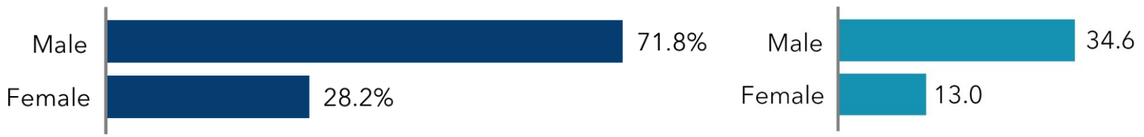
State Unintentional Drug Overdose Reporting System (SUDORS)
Summary of Unintentional and Undetermined Intent Drug Overdose Deaths in Massachusetts - 2024

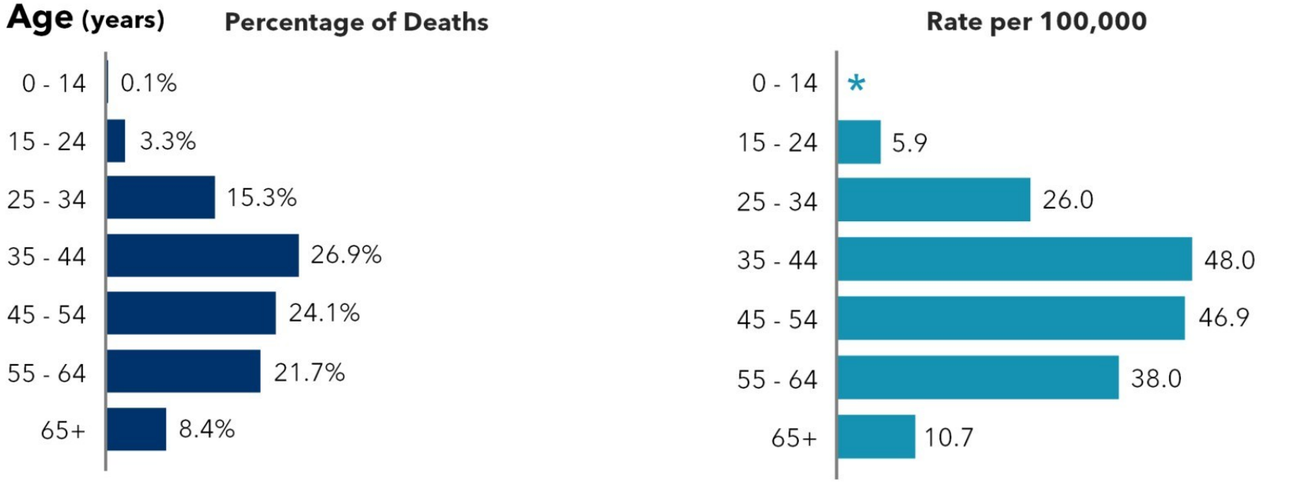
n = 1,646[1] (22.8 deaths per 100,000 population)

Demographics and Where Overdoses Occurred

Sex

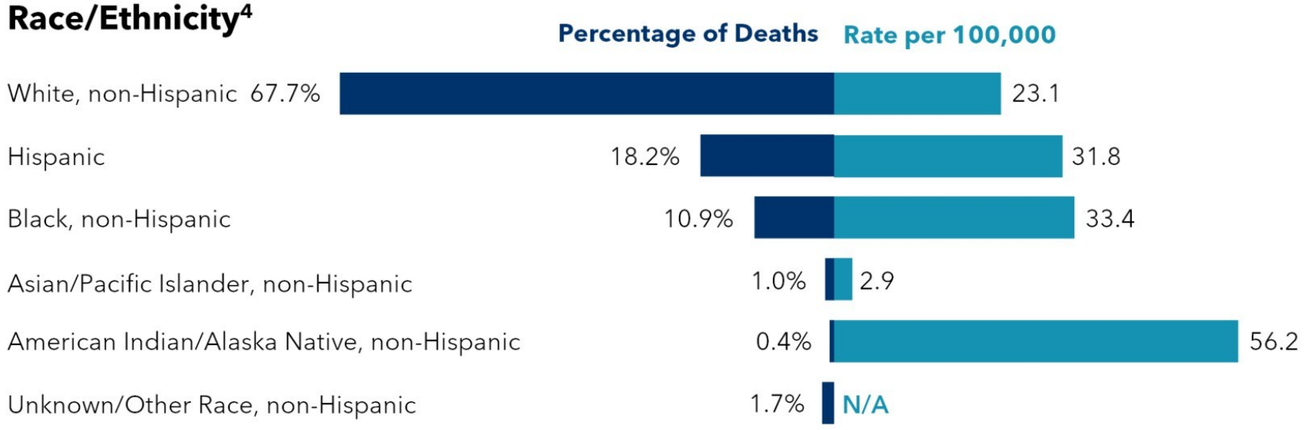


Age (years)

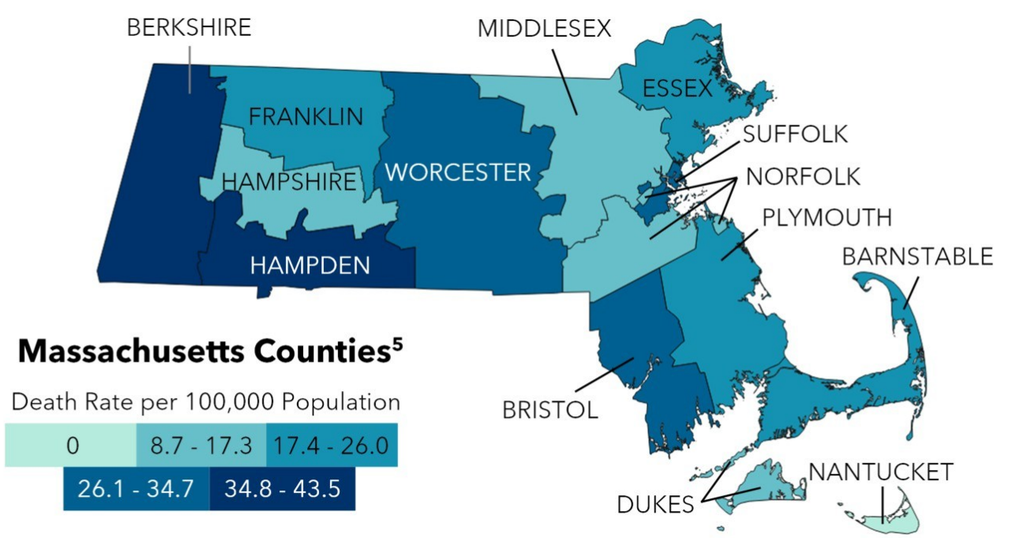


Half of the decedents were 37 to 57 years old. The median age was 46.[3]

Race/Ethnicity[4]



*Values suppressed due to death counts of five or fewer



Massachusetts Counties[5]

Death Rate per 100,000 Population

0	8.7 - 17.3	17.4 - 26.0	26.1 - 34.7	34.8 - 43.5

County	Rate per 100K	
Hampden	43.5	▼
Berkshire	35.5	▼
Suffolk	34.7	▼
Bristol	27.5	▼
Worcester	27.2	▼
Essex	23.7	▼
Plymouth	23.0	▼
Barnstable	21.1	▼
Franklin	19.8	▼
Middlesex	14.4	▼
Norfolk	13.9	▼
Hampshire	9.8	▼
Nantucket	0	▼
Dukes	*	--

▲ Rate increased since 2023
▼ Rate decreased since 2023

Top 5 Cities by Count

City (County)	Count	Rate per 100K	
Boston (Suffolk)	**219**	33.9	▼
Worcester (Worcester)	**119**	56.6	▼
Springfield (Hampden)	**94**	60.6	▼
Lynn (Essex)	**50**	48.8	▲
Lawrence (Essex)	**48**	52.6	▼

Top 5 Cities by Rate**

City (County)	Count	Rate per 100K	
North Adams (Berkshire)	11	**86.6**	▲
Holyoke (Hampden)	30	**80.8**	▼
Springfield (Hampden)	94	**60.6**	▼
Pittsfield (Berkshire)	26	**60.1**	▼
Worcester (Worcester)	119	**56.6**	▼

**List based on cities with counts over five

Where Overdoses Occurred

Top 5 Locations

79.1% overdosed in a house or apartment; of those, **84.9%** overdosed in their own residence

3.8% overdosed in a motor vehicle or camper (excluding school buses and public transportation)

3.0% overdosed in a supervised residential facility[6]

3.0% overdosed on a street, sidewalk, or in an alley

2.6% overdosed in a hotel or motel

Fatal Overdose Circumstances

72.4% of decedents died before they could be treated at an Emergency Department, or were dead on arrival

One or more potential bystanders were present during **52.6%** of overdoses[7]

Drug use was witnessed in only **10.6%** of overdoses[8]

Minors were present during **2.1%** of overdoses

Personal Circumstances[9]

Note: Personal circumstances are not known for every decedent. Percentages reported below are based on available data.

