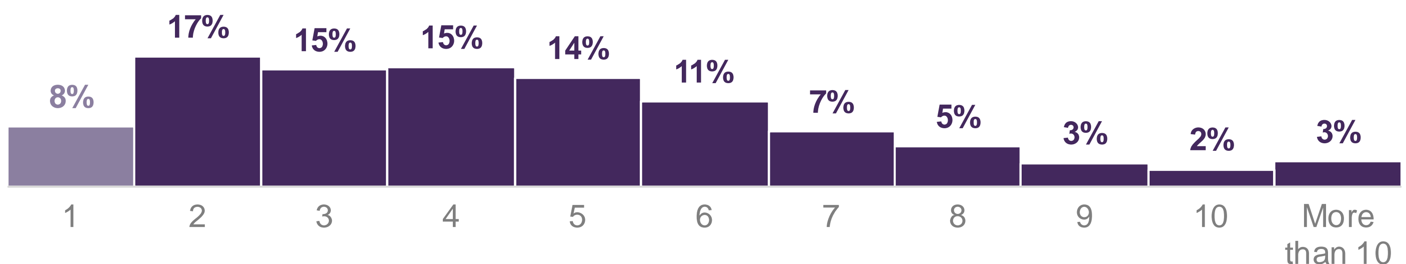
Figure 5c. Rate of overdose deaths involving select drugs and drug classes as a cause of death, per 100,000 population, 2023-2024.

	2024	2023	Change
Any Opioids	16.4	25.7	-36%
Illegally-made Fentanyls	14.7	24.0	-39%
Prescription Opioids	3.7	5.4	-32%
Heroin	2.2	3.9	-43%
Any Stimulants	13.4	18.3	-27%
Cocaine	11.7	16.0	-27%
Methamphetamine	2.1	2.5	-14%
Any Non-Opioid Sedatives	6.8	9.5	-28%
Any Benzodiazepines	3.3	4.3	-23%
Xylazine	3.3	5.1	-36%

OVERDOSE DEATHS OFTEN INVOLVE MULTIPLE SUBSTANCES

In 2024, 92% of persons who died of a drug overdose had two or more substances involved as a cause of death.

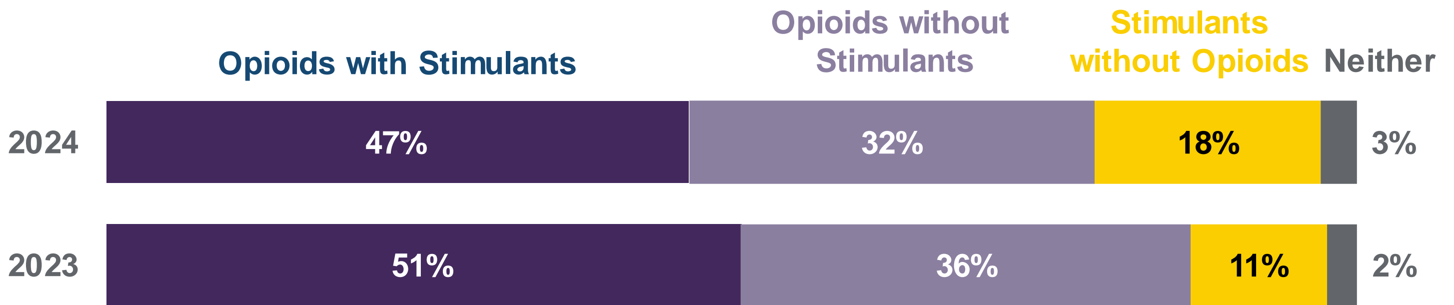
Figure 6. Number of Substances indicated as cause of death, among cases with a postmortem toxicology report, 2024.



INCREASE IN DEATHS INVOLVING STIMULANTS WITHOUT OPIOIDS

In 2024, 47% of overdose deaths involved both opioids and stimulants; 18% involved stimulants without opioids, up from 11% in 2023.

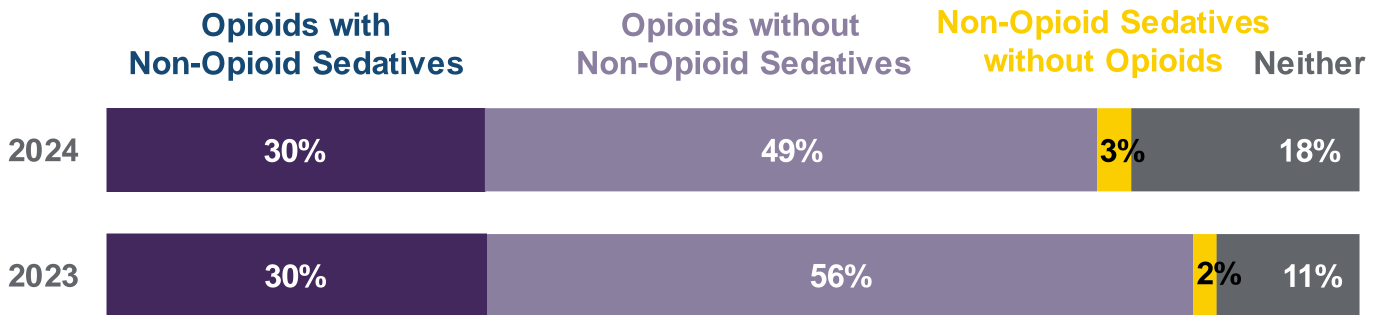
Figure 7a. Percent of overdose deaths with opioids and/or stimulants involved as cause of death, 2024.



NON-OPIOID SEDATIVES USUALLY INVOLVED WITH OPIOIDS

In 2024, 30% of overdose deaths involved both opioids and non-opioid sedatives; only 3% involved non-opioid sedatives without opioids.

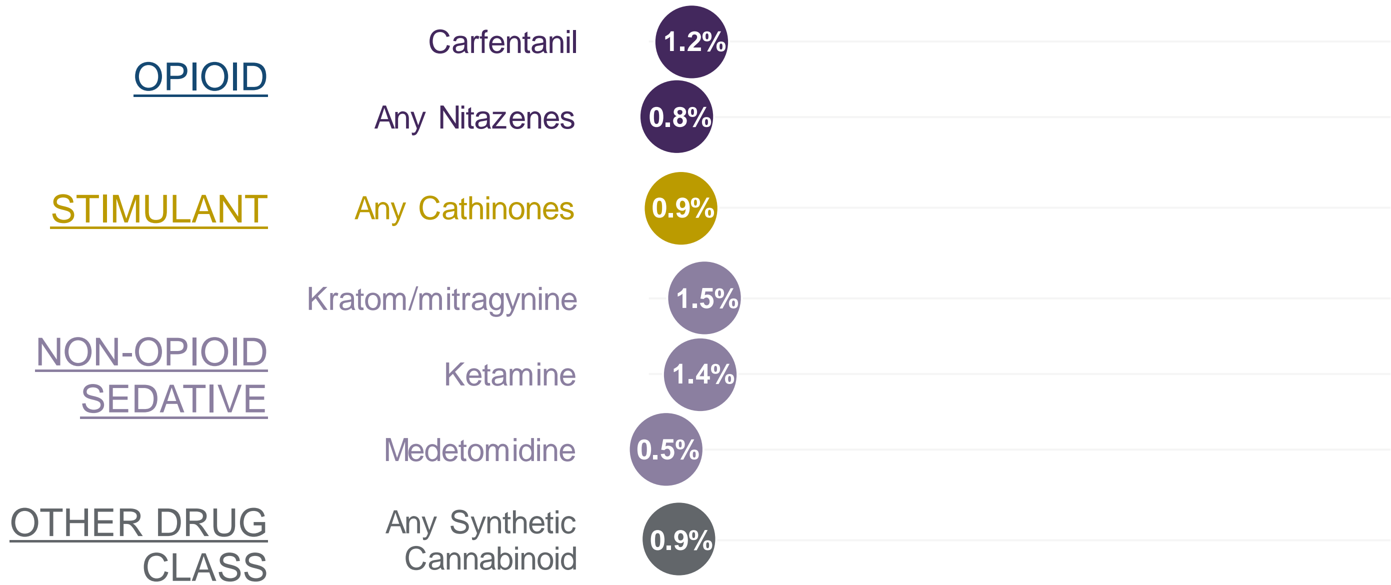
Figure 7b. Percent of overdose deaths with opioids and/or non-opioid sedatives involved as cause of death, 2024.



