

MAINE MONTHLY OVERDOSE REPORT

For January 2024

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Overview

This report documents suspected and confirmed fatal and nonfatal drug overdoses in Maine during January 2024 as well as for the period January 2023–January 2024 (Table 1). During January 2024, there were 680 overdoses, 51 fatal and 629 nonfatal, a reduction compared to January 2023 when there were 803 overdoses, 54 fatal and 749 nonfatal. During 2023 as a whole, fatal overdoses constituted 6.3% of all overdoses, lower than the 6.9% for the year in 2022. The total number of confirmed and suspected fatal overdoses January–December 2023 is 608, 15.9% lower than the total confirmed fatal overdoses for the same period in 2022, 723. Nonfatal overdoses, January–December 2023 totaled 9,049, which is 7.3% lower than the total in 2022, 9,760.

Data derived from multiple statewide sources were compiled and deduplicated to calculate fatal and nonfatal overdose totals (Table 1). These include nonfatal overdose incidents reported by hospital emergency departments (ED), nonfatal emergency medical service (EMS) responses without transport to the ED, overdose reversals reported by law enforcement in the absence of EMS, and overdose reversals reported by community members or agencies receiving state-supplied naloxone through the Maine Naloxone Distribution Initiative. There are also an unknown number of private overdose reversals that were not reported and an unknown number of community-reported reversals that may have overlapped with emergency response by EMS or law enforcement. The total number of fatal overdoses in this report includes those that have been confirmed, as well as those that are suspected but not yet confirmed for October, November, December, and January (see Figure 1).

The total number of suspected and confirmed fatal overdoses and reported nonfatal overdoses for January 2024, 680, is displayed in Table 1 near the bottom row. Of those 680, there were 51 (7.5%) confirmed and suspected fatal overdoses, 270 (39.7%) nonfatal emergency department visits, 211 (31.0%) nonfatal EMS responses not transported to the emergency department, 139 (20.4%) reported community overdose reversals, and 9 (1.3%) law enforcement reversals in incidents that did not include EMS.

Figure 1. Suspected and confirmed fatal overdoses, all drugs, January 2023 through January 2024

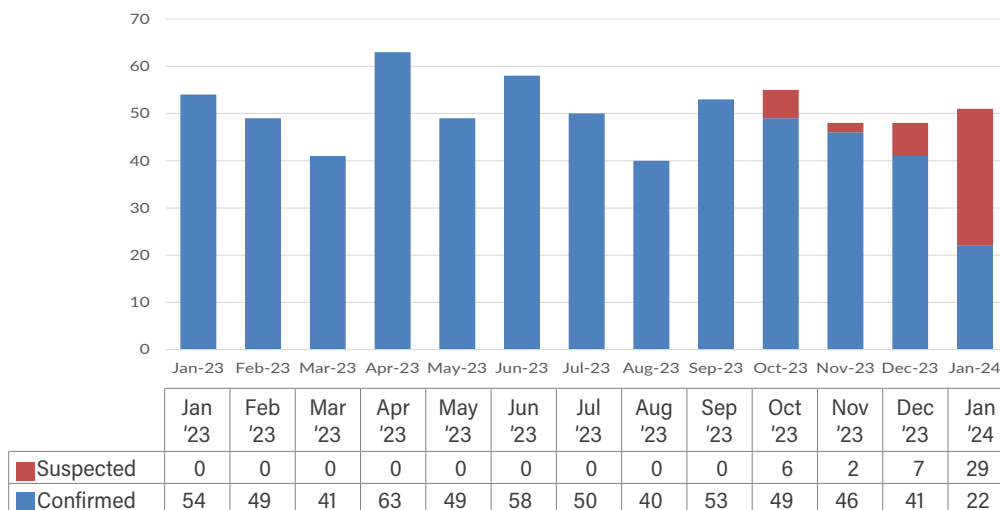


Table 1: Composite reported overdose totals, all drugs, January 2023–January 2024

	Nonfatal					Total confirmed and suspected fatal overdoses	Total overdoses
	Emergency Dept.	EMS not transported to emergency	Community reversals with naloxone	Law enforcement nonfatal overdose response without EMS	Total nonfatal overdoses		
January 2023	296	221	184	48	749	54	803
February 2023	348	185	192	30	755	49	804
March 2023	382	246	237	54	919	41	960
April 2023	270	217	202	29	718	63	781
May 2023	295	223	165	47	730	49	779
June 2023	378	209	219	35	841	58	899
July 2023	339	291	173	34	837	50	887
August 2023	330	247	152	22	751	40	791
September 2023	390	235	141	26	792	53	845
October 2023	316	254	147	17	734	55	789
November 2023	254	190	101	20	565	48	613
December 2023	323	183	129	23	658	48	706
2023 YTD total	3921	2701	2042	385	9049	608	9657
% of 2023 YTD total	40.6%	28.0%	21.1%	4.0%	93.7%	6.3%	100%
January 2024	270	211	139	9	629	51	680
2024 YTD total	270	211	139	9	629	51	680
% of 2024 YTD total	39.7%	31.0%	20.4%	1.3%	92.5%	7.5%	100%