Substance Use, Treatment, and Overdose History

85.3% had a history of drug use[10]

36.1% had a problem with alcohol[11]

31.9% had a history of treatment for substance use disorder

19.9% had a previous overdose[12]

Mental Health and Neurodivergence

56.3% had one or more mental health conditions, with depression (36.9%) and anxiety (36.7%) most common[13]

13.4% were neurodivergent[14]

Past Medical History and Current Medical Conditions

23.2% had asthma, chronic obstructive pulmonary disease (COPD), or some other breathing problem

9.3% were being treated for pain

5.5% ever had a major injury[15]

Housing Status

11.8% were experiencing homelessness[16]

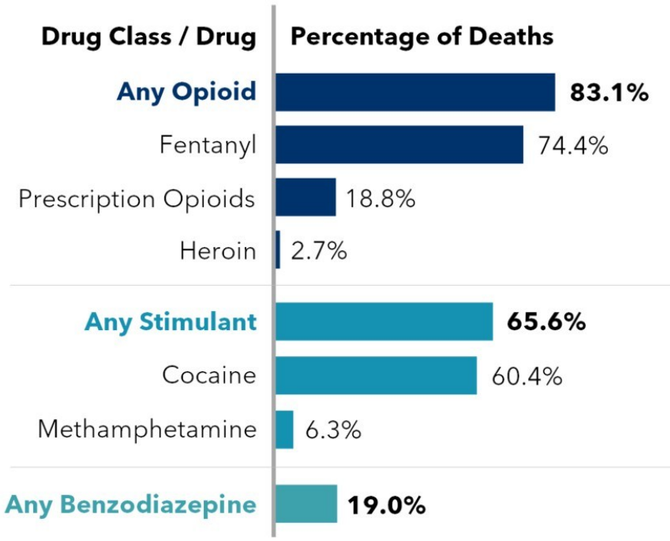
7.4% were experiencing housing instability[17]

Military Service

3.2% ever served in the military

Toxicology Results[18]

The graph below shows selected drugs and the percentage of incidents in which they were determined to have contributed to the individual's death. (Note: More than one drug or class of drug may have caused an individual's death. Individual drug percentages may not add up to the total displayed for the drug class.)



Over half **(51.2%)** of the overdose deaths involved both opioids and stimulants.

Scene Evidence & Routes of Administration[19]

Scene evidence suggestive of one or more routes of drug administration was found in 845 (51.3%) of the 1,646 overdose deaths.

Snorting **21.3%**

Smoking **19.8%**

Injection **17.8%**

Summary of Facts

3 in 4 decedents were male	**2 in 3** decedents were White	Black decedents had death rates almost **1.5X** higher than White decedents
4 in 5 overdoses occurred at a residence	**8 in 10** fatal overdoses involved an opioid	**2 in 3** fatal overdoses involved a stimulant
3 in 4 persons died before they could be treated in the Emergency Department	**Half** the overdoses had no potential bystander present	Drug use was witnessed in about **1 in 10** fatal overdoses

Resources

Massachusetts Substance Use Helpline

Call 800-327-5050, text "HOPE" to 800327,
or visit https://helplinema.org

SafeSpot Overdose Prevention Hotline

Call 800-972-0590 or visit https://safe-spot.me/

StreetCheck (Community Drug Checking)

https://www.info.streetcheck.org/

Sources

Fatal overdose data: State Unintentional Drug Overdose Reporting System (SUDORS)

Population data: United States Census Bureau and University of Massachusetts Donahue Institute

About SUDORS

The State Unintentional Drug Overdose Reporting System (SUDORS) is a component of the Overdose Data to Action in States (OD2A-S) project, a national initiative funded by the Centers for Disease Control and Prevention (CDC).

SUDORS collects data on unintentional and undetermined intent drug overdose deaths occurring in Massachusetts. The system combines information from death certificates, medical examiner records, and toxicology reports.

Note: There may be discrepancies between this infographic and other Massachusetts Department of Public Health reports due to differences in data sourcing and groupings of substance types, the use of CDC definitions rather than State definitions for coding, and other factors.

Footnotes

[1]In 2024, there were 1,646 overdose deaths of unintentional intent or undetermined intent in the State of Massachusetts.

[2]"Rate per 100,000 population" expresses the frequency of an event in relation to a standard population size of 100,000. This measure allows for easier comparison between populations or regions.

The population values used to calculate rates for this infographic were obtained from the United States Census Bureau and UMass Donahue Institute.

[3]This fact box is based on quartile information. Quartiles are values that divide a dataset into four equal parts after it has been ordered--in this case, by age in years (y). Each quartile represents 25% of the observations. The value of the first quartile, which represents the lowest 25%, is 37 years. The second quartile or median, which divides the dataset in half, is 46 years. The third quartile, which represents the highest 25%, is 57 years. $Q_1 = 37y$, $Q_2 = 46y$, $Q_3 = 57y$

[4]Multi-racial persons were counted under the race or ethnicity with the least representation in Massachusetts. For example, if a decedent was Asian and White, they were counted as Asian.

Footnotes (cont.)

[5]This county-level map shows where overdoses began, using values expressed in rates per 100,000 population. The county where the overdose began may not be the county where the death occurred. For example, a decedent may overdose in one county and be transported to an emergency department in another county.

1,639 out of the 1,646 overdose deaths that occurred in Massachusetts are represented on this map. The seven deaths not represented on the map involve overdoses that began outside of Massachusetts.

[6]This includes supervised residential treatment facilities related to alcohol or substance use treatment, shelters, halfway houses, group homes, nursing homes, and assisted living residences.

[7]SUDORS defines a bystander as someone who is 11 years old or older and has the opportunity to intervene during an overdose. Bystanders include people who are present or nearby when the overdose occurs (including spatially separated persons within the same household); people who observed the decedent during the overdose regardless of whether the drug use was observed; and persons who witnessed the drug use or observed that the decedent was intoxicated or high, regardless of whether they were present for the overdose itself. First responders or medical professionals called to the scene are not bystanders under this definition. sublingual, suppository, and buccal.

[8]In SUDORS, drug use is coded as witnessed if someone at least 11 years of age saw the decedent using the substance(s) that caused the overdose, regardless of whether the overdose itself was witnessed.

[9]Personal circumstances are not known for every decedent.

[10]Drug use is defined as current or past illicit drug use and/or prescription drug misuse. Alcohol use is not captured by this variable.

Footnotes (cont.)

[11]Decedents were coded as currently having an alcohol problem if they were perceived to have a problem with alcohol or had an alcohol addiction. This could be evidenced by medical records reporting alcohol use disorder, police report information, and other sources. In accordance with the National Violent Death Reporting System Web Coding Manual v6.0, an alcohol problem from the past (i.e., five years or more ago) that has resolved and no longer seems to apply would not be coded.

[12]Previous overdoses were coded when known. Our reported statistic is likely lower than it should be due to the unavailability of medical records, police reports, and other documentation for some decedents.

[13]This statistic captures mental health conditions including depression, schizophrenia, generalized anxiety disorder, eating disorders, personality disorders, and dementia.

[14]For the purposes of this infographic, "neurodivergent" refers to decedents who were autistic, had attention-deficit disorders, dyscalculia, dysgraphia, dyslexia, dyspraxia, Tourette syndrome, obsessive compulsive disorder (OCD), epilepsy, brain injury, or other conditions that impact information processing. Though depression, anxiety, bipolar disorder, post-traumatic stress disorder (PTSD), and schizophrenia are included in some definitions of neurodivergence, we captured these in our mental health statistic instead.

[15]Major injuries include fractures, severe burns, and other events that may have been significant enough to be mentioned in documentation pertaining to the decedent.

[16]For the purposes of this infographic, persons experiencing homelessness reside in places not designed for or ordinarily used as a regular sleeping accommodation for human beings, or reside in a shelter, in temporary accommodations provided by a homeless shelter, or in a drop-in center designated to provide temporary living arrangements.

[17]According to the National Violent Death Reporting System Web Coding Manual v6.0, the housing instability variable is intended to "represent people who are not experiencing homelessness but who lack the resources or supports to obtain or retain permanent or stable housing." The homeless and housing instability variables are mutually exclusive.

Footnotes (cont.)

[18]A decedent may have died with more than one drug class (e.g., opioids and stimulants) or drug (e.g., cocaine and fentanyl) in their system. The Office of the Chief Medical Examiner determines whether a detected substance caused death.

In the bar graph, the drug class "Opioids" includes any opioid, whether illicit or prescription, "Stimulants" includes cocaine, methamphetamine, cathinones, and phenidates, and "Benzodiazepines" includes any benzodiazepine.

[19]Other routes of administration include ingestion, transdermal, sublingual, suppository, and buccal.