EMERGING SUBSTANCES DETECTED INFREQUENTLY IN 2024

Emerging substances were each detected in less than 2% of overdose deaths with an available toxicology report.

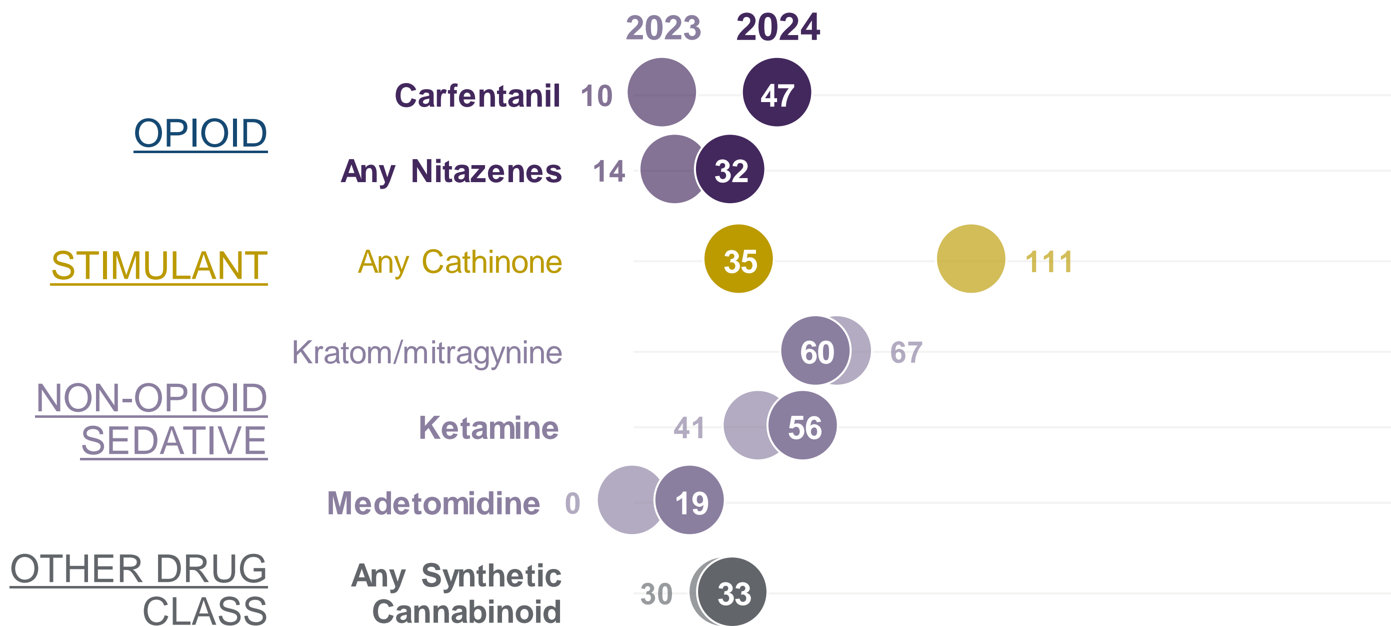
Figure 8a. Percent of overdose deaths where select substances and substance classes were detected in postmortem toxicological testing, among cases with a postmortem toxicology report, 2024.



RISE IN DETECTION FOR MOST EMERGING SUBSTANCES IN 2024

Carfentanil, Nitazenes, Ketamine, Medetomidine, and Synthetic Cannabinoids were more frequently detected in overdose deaths in 2024 than 2023.

Figure 8b. Number of overdose deaths where select drugs and drug classes were detected in postmortem toxicological testing, among cases with a postmortem toxicology report, 2023-2024.

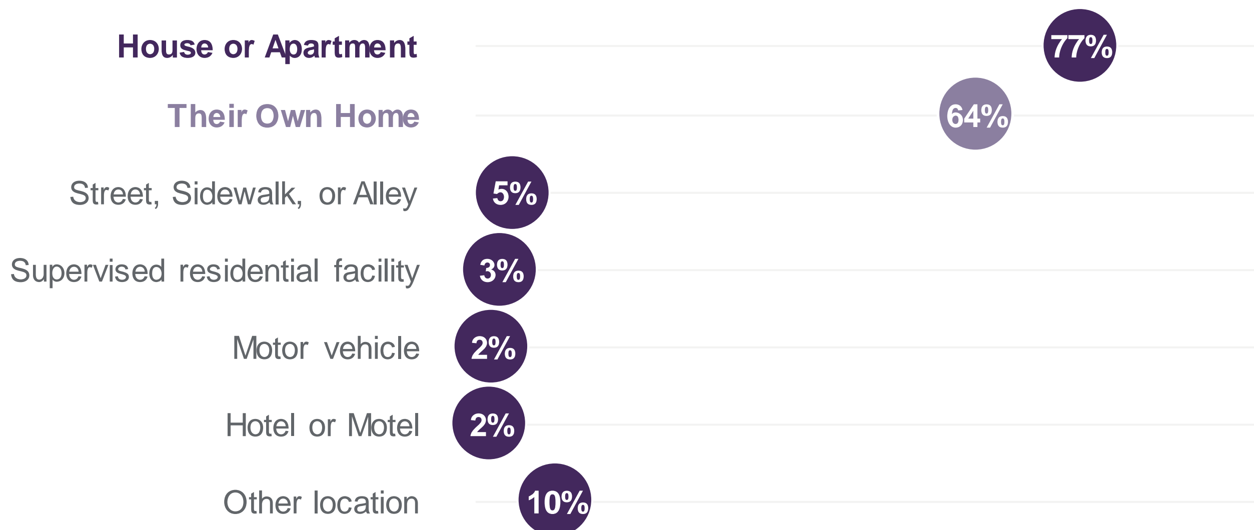


CIRCUMSTANCES

MOST OVERDOSE EVENTS OCCUR IN A RESIDENTIAL SETTING, OFTEN AT HOME

77% of overdose events occurred in a house or an apartment;
64% occurred where the decedent lived.

Figure 9. Percent of overdose deaths, by location of overdose, among cases with a coroner or medical examiner report, 2024.



WHEN AN OVERDOSE IS UNNOTICED, MEDICAL RESPONSE IS DELAYED

Most overdose events had a medical response, and some decedents made it to an emergency room or were administered naloxone, but not in time.

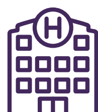
Figure 10. Percent of overdose decedents with select circumstances related to status of medical response, among cases with a coroner or medical examiner report, 2024.

85% of people who died of an overdose **had emergency medical services (EMS) respond** to the scene.

74% of people **had no pulse** when first responders arrived.

24% of people were **administered naloxone**.

26% received **cardiopulmonary resuscitation (CPR)**.

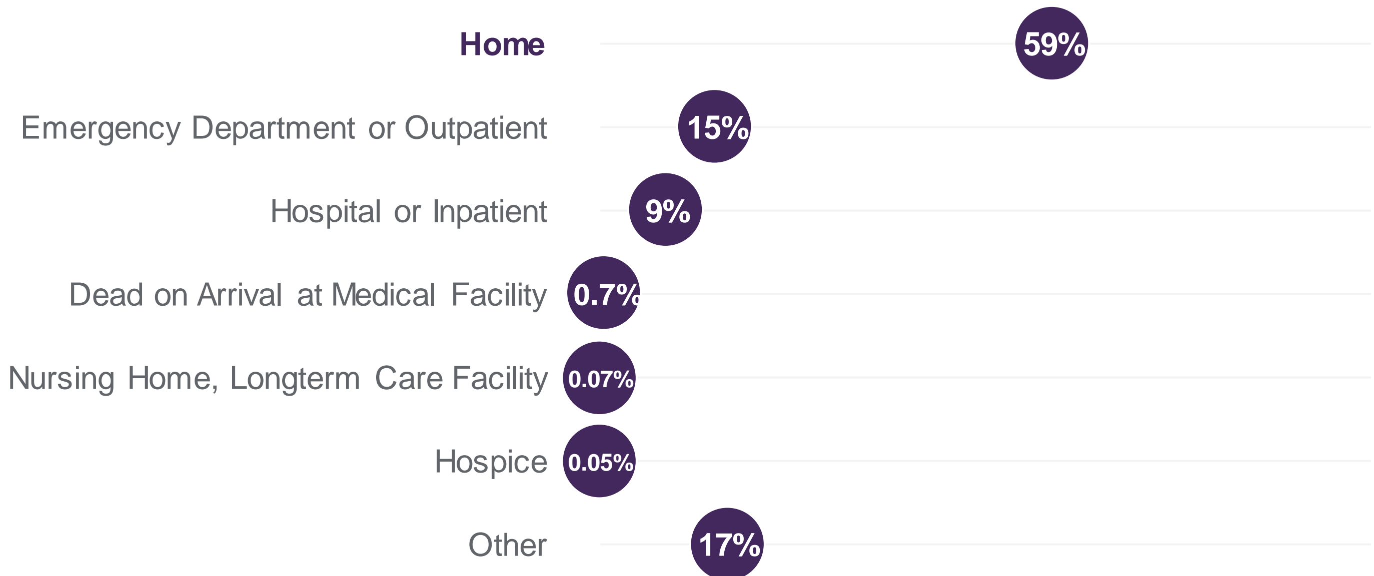


24% of people were seen in an **emergency room**, and
8% were admitted to a **hospital, but they did not survive**.

MOST OVERDOSE DEATHS OCCUR AT HOME

Despite response efforts, 59% of persons who died of an overdose, died at their own home.

Figure 11. Percent of overdose deaths, by location of death, among all cases, 2024.



BYSTANDERS PLAY ROLE IN OVERDOSE PREVENTION AND RESPONSE

Only about 1 in 3 overdose deaths had a bystander nearby.

Figure 12a. Percent of overdose deaths with a bystander present at time of overdose, among cases with a coroner or medical examiner report, 2024.

When present, bystanders did not respond 42% of the time.

Figure 12b. Percent of overdose deaths where a bystander provided no overdose response, among cases with a coroner or medical examiner report where a bystander present at time of overdose, 2024.

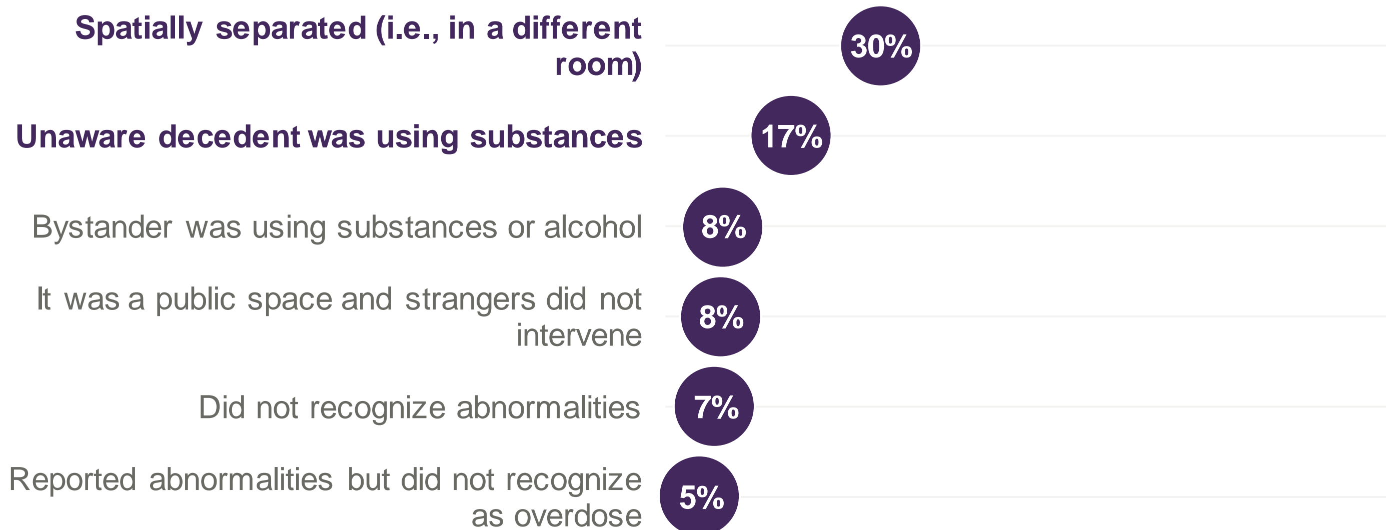
For the purposes of this reporting system, bystanders are individuals who:

- ✓ Were physically nearby at the onset, during, or shortly after an overdose
  - ➢ Even if they were not directly with the decedent
- ✓ Potentially had an opportunity to intervene and respond
- X Note: First responders or medical professionals called to the scene are not considered bystanders.

BYSTANDERS NEED TO BE ABLE TO SEE AND RECOGNIZE AN OVERDOSE TO RESPOND

When bystanders did not respond, they were often unaware of the overdose.

Figure 13. Percent of overdose deaths, by reason for bystander(s) non-response, among cases with a coroner or medical examiner report where a bystander was present, but did not respond, 2024.

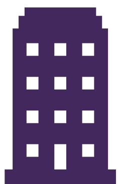


INSTABILITY IN PERSON'S LIFE A RISK FACTOR FOR OVERDOSE

8.6% of overdose decedents were experiencing housing instability; 5.9% had been recently released from an institutional setting.

Figure 14. Percent of overdose decedents with select circumstances related to housing and life stability, among cases with a coroner or medical examiner report, 2024.

8.6% of persons who died of an overdose were **experiencing homelessness or housing instability** at their time of death.

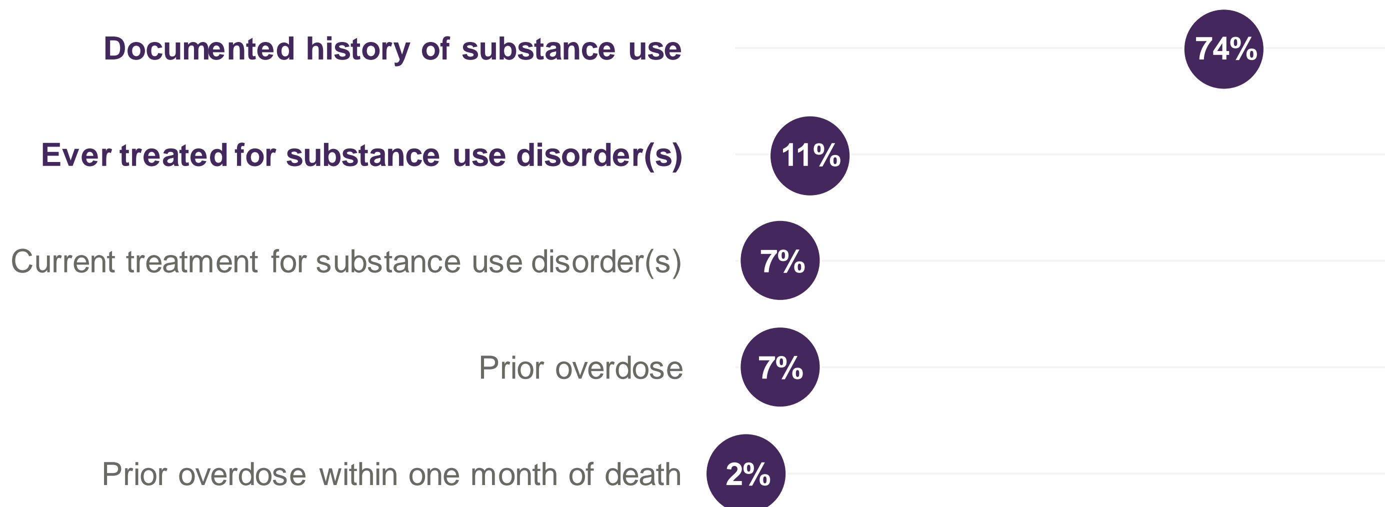


5.9% died within a month of being released from an institutional setting (e.g., prison/jail, residential treatment facility, or psychiatric hospital).

SUBSTANCE USE HISTORY WAS COMMON, HISTORY OF TREATMENT WAS NOT

74% of persons who died of an overdose had a documented history of substance use, while only 11% had evidence of ever receiving treatment for substance use disorder.

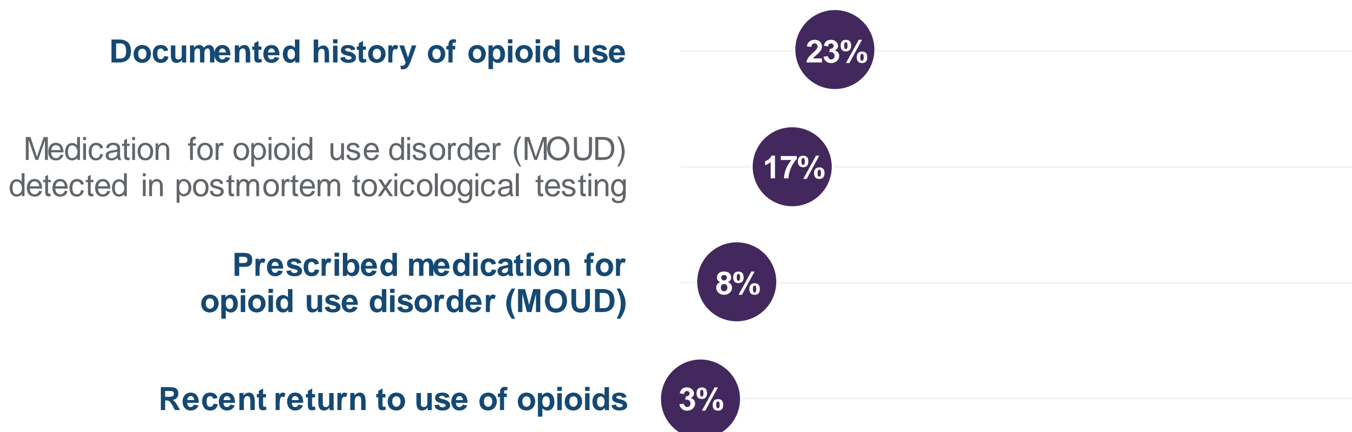
Figure 15. Percent of overdose deaths with select circumstances related to substance use and substance use disorder treatment, among cases with a coroner or medical examiner report, 2024.



INCREASED ACCESS TO TREATMENT CAN HELP PREVENT OPIOID OVERDOSE

23% of persons who died of an opioid-involved overdose had a documented history of opioid use; 8% were prescribed medications for opioid use disorder; 3% had recently returned to using opioids after not using opioids for some time.

Figure 16. Percent of opioid-involved overdose deaths with select circumstances related to substance use and substance use disorder treatment, among cases with a coroner or medical examiner report and a toxicology report, 2024.

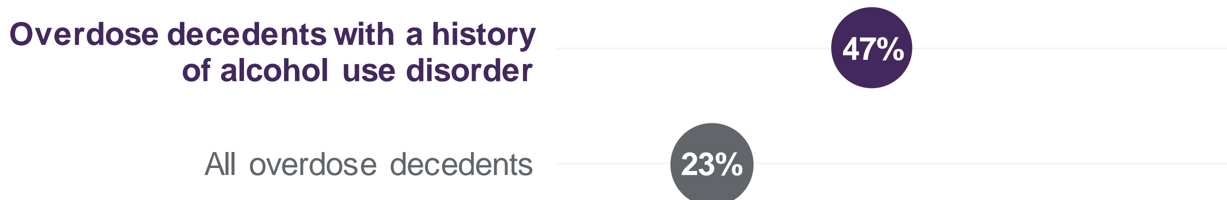


***FDA-approved medications for opioid use disorder (MOUD): buprenorphine, methadone, or naltrexone**

ALCOHOL USE DISORDER A RISK FACTOR FOR DRUG OVERDOSE

For decedents with a history of alcohol use disorder, almost half had alcohol as one of the substances listed as a cause of death, compared to 23% of decedents without a history of alcohol use disorder.

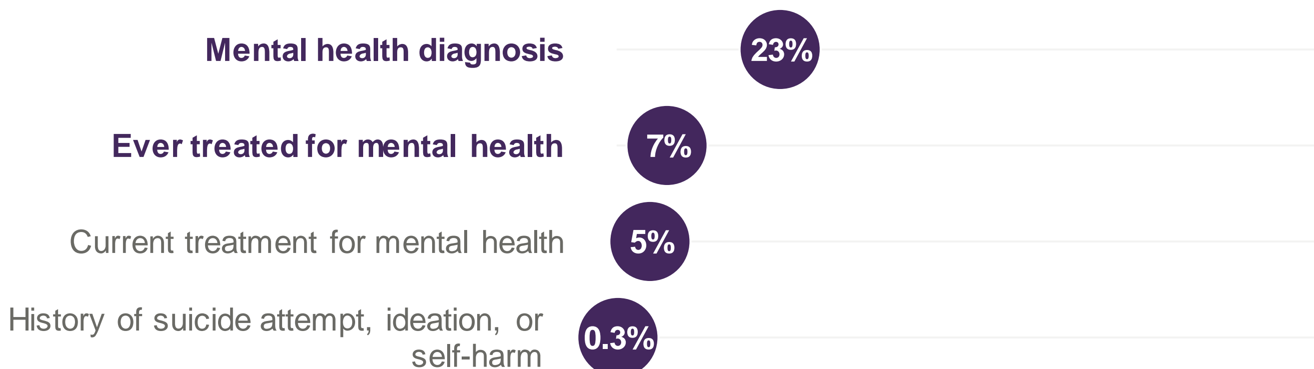
Figure 17. Percent of overdose deaths with alcohol as a cause of death, comparing decedents with alcohol use disorder history to all decedents, among cases with a coroner or medical examiner report and a postmortem toxicology report, 2024.



MENTAL HEALTH CONDITIONS WERE COMMON, HISTORY OF TREATMENT WAS NOT

23% of persons who died of an overdose were living with a mental health condition, but only 7% had ever received mental health treatment.

Figure 18. Percent of overdose deaths with select circumstances related to mental health and mental health treatment, among cases with a coroner or medical examiner report, 2024.



The **most common mental health diagnoses** were:

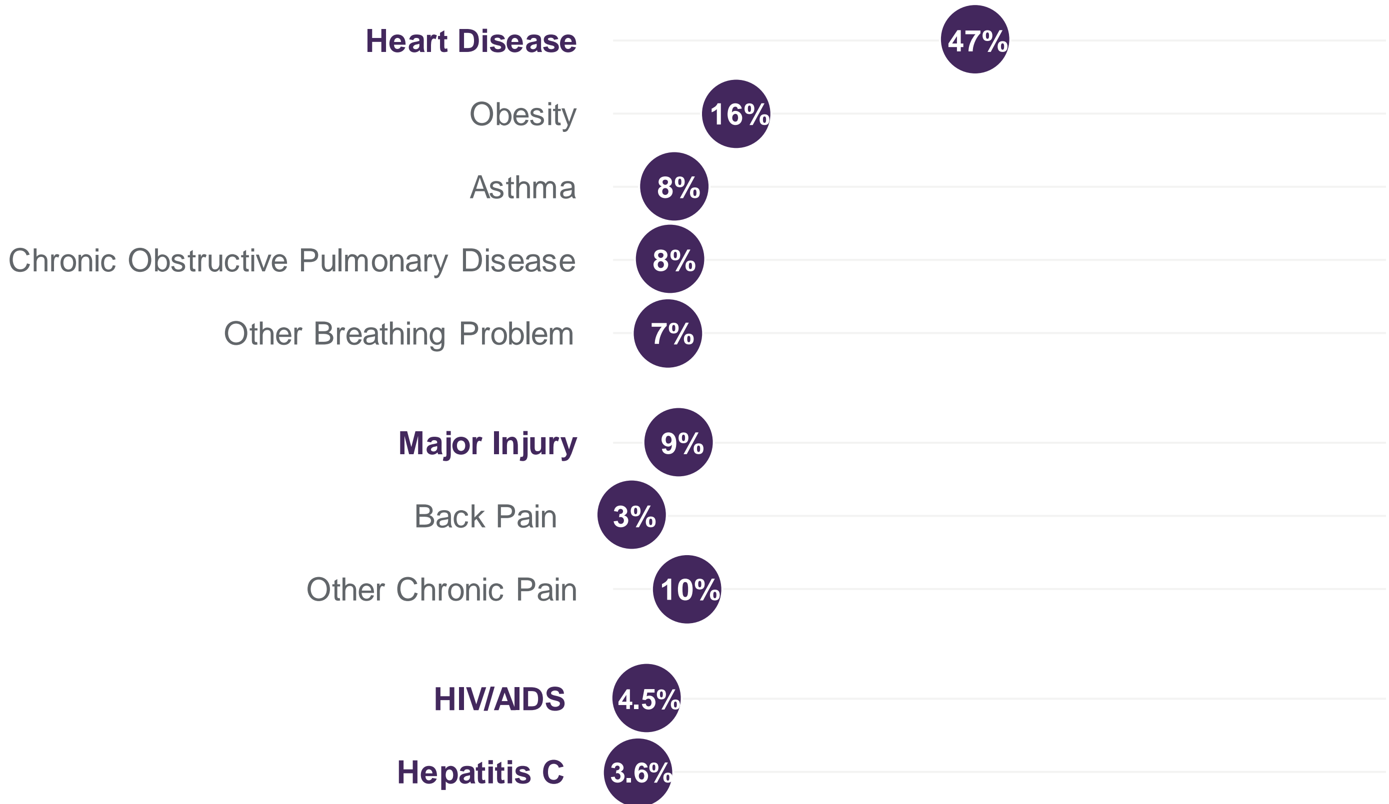
- **depression** (11.7%)
- **anxiety** (6.3%)
- **bipolar disorder** (5.5%)
- **schizophrenia** (4.0%)
- **post-traumatic stress disorder** (2.0%)

Other mental health diagnoses (including borderline personality disorder, and panic disorder) were reported for less than 2% of people who died of an overdose.

CHRONIC CONDITIONS CAN CONTRIBUTE TO OVERDOSE RISK

Almost half of persons who died of an overdose had **heart disease**, **9%** had a **history of a major injury**, **4.5%** had **HIV/AIDS**, and **3.6%** had **Hepatitis C**.

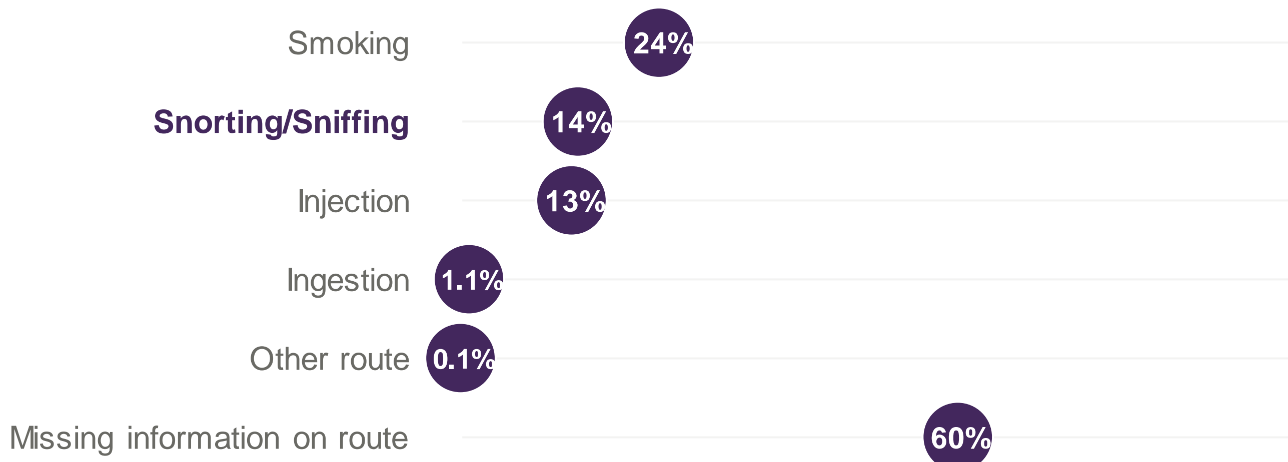
Figure 19. Percent of overdose deaths with select circumstances related to chronic conditions and medical history, among cases with a coroner or medical examiner report, 2024.



SMOKING WAS THE MOST COMMON ROUTE OF USE

24% of overdose death cases had **evidence of smoking** as a route of drug use.

Figure 20. Percent of overdose deaths, by route of drug use, among cases with a coroner or medical examiner report, 2024.



OVERDOSES ARE PREVENTABLE

56.4% OF OVERDOSE DEATHS HAD AT LEAST ONE POTENTIAL OPPORTUNITY FOR INTERVENTION.

Figure 21. Percent of overdose deaths with at least one potential opportunity for intervention, among cases with a coroner or medical examiner report, 2024.

Decedent had at least one potential opportunity for intervention	56%

Opportunities for intervention included evidence of at least one of the following:

- Potential bystander was present at time of fatal overdose
- Fatal drug use was witnessed
- Evidence of a mental health diagnosis
- Current treatment for substance use disorder(s)
- Prior overdose
- Decedent was recently released from an institutional setting

TECHNICAL NOTES

Figure 1. State Unintentional Drug Overdose Reporting System successfully collects multiple data sources. This report includes death certificates from all counties in New York State with deaths in 2024, with 53 counties additionally submitting coroner/medical examiner and toxicology reports. The counties submitting reports during this reporting period included: Albany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Dutchess, Erie, Essex, Fulton, Genesee, Greene, Herkimer, Jefferson, Kings, Lewis, Madison, Monroe, Montgomery, Nassau, New York, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schuyler, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, and Yates.

Figure 2. State Unintentional Drug Overdose Reporting System prioritizes data timeliness. Information in this report includes 4,194 of the 4,295, or 97.6%, of the deaths in this period based on provisional data from the Centers for Disease Control and Prevention. Cases included in the State Unintentional Drug Overdose Reporting System are identified using ICD-10 cause-of-death codes (X40-X44 and Y10-Y14 for unintentional and undetermined intent overdose deaths, respectively), scans of the text-based cause of death information, and reviews of coroner/medical examiner reports, subject to review by Centers for Disease Control and Prevention's quality assurance team. Compared to the final count of 2024 deaths included in the State Unintentional Drug Overdose Reporting System, provisional 2024 data from CDC Wide-ranging Online Data for Epidemiologic Research included 101, or 2.4%, more drug overdose deaths and provisional 2024 data from the National Vital Statistics System included 390, or 8.5%, more drug overdose deaths, as of February 13, 2026.

CDC Wide-ranging Online Data for Epidemiologic Research includes drug overdose deaths with ICD-10 underlying cause-of-death codes X40-X44 and Y10-Y14 but is limited to deaths among U.S. residents. Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Provisional Mortality on CDC WONDER (Wide-ranging ONline Data for Epidemiologic Research) Online Database. Data are from the final Multiple Cause of Death Files, 2018-2024, and from provisional data for years 2025 and later, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Retrieved February 23, 2026, from wonder.cdc.gov/mcd-icd10-provisional.html.

National Vital Statistics System includes drug overdose deaths among non-U.S. residents with ICD-10 underlying cause-of-death codes X40-X44 and Y10-Y14, as well as underlying cause-of-death codes X60-X64 and X85 for suicide and homicide deaths, respectively. Ahmad FB, Cisewski JA, Rossen LM, Sutton P. Provisional drug overdose death counts. National Center for Health Statistics, National Vital Statistics System. 2026. Estimates for 2024 and 2025 are based on provisional data. Estimates for 2015-2023 are based on final data. Retrieved March 06, 2026, from cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm.

Figures 3a and 3b. Proportion of overdose deaths, by sex, and percent of overdose deaths, by sex and age, 2024. Based on death certificate demographic data, the percentage of overdose deaths among men was 73.7% (n=3,091/4,194) and 26.3% (n=1,103/4,194) among women. The highest percentage of deaths were observed among the 35-44 and 55-64 male age groups, representing 16.9% (n=708/4,194) and 18.9% (n=792/4,194) of total deaths, respectively.

Figure 4a. Overdose mortality rate, per 100,000 population, by race/ethnicity, 2023-2024. Rates are based on the number of drug overdose deaths in 2024 per 100,000 population, using Census 2020 counts. Black, non-Hispanic, communities experienced the highest overdose mortality rate in 2024, at 40.6 per 100,000 population, down 33% from 60.3 in 2023. 2024 overdose mortality rates were suppressed for American Indian and Alaskan Native individuals and Native Hawaiian or other Pacific Islander individuals as their rates were based on counts of less than 20. Drug overdose death counts were based on final 2023 and 2024 data from CDC Wide-ranging Online Data for Epidemiologic Research and populations were based on Census 2020 counts. Source: U.S. Census Bureau, U.S. Department of Commerce. (n.d.). Profile of General Population and Housing Characteristics. Decennial Census, DEC Demographic Profile, Table DP1. Retrieved January 21, 2026, from data.census.gov/table/DECENNIALDP2020.DP1?q=Race+and+Ethnicity&d=DEC+Demographic+Profile.