Law Enforcement Response to Fatal and Nonfatal Overdose Incidents

Due to the method used to deduplicate nonfatal overdose incidents to derive a composite number of overdoses for the month, the total activity of both law enforcement officials and EMS agencies is underrepresented in the above table. The process used to deduplicate overdoses begins by removing fatal overdoses from the emergency department and EMS overdose incidents. Then the number of patients transported to emergency departments by Maine EMS are removed from the EMS overdose incidents. Finally, EMS involvement and fatal overdose incidents are removed from law enforcement responses.

Table 2 shows the public safety response to fatal and nonfatal overdose events in January 2024 as well as January–December 2023. During January 2024, law enforcement officers responded to a reported 109 overdose incidents (48 fatal; 61 nonfatal), and Maine EMS responded to a reported 397 incidents (37 fatal; 360 nonfatal). During 2023, law enforcement officers responded to a reported 1,617 incidents (564 fatal; 1,053 nonfatal), and Maine EMS responded to a reported 9,332 incidents (482 fatal; 8,840 nonfatal).

Table 2: Fatal and nonfatal overdose emergency response counts from law enforcement and EMS, including overlapping cases

	Fatal overdose response Jan-Dec 2023	Nonfatal overdose response Jan-Dec 2023	Total overdose response Jan-Dec 2023	Fatal overdose response Jan 2024	Nonfatal overdose response Jan 2024	Total overdose response Jan 2024
Maine EMS	482	8840	9332	37	360	397
Law enforcement	564	1053	1617	48	61	109

*Please note numbers will fluctuate from month to month as public safety agencies catch up their reporting. Due to methodological convention, alcohol-only cases are excluded from this table. However, we recognize that alcohol is a large part of substance misuse epidemic. Cases with both drugs and alcohol are included.

County Distribution of Suspected Nonfatal Overdoses with EMS Response

Table 3 shows the frequency distribution of nonfatal overdoses to which EMS responded at the county level. Overdose reversal totals reported by community partners and emergency departments are not reported by county; only EMS case data include county frequencies. The January 2024 monthly totals in the far right column can be compared to the percentage of the census population on the far left or the percentage of nonfatal overdoses for the year in 2023. Caution must be exercised viewing single counties, especially for a single month, due to small numbers. These may fluctuate randomly, without reflecting any statistically significant trend.

January–December 2023 percentage totals for most counties fall within 0 to 1 percentage points of the 2020 census distribution. Penobscot County is 3 percentage points higher than the 2020 census proportion. Androscoggin County is 2 percentage points higher than the 2020 census proportion. York County is 4 percentage points lower and Sagadahoc County is 2 percentage points lower than the 2020 census proportion.

Table 3: County of EMS incident among suspected and confirmed nonfatal overdoses

	% 2020 estimated Census population	Jan–Dec 2023 Est. N = 8840	Jan 2024 Est. N = 360
Androscoggin	8%	912 (10%)	25 (7%)
Aroostook	5%	447 (5%)	21 (6%)
Cumberland	22%	2037 (23%)	66 (18%)
Franklin	2%	138 (2%)	10 (3%)
Hancock	4%	255 (3%)	15 (4%)
Kennebec	9%	871 (10%)	36 (10%)
Knox	3%	300 (3%)	15 (4%)
Lincoln	3%	185 (2%)	8 (2%)
Oxford	4%	355 (4%)	15 (4%)
Penobscot	11%	1253 (14%)	59 (16%)
Piscataquis	1%	109 (1%)	2 (1%)
Sagadahoc	3%	130 (1%)	4 (1%)
Somerset	4%	431 (5%)	24 (7%)
Waldo	3%	193 (2%)	7 (2%)
Washington	2%	193 (2%)	8 (2%)
York	16%	1031 (12%)	45 (13%)

*EMS nonfatal overdose counts include incidents where a patient may have died after admission to the ED. Please note numbers will fluctuate from month-to-month as public safety agencies catch up their reporting. Due to methodological convention, alcohol-only cases are excluded from this table. However, we recognize that alcohol is a large part of substance misuse epidemic. Cases with both drugs and alcohol are included.

Age and Gender Distