

Accidental Drug Overdose Deaths— Rhode Island, January 1, 2023–December 31, 2025

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INTRODUCTION

In Rhode Island (RI), fatal overdose is a leading cause of preventable death and has been a priority area for public health initiatives for the state.¹ In 2022, RI experienced the highest number of overdose deaths ever recorded, with 436 individuals lost to accidental drug overdose in a single year.² Encouragingly, in 2023 and 2024 overdose fatalities sharply declined in RI, following regional and national trends.³ To inform new and ongoing public health initiatives to prevent or reduce substance use and related harms, this analysis aims to describe the current state of the overdose epidemic in RI and how overdose trends have changed over time.

METHODS

We obtained data from the Office of State Medical Examiners (OSME) for accidental fatal overdoses that occurred in RI from January 1, 2023 to December 31, 2025. Manner of death (accident vs. suicide) and substances contributing to death are determined by the medical examiners based on their clinical judgement and consideration of autopsy results, toxicology testing, scene investigation, and medical history. Demographic categories were combined to comply with the RI Department of Health (RIDOH) Small Numbers Policy. Decedent age was categorized as Less than 25, 25–34, 35–44, 45–54, 55–64, and 65+. Decedents were grouped by ethnicity and race, with all Hispanic individuals captured as Hispanic or Latino and non-Hispanic individuals captured as Non-Hispanic Black, Non-Hispanic White, or Non-Hispanic, other race/unknown. Individuals who were non-Hispanic American Indian or Alaska native, Asian, or unknown race were classified as other race/unknown. Due to small numbers, rates were restricted to RI residents who were non-Hispanic Black, non-Hispanic White, or Hispanic or Latino. Population estimates were obtained from CDC WONDER by year, with 2024 estimates used to calculate 2025 rates.⁴

Overdoses were classified by drug type, including involving illicit drugs alone, prescription drugs alone, a combination of illicit and prescription drugs, or having unknown or missing drug type. More than one substance can contribute to cause of death, so substance categories are not mutually exclusive. Overdoses involving ‘Any Opioid’ is inclusive of overdoses caused by fentanyl, buprenorphine, methadone,

and other opioids, while overdoses categorized as involving ‘Any Stimulant’ is inclusive of overdoses involving cocaine, MDMA, and amphetamines. In addition to showing trends by year, substances contributing to cause of death were analyzed by age and race and ethnicity groups to help inform tailored prevention initiatives.

Overdose location captures where the overdose took place, and not necessarily where the death occurred. Location was categorized as Private, Semi-Private, Public, and Unknown/Missing.

To assess statistical significance, we utilized chi square and Fishers exact tests. P-values <0.05 were considered statistically significant. Analyses were performed in SAS [Version 9.4].

RESULTS

From 2023 to 2025, a total of 952 fatal overdoses occurred in RI [Table 1]. In 2025, there were 219 individuals who experienced a fatal overdose, which is a 33.4% decrease compared to 2024 (n=329), and 46% decrease compared to 2023 (n=404).

Similar to previous years, in 2025 most overdoses occurred among males (70%), non-Hispanic White individuals (72%), and people ages 35 to 64 (74%; Table 1). Compared to 2023, in 2024 the number of fatal overdoses declined across every age group except individuals aged 55–64, which saw a 15% increase. From 2024 to 2025, fatal overdoses declined or stayed the same across all age groups. While the rate of fatal overdoses declined among all race and ethnicity groups from 2023 to 2025, in 2025 the rate of overdose was highest among non-Hispanic Black residents (31.6 per 100,000) compared to non-Hispanic White (16.5 per 100,000) and Hispanic or Latino (13.4 per 100,000) residents [Figure 1].

Overall, 87% of overdoses involved illicit drugs, either alone or in combination with prescription drugs [Table 2]. While the number of overdoses involving illicit drugs alone or a combination of illicit and prescription drugs decreased 54% and 46% respectively from 2023 to 2025, fatal overdoses involving prescription drugs alone increased 24%. In 2025, opioids (73%) and stimulants (65%) were the leading substances contributing to death, with fentanyl contributing to 57% and cocaine contributing to 56%. When stratified by age, 100% of overdoses among individuals 25–34 years

old were opioid-involved, which gradually decreased as age groups increased, from 81% opioid-involved among individuals 35–44, 74% among individuals 45–54, to 56% among individuals 55–64 (data not shown). When stratified by race/ethnicity, 91% of Hispanic or Latino deaths involved opioids, compared to 60% and 70% of non-Hispanic Black and non-Hispanic White individuals respectively. Of note, 88%

of deaths among non-Hispanic Black individuals involved stimulants, compared to 59% among Hispanic or Latino individuals, and 64% among non-Hispanic White individuals [Figure 2].

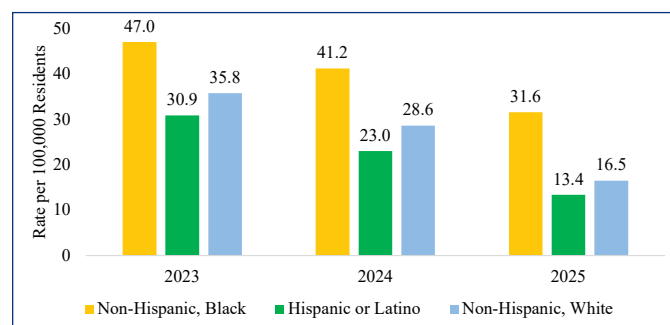
Overall, most overdoses took place in a private setting (69%), followed by public (11%) and semi-private (5%) locations [Table 2].

Table 1. Demographic characteristics of individuals who died of an accidental overdose in Rhode Island: January 1, 2023–December 31, 2025

Decedent Demographic	Overall N=952 n (%)	2023 N=404 n (%)	2024 N=329 n (%)	2025 N=219 n (%)	p-value ¹
Sex					
Male	670 (70)	280 (69)	231 (70)	159 (73)	0.6885
Female	282 (30)	124 (31)	98 (30)	60 (27)	
Age Category					
Less than 25	30 (3)	16 (4)	7 (2)	7 (3)	0.3555
25–34	143 (15)	68 (17)	45 (14)	30 (14)	
35–44	246 (26)	113 (28)	79 (24)	54 (25)	
45–54	231 (24)	96 (24)	82 (25)	53 (24)	
55–64	227 (24)	78 (19)	90 (27)	59 (27)	
65+	75 (8)	33 (8)	26 (8)	16 (7)	
Race/Ethnicity					
Non-Hispanic, Black	94 (10)	36 (9)	33 (10)	25 (11)	0.3249
Hispanic or Latino	151 (16)	66 (16)	53 (16)	32 (15)	
Non-Hispanic, White	690 (72)	297 (74)	239 (73)	154 (70)	
Non-Hispanic, Other/ Unknown Race	17 (2)	5 (1)	<5	8 (4)	

Source: Office of State Medical Examiners. ¹Chi-square test. Counts less than five are suppressed to comply with the Rhode Island Small Numbers Policy.

Figure 1. Rate of accidental overdose deaths among Rhode Island residents, stratified by decedent race and ethnicity: January 1, 2023–December 31, 2025



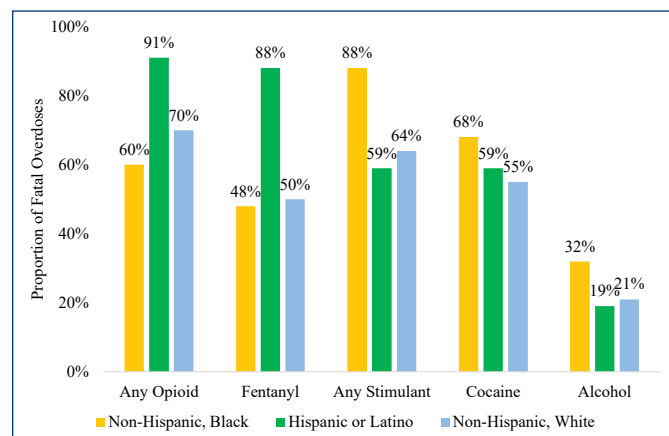
Source: Office of State Medical Examiners. Note: Population denominator based on CDC WONDER single-race population estimates for each year accessed May 28, 2026; 2024 estimate applied for 2025 rates.

Table 2. Substances that contributed to cause of death for individuals who died of an accidental overdose in Rhode Island: January 1, 2023–December 31, 2025