Figure 4b. Percent of overdose deaths, by race/ethnicity and by age group, 2024. Based on death certificate demographic data, in 2024, 36.1% (n=426/1,180) of Black, non-Hispanic, people who died of a drug overdose were aged 55-64 years, while only 23.3% (n=230/987) of Hispanic drug overdose decedents and 20.7% (n=383/1,850) of White, non-Hispanic drug overdose decedents were aged 55-64 years. Similarly, while 18.9% (n=223/1,180) of Black, non-Hispanic, people who died of a drug overdose were aged 65 years or older, only 11.1% (n=110/987) of Hispanic drug overdose decedents and 9.4% (n=173/1,850) of White, non-Hispanic drug overdose decedents were aged 65 years or older.

Toxicology section. "Any opioids" includes deaths that had at least one opioid listed as a cause of death. "Any opioids" includes illegally made fentanyls, heroin, prescription opioids, and any other opioids. Fentanyl was classified as likely illegally made using toxicology, scene, and witness evidence. In the absence of sufficient evidence to classify fentanyl as illegal or prescription, fentanyl was classified as illegally made because most fentanyl overdose deaths involve illegally made fentanyl. All fentanyl analogs except alfentanil, remifentanil, and sufentanil (which have legitimate human medical use) were included as "Illegally made fentanyls."
- Drugs coded as "Heroin" were heroin and 6-acetylmorphine, a metabolite of heroin. In addition, morphine was coded as heroin if detected along with 6-acetylmorphine, if heroin was listed as a cause of death on the death certificate, or if scene, toxicology, or witness evidence indicated presence of heroin impurities or other illegal drugs, injection, illegal drug use, or a history of heroin use.
- Drugs coded as "Prescription opioids" were alfentanil, buprenorphine, butorphanol, codeine, dihydrocodeine, hydrocodone, hydromorphone, levorphanol, loperamide, meperidine, methadone, morphine, nalbuphine, noscapine, oxycodone, oxymorphone, pentazocine, prescription fentanyl, propoxyphene, remifentanil, sufentanil, tapentadol, thebaine, and tramadol. Also included as prescription opioids were brand names and metabolites (e.g., nortramadol) of these drugs and combinations of these drugs and nonopioids (e.g., acetaminophen-oxycodone). Morphine was included as prescription only if scene or witness evidence did not indicate likely heroin use and if 6-acetylmorphine was also not detected. Fentanyl was coded as a prescription opioid based on scene, toxicology, or witness evidence indicating that it was taken or found at the scene in prescribed form (e.g., a fentanyl patch) or that the decedent had a current fentanyl prescription.
- "Any stimulants" includes deaths that had at least one stimulant listed as a cause of death. "Any stimulants" includes cocaine, methamphetamine, and any other stimulants (e.g., cathinones, prescription dextroamphetamine/amphetamine, 3,4-methylenedioxymethamphetamine).
- "Any non-opioid sedatives" includes deaths with anxiolytics, barbiturates, benzodiazepines, gabapentin, ketamine, ketamine analogs, kratom/mitragynine, medetomidine, xylazine, or other hypnotics or sedatives (e.g., zolpidem). "Any benzodiazepines" includes both prescription benzodiazepines (e.g., alprazolam) and illegal benzodiazepines (e.g., etizolam).

Figures 5a, 5b, and 5c. Percent and rate of overdose deaths where select drugs and drug classes were indicated as cause of death, 2023-2024. Any opioids were indicated as a cause of death in 79.1% (n=3,316/4,194) of cases, with any illegally made fentanyls listed as a cause of death in 70.7% (n=2,963/4,194) of cases. The prevalence of any stimulant listed as a cause of death was 64.7% (n=2,714/4,194), with cocaine listed as a cause of death in 56.3% (n=2,361/4,194) of cases.

The percentage of overdose deaths cases with any opioids indicated as a cause of death decreased from 86.8% (n=5,193/5,983) in 2023 to 79.1% (n=3,316/4,194) in 2024. Illegally made fentanyl involvement as a cause of death in overdose deaths decreased from 81.0% (n=4,844/5,983) in 2023 to 70.6% (n=2,963/4,194) in 2024. The percentage of overdose deaths cases with any stimulants indicated as a cause of death increased from 61.7% (n=3,694/5,983) in 2023 to 64.7% (n=2,714/4,194) in 2024. Cocaine involvement as a cause of death in overdose deaths increased from 53.9% (n=3,226/5,983) in 2023 to 56.3% (n=2,361/4,194) in 2024. Percentages are not mutually exclusive. Deaths involving multiple drugs were included in the percentages for each drug (i.e., heroin, cocaine, methamphetamine) or drug class (i.e., any opioids, illegally made fentanyls, prescription opioids, any stimulants, benzodiazepines, non-opioid sedatives). For example, a death involving both heroin and cocaine would be included in both the heroin and cocaine percentages.

Rates are based on the number of drug overdose deaths per 100,000 population, using Census 2020 counts (source cited on previous page). From 2023 to 2024, the rate of overdose deaths with any opioid indicated as a cause of death decreased by 36% from 25.7 to 16.4 per 100,000 population. The rate of overdose deaths with any illegally made fentanyls indicated as a cause of death decreased from 2023 to 2024 by 39%, from 24.0 to 14.7 per 100,000 population. From 2023 to 2024, the rate of overdose deaths with any stimulant indicated as a cause of death decreased by 27% from 18.3 to 13.4 per 100,000 population. The rate of overdose deaths with

cocaine indicated as a cause of death decreased from 2023 to 2024 by 27%, from 16.0 to 11.7 per 100,000 population. From 2023 to 2024, the rate of overdose deaths with any non-opioid sedative indicated as a cause of death decreased by 28% from 9.5 to 6.8 per 100,000 population. The rate of overdose deaths with xylazine indicated as a cause of death decreased from 2023 to 2024 by 36%, from 5.1 to 3.3 per 100,000 population. The rate of overdose deaths with any benzodiazepines indicated as a cause of death decreased from 2023 to 2024 by 23%, from 4.3 to 3.3 per 100,000 population.

Figure 6. Number of Substances indicated as cause of death, among cases with a postmortem toxicology report, 2024. Among people who died from an overdose in 2024 and had a postmortem toxicology report provided, 7.7% (n=299/3,882) had a single substance indicated as a cause of death, while 92.3% (n=3,582/3,882) had more than one substance indicated as a cause of death. Drug overdose death cases with a postmortem toxicology report had a median of 4.0 and an average of 4.6 substances listed as cause of death.

Figure 7a. Percent of overdose deaths with opioids and/or stimulants involved as cause of death, 2024. Almost half (47%, n=1,953/4,194) of people who died of an overdose had at least one opioid and at least one stimulant listed as cause of death substances on their death certificate. The percentage of overdose deaths with at least one stimulant and no opioids listed as cause of death substance(s) increased in 2024 to 18.1% (n=761/4,194), from 10.9% (n=654/5,983) in 2023. Only 2.8% (n=117/4,194) of overdose deaths in 2024 had neither opioids nor stimulants listed as cause of death substance(s). “Opioids” includes illegally made fentanyls, heroin, prescription opioids, and any other opioids. “Stimulants” includes cocaine, methamphetamine, and any other stimulants (e.g., cathinones, prescription dextroamphetamine/amphetamine, 3,4-methylenedioxymethamphetamine).

Figure 7b. Percent of overdose deaths with opioids and/or non-opioid sedatives involved as cause of death, 2024. Almost one-third (30%, n=1,268/4,194) of people who died of an overdose had at least one opioid and at least one non-opioid sedative listed as cause of death substances on their death certificate. Only 2.6% (n=111/4,194) of overdose deaths in 2024 had neither opioids nor non-opioid sedatives listed as cause of death substance(s). “Opioids” includes illegally made fentanyls, heroin, prescription opioids, and any other opioids. “Any non-opioid sedatives” includes deaths with anxiolytics, barbiturates, benzodiazepines, gabapentin, ketamine, ketamine analogs, kratom/mitragynine, medetomidine, xylazine, or other hypnotics or sedatives (e.g., zolpidem). “Any benzodiazepines” includes both prescription benzodiazepines (e.g., alprazolam) and illegal benzodiazepines (e.g., etizolam).

Figures 8a and 8b. Percent of overdose deaths where select substances and substance classes were detected in postmortem toxicological testing, among cases with a postmortem toxicology report, 2024 and 2023-2024. Kratom/mitragynine was detected in 1.5% (n=60/3,882) of people who died from an overdose in 2024 and had a postmortem toxicology report provided. Other select emerging substances were detected in less than 1.5% of overdose deaths with a postmortem toxicology report. “Ketamine” was detected in 56 of 3,882 overdose deaths in 2024 with a postmortem toxicology report, up from 41 of 5,431 overdose deaths in 2023 with a postmortem toxicology report; carfentanil was detected in 47 overdose deaths in 2024, up from 10 in 2023; “Any nitazenes” were detected in 32 overdose deaths in 2024, up from 14 in 2023; “Any synthetic cannabinoid” was detected in 33 overdose deaths in 2024, up from 30 in 2023; and medetomidine was detected in 19 overdose deaths, up from 0 in 2023. “Any cathinone” was detected in 35 overdose deaths in 2024 with a postmortem toxicology report, down from 111 detections in 2023.

- “Nitazenes” are a group of illegally made synthetic opioids that can be several times more potent than fentanyl. Some examples include isotonitazene, metonitazene, and N-pyrrolidino etonitazene.
- “Cathinones” are a group of stimulants that are chemically related to substances found in the khat plant. Illegally made synthetic cathinones are often referred to as “bath salts.” From the National Institute on Drug Abuse (NIDA). February 28, 2024. Synthetic Cathinones ("Bath Salts"). Retrieved February 17, 2026, from nida.nih.gov/research-topics/synthetic-cathinones-bath-salts.
- “Ketamine” includes cases with ketamine or its metabolites (e.g., norketamine) detected on toxicology but excludes ketamine analogs (e.g., 2F-deschloroketamine).
- “Synthetic cannabinoids” includes deaths with at least one drug belonging to the synthetic cannabinoid class detected on postmortem toxicology (e.g., 5F-MDMB-PICA, 4F-MDMB-BINACA, etc.). Synthetic cannabinoids are lab-made psychoactive substances that are similar in chemical structure to those derived from the cannabis plant but typically cause very different effects. The synthetic cannabinoid class includes both illegally made synthetic cannabinoids as well as those not currently scheduled by the U.S. Food and Drug Administration.

Circumstances section. Circumstances represent evidence available in source documents (coroner or medical examiner reports); these are likely underestimated as death investigators might have limited information. Circumstance percentages are only among decedents with sufficient information on circumstances surrounding the overdose death and with non-missing information on the specified circumstance.

Figure 9. Percent of overdose deaths, by location of overdose, among cases with a coroner or medical examiner report, 2024. Among drug overdose deaths in 2024 that had a coroner or medical examiner report, 76.8% (n=2,886/3,756) of overdoses occurred in a house or apartment. “House or apartment” includes the driveway, porch, yard, or garage. 63.6% (n=2,421/3,806) of overdoses occurred in the decedents own residence, 4.9% (183/3,756) occurred in a street, sidewalk, or alley, 3.2% (n=121/3,756) occurred at a supervised residential facility (e.g., a shelter, halfway house, or group home), 2.6% (n=97/3,756) occurred at an unknown location, and 2.2% (n=81/3,756) occurred in a motor vehicle, and 10.3% (n=388/3,756) occurred at another location (e.g., a hotel/motel, public transportation, a public area, a commercial establishment, or a correctional facility). Cases with missing information on overdose location were excluded.

Figure 10. Percent of overdose decedents with select circumstances related to status of medical response, among cases with a coroner or medical examiner report, 2024. Based on information in the coroner or medical examiner reports for persons who died of a drug overdose in 2024, 84.9% (n=3,186/3,756) of overdose decedents had emergency medical services arrive at the scene, 73.6% (n=2,798/3,804) had no pulse when first-responders arrived on the scene, 26.0% (n=994/3,816) were administered cardiopulmonary resuscitation (CPR), 23.9% (n=911/3,804) were seen in the emergency department for their fatal overdose, and 7.8% (n=299/3,816) were admitted to inpatient care (i.e. hospitalized) following their fatal overdose. Coroner or medical examiner report and toxicology report data suggests naloxone is utilized only 23.7% (n=903/3,816) of the time. Reports often state that the person was pronounced deceased on arrival, leaving no opportunity for resuscitation and lifesaving care. Cases with missing information related to the select circumstances were excluded.

Figure 11. Percent of overdose deaths, by location of death, among all cases, 2024. Based on death certificate information on place of death, among persons who died of a drug overdose in 2024, 58.7% (n=2,463/4,194) died at home, 15.1% (n=635/4,194) died at an emergency department or another outpatient setting, and 8.7% died in a hospital or inpatient setting. “Other” death locations include another person’s residence (5.0%, n=208/4,194), a hotel or motel (1.4%, n=60/4,194), a shelter (1.1%, n=48/4,194), as well as other public (e.g., a street, sidewalk, or subway station), occupational (i.e., where the person worked), or institutional settings (e.g., a correctional facility).

Figure 12a. Percent of overdose deaths with a bystander present at time of overdose, among cases with a coroner or medical examiner report, 2024. A potential bystander was present at 36.6% (n=1,395/3,816) of overdose deaths that occurred in 2024 and had a coroner or medical examiner report provided. A bystander is an individual aged 11 years or older who was physically nearby either during or shortly preceding a drug overdose who potentially had an opportunity to intervene and respond to the overdose. First responders or medical professionals called to the scene are not considered bystanders. The definition of a bystander allows for inclusion of individuals that were nearby during or shortly preceding an overdose even if they were not directly with the decedent at the onset of overdose. This would include individuals who were in a different room of the same house or otherwise spatially separated from the person who overdosed, therefore hindering the ability to recognize that an overdose was occurring.

Figure 12b. Percent of overdose deaths where a bystander provided no overdose response, among cases with a coroner or medical examiner report where a bystander present at time of overdose, 2024. Among overdose deaths that occurred in 2024 with a coroner or medical examiner report where a bystander was present at the time of the overdose, 42.0% (n=586/1,395) of bystanders provided no overdose response. 50.0% (n=698/1,395) of bystanders responded by calling 911, while 10.0% (n=139/1,395) performed cardiopulmonary resuscitation (CPR). Other bystander responses included administering naloxone, attempting to wake up the decedent, using a defibrillator, or performing rescue breathing. Bystanders who respond can perform multiple responses like calling 911 before performing CPR.

Figure 13. Percent of overdose deaths, by reason for bystander(s) non-response, among cases with a coroner or medical examiner report where a bystander was present, but did not respond, 2024. When bystanders did not respond, it was typically because they did not see the overdose or were unaware that the

overdose occurred. Among overdose deaths that occurred in 2024, had a coroner or medical examiner report provided, where a bystander was present but did not respond, 29.9% (n=175/586) did not respond because they were spatially separated (i.e. not physically close) to the person who overdosed (e.g. they were in another room); 17.4% (n=102/586) were unaware the person was using substances at the time. In 7.0% (n=41/586) of included cases, the bystander did not recognize the abnormalities of the overdose (e.g. they thought the decedent was sleeping) and in 4.9% (n=29/586) of included cases, the bystander reported having noticed abnormalities, but that they did not recognize that an overdose had occurred.

Figure 14. Percent of overdose decedents with select circumstances related to housing and life stability, among cases with a coroner or medical examiner report, 2024. Among persons who died from an overdose in 2024 and had a coroner or medical examiner report provided, 8.6% (n=326/3,798) were experiencing homeless or housing instability at their time of death, and 5.8% (n=222/3,741) had been recently released from an institutional setting within the month prior to their death. Institutional settings could include a prison/jail, residential treatment facility, or psychiatric hospital. Recent stays in these settings may reflect conditions that could have impacted the individual's drug tolerance and may have potentially increased the risk of overdose. Cases with missing information related to the select circumstances were excluded.