Overdose Circumstances	Overall N=952 n (%)	2023 N=404 n (%)	2024 N=329 n (%)	2025 N=219 n (%)	p-value ¹
Drug Type					
Illicit Only	540 (57)	257 (64)	165 (51)	118 (54)	<0.0001
Prescription Only	123 (13)	33 (8)	49 (15)	41 (19)	
Combination	284 (30)	112 (28)	112 (34)	60 (27)	
Unknown/ Missing	5 (<1)	<5	<5	0	
Substances Contributing to Death					
Any Opioid	732 (77)	345 (85)	228 (69)	159 (73)	<0.0001
Fentanyl	627 (66)	314 (78)	189 (57)	124 (57)	<0.0001
Methadone	111 (12)	37 (9)	39 (12)	35 (16)	0.0400
Buprenorphine	33 (3)	10 (2)	10 (3)	13 (6)	0.0687
Any Stimulant	612 (64)	252 (62)	217 (66)	143 (65)	0.5656
Cocaine	556 (58)	234 (58)	199 (61)	123 (56)	0.5833
Amphetamines	112 (12)	47 (12)	39 (12)	26 (12)	0.9942
Alcohol	214 (22)	77 (19)	89 (27)	48 (22)	0.0351
Antidepressants	141 (15)	49 (12)	56 (17)	36 (16)	0.1328
Benzodiazepines	129 (14)	49 (12)	48 (15)	32 (15)	0.5458
Antipsychotics	51 (5)	15 (4)	25 (8)	11 (5)	0.0651
Over the Counter	39 (4)	13 (3)	17 (5)	9 (4)	0.4160
Kratom	6 (<1)	<5	<5	<5	0.2305
Overdose Location ²					
Private	656 (69)	284 (70)	227 (69)	145 (66)	0.0190
Semi-Private	52 (5)	23 (6)	15 (5)	14 (6)	
Public	106 (11)	30 (7)	40 (12)	36 (16)	
Unknown/ Missing	138 (15)	67 (17)	47 (14)	24 (11)	

Source: Office of State Medical Examiners. ¹Chi-square test. ²Private included apartment or residence, semi-public included hotel, motel, shelter, nursing home, hospital, prison, group home, assisted living, or treatment facility, while public included theater, concert, show, office, park, school, bar/restaurant, roadway, or cemetery. ±Fisher's exact test. Counts less than five are suppressed to comply with the Rhode Island Small Numbers Policy.

Figure 2. Substances contributing to accidental overdose deaths in Rhode Island, stratified by decedent race and ethnicity: January 1, 2025–December 31, 2025



Source: Office of State Medical Examiners. Note: Substance categories are not mutually exclusive; more than one substance can contribute to cause of death.

DISCUSSION

From 2023 to 2025, accidental overdose deaths in RI declined by 46%. Encouragingly, these declines were observed among all population groups. The declines observed in RI align with neighboring states who reported similar decreases in overdose deaths during this period, including Massachusetts, Maine, Connecticut, and Vermont.⁵⁻⁸

In response to the rising overdose deaths in RI and the highest number of overdose deaths ever recorded in 2022, the State of Rhode Island set a goal to reduce overdose deaths by 30% from 2022 to 2030 as a part of the RI 2030 Action Plan.⁹ In 2025, RI experienced its third consecutive decrease in annual overdose deaths since its peak in 2022, with a 50% decrease in overdose deaths from 2022 to 2025, surpassing the State's goal to reduce fatal overdoses by 30% by 2030. This is the lowest number of fatal overdoses that the state has experienced since 2012, when 183 individuals experienced an accidental overdose death.

Though there was an observed decrease in both the counts and proportion of overdoses caused by opioids, stimulants, fentanyl, and cocaine between 2023 and 2025, these substances remain a main concern and the driver of most fatal overdoses in the state. Of note, while declines were seen across most substances of concern and drug types, the proportion and number of deaths involving prescription only drugs increased from 2023 to 2025. Additional surveillance work should be performed to inform future prevention efforts focused on reducing prescription involved fatal overdoses.

In April 2026, the RI Kratom Act was passed, which allowed for the manufacture and sale of kratom products to individuals age 21 and older.¹⁰ Kratom is a product that can be ingested or injected to produce stimulant- or opioid-like effects.¹¹ Kratom, as well as its alkaloids, mitragynine and

7-hydroxymitragynine (also known as 7-OH), do not have any approved therapeutic use by the Federal Drug Administration (FDA). Kratom products themselves pose health risks, including the potential for withdrawal, dependence, and death. Currently, the RI State Health Laboratories (SHL) only test for kratom and mitragynine, but do not test for the more potent 7-OH, which means that the potential impact of kratom on fatal overdose is likely underestimated. To determine the impact of legalization on overdose deaths, the health department will continue to monitor this substance over time, and the RISHL will be adding 7-OH testing in 2026.

While it is not possible to attribute the decline in overdose deaths to a single contributing factor, it is likely due to several initiatives undertaken by RI's community-based organizations and their dedicated staff with lived experience, healthcare professionals, municipalities, and government organizations to meet individuals where they are and provide free treatment/recovery options, naloxone, education, and basic needs services to individuals at risk of an overdose.

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