Figure 15. Percent of overdose deaths with select circumstances related to substance use and substance use disorder treatment, among cases with a coroner or medical examiner report, 2024. Among the (n=3,816) people who died from an overdose in 2024 and had a coroner or medical examiner report provided, 74.3% (n=1,054) had a history of substance use, 11.5% (n=438) had ever been treated for one or more substance use disorders, 7.0% (n=269) were currently receiving treatment for one or more substance use disorders, 6.8% (n=258) ever had a prior drug overdose, and 1.8% (n=69) had a prior overdose within one month of their death. Current or past treatment for substance use disorders includes reported treatment for any type of substance use disorder (e.g., opioid use disorder, cocaine use disorder), excluding alcohol. Current treatment is limited to decedents who were receiving treatment for any substance use disorder at the time of the fatal overdose, including medications for opioid use disorder (MOUD), living in an inpatient rehabilitation facility, or participation in mental health or substance use disorder outpatient treatment. Prior overdose includes any previous drug overdose, involving any substance, and regardless of intent (e.g., unintentional, undetermined intent, or intentional (i.e., suicide attempt by overdose)) was reported.

Figure 16. Percent of opioid-involved overdose deaths with select circumstances related to substance use and substance use disorder treatment, among cases with a coroner or medical examiner report and a toxicology report, 2024. Among the (n=3,019) people who died from an overdose in 2024 with any opioid listed as a cause of death, where both a coroner or medical examiner report and a postmortem toxicology report were available, 22.9% (n=691) had a documented history of any opioid use (including prescription opioid misuse or use of heroin or illegally-made fentanyls). Evidence of receiving medication for opioid use disorder (MOUD) was found in 8.3% (n=251) of coroner or medical examiner reports among included cases, while 16.6% (n=501) of included cases had at least one of the three medications approved by the FDA for opioid use disorder treatment – methadone, buprenorphine, or naltrexone – detected in postmortem toxicological testing. Additionally, 2.9% (n=88) of included opioid-involved overdose decedents had recently returned to using opioids (within 3 months of their fatal overdose), after a period of opioid use abstinence. Note: methadone, buprenorphine, and naltrexone are also used clinically to treat other conditions (e.g., chronic pain or alcohol use disorder), so detection of these medications in postmortem toxicological testing does not necessarily indicate that a decedent was prescribed medication for opioid use disorder or that they were receiving treatment specifically for opioid use disorder.

Figure 17. Percent of overdose deaths with alcohol as a cause of death, comparing decedents with alcohol use disorder history to all decedents, among cases with a coroner or medical examiner report and a postmortem toxicology report, 2024. Among overdose deaths that occurred in 2024 with a coroner or medical examiner report and a postmortem toxicology report provided, 22.8% (n=861/3,779) had alcohol listed as a cause of death. When included cases were further limited to persons with a history of alcohol use disorder, the percentage with alcohol as a cause of death was 46.5% (n=342/735). Among all overdose decedents with a coroner or medical examiner report, 19.4% (n=740/3,816) had a history of alcohol use disorder.

Figure 18. Percent of overdose deaths with select circumstances related to mental health and mental health treatment, among cases with a coroner or medical examiner report, 2024. Among the (n=3,816) people who died from an overdose in 2024 and had a coroner or medical examiner report provided, 23.2% (n=884) had a documented mental health diagnosis at the time of their death. However, only 7.3% (n=278), or

about one-third of those with a mental health diagnosis, had received mental health treatment. 5.0% (n=189) of overdose decedents, or about one fifth with a mental health diagnosis, were receiving treatment at the time of their death. 0.3% of decedents (n=10) had a known history of suicidal ideation, attempt(s), or self-harm.

Figure 19. Percent of overdose deaths with select circumstances related to chronic conditions and medical history, among cases with a coroner or medical examiner report, 2024. Among the (n=3,816) people who died from an overdose in 2024 and had a coroner or medical examiner report provided, 46.9% (n=1,788) of all drug overdose decedents had a medical history of heart disease, compared to 7.9%, the estimate of all New York State adults with cardiovascular disease in 2023. 16.1% (n=615) of people who died of a drug overdose had obesity, 8.7% (n=332) had a history of a major injury, 4.5% (n=173) had a medical history of HIV or AIDS, and 3.6% (n=136) had a medical history of hepatitis C.

Heart disease can refer to multiple conditions that affect the functioning of the heart. It is possible that heart disease can put someone at higher risk for overdose or could make it harder to revive someone after an overdose. If there is evidence that the decedent had heart disease at the time of the overdose, this evidence might be included in the autopsy report, the coroner/medical examiner report in a section on medical history or in the report narrative, or in medical records if they are available. The New York State population heart disease rate estimate is referenced from the 2023 New York State Behavioral Risk Factor Surveillance System Brief report. Spence M, Potestio K, Rabii K, Archibald A, Lowenfels, A. Overweight and Obesity, New York State Adults, 2023. New York State Behavioral Risk Factor System Brief, No. 2025-09. Albany, NY: New York State Department of Health, Division of Chronic Disease Prevention, Bureau of Chronic Disease Evaluation and Research, 2025. Retrieved February 18, 2026, from health.ny.gov/statistics/brfss/reports/docs/2025-09_brfss_overweight_and_obesity.

Figure 20. Percent of overdose deaths, by route of drug use, among cases with a coroner or medical examiner report, 2024. Among the (n=3,816) people who died from an overdose in 2024 and had a coroner or medical examiner report provided, 24.1% (n=919) had evidence of smoking as a route of drug use, 14.2% (n=541) had evidence of snorting or sniffing, and 13.4% (n=513) had evidence of injection as a route of drug use. "Other" routes of drug use include transdermal, suppository, sublingual, or buccal. Routes of drug use are not mutually exclusive. A death could have evidence of more than one route of drug use. Information on route of drug use was missing for 60.3% of cases with a coroner of medical examiner report.
- Evidence of smoking definition: Witness, death scene, or autopsy evidence suggests that the decedent smoked substance(s) leading up to the fatal overdose. Evidence of smoking includes witness reports of smoking and drug paraphernalia at the scene of the overdose associated with smoking such as pipes, stems, tinfoil, and vape pens. Matches, disposable lighters, and gas torches are also indications of smoking.
- Evidence of injection definition: Witness, death scene, or autopsy evidence suggests that the decedent injected substance(s) leading up to the fatal overdose. Evidence of injection includes witness reports of injecting, documentation of items used to prepare and inject substances found at the scene (e.g., needles, cookers, filters, tourniquets, alcohol pads), and/or track marks found on decedent that appear to be recent.
- Evidence of snorting/sniffing definition: Witness, death scene, or autopsy evidence suggests that the decedent snorted or sniffed substance(s) leading up to the fatal overdose. Snorting may also be called insufflation.
- Evidence of snorting or sniffing includes witness reports of snorting or sniffing or drug paraphernalia at the overdose scene associated with snorting or sniffing. Scene evidence may include razor blades or credit cards used to chop and separate powder; straws, rolled paper, dollar bills, or tubes for nasal inhalation; powder visible on a table/mirror; or powder on the decedent's nose.

Figure 21. Percent of overdose deaths with at least one potential opportunity for intervention, among cases with a coroner or medical examiner report, 2024. Among the persons who died from an overdose in 2024 and had a coroner or medical examiner report provided, 56.4% (n=2,151/3,816) had at least one potential opportunity for intervention. "Potential opportunities for intervention" include documented evidence of at least one of the following: potential bystander was present at the time of the overdose, fatal drug use was witnessed, decedent had a mental health diagnosis, decedent had a prior overdose, decedent was receiving treatment for substance use disorder(s) at the time of their death, or decedent was recently released from an institutional setting (e.g., a prison/jail, residential treatment facility, or psychiatric hospital) within 1 month of death.

RESOURCES AND PROGRAMMATIC INFORMATION

For information on New York's Overdose Free Generation: New York's Public Health Initiative

For information on the New York State AIDS Institute Office of Drug User Health: Office of Drug User Health

For more information on Centers for Disease Control and Prevention's State Unintentional Drug Overdose Reporting System: About the State Unintentional Drug Overdose Reporting System (SUDORS) | Overdose Prevention | CDC

For information on the New York State's Opioid Prevention Program: New York State's Opioid Overdose Prevention Program

For additional Opioid-related Data in New York State: Opioid-related Data in New York State

To find a provider: Provider Directory Home Page - Provider Directory Application (aidsinstituteny.org)

For information on Buprenorphine access: Buprenorphine Access Initiative (ny.gov)

For information on services offered by the Office of Addiction Services and Supports: Services | Office of Addiction Services and Supports

PREFERRED CITATION:

State Unintentional Drug Overdose Reporting System: Characteristics of Fatal Overdoses In New York, Deaths that occurred between January and December 2024. Office of Drug User Health, AIDS Institute, New York State Department of Health.

CONTACT US:

SUDORS@health.ny.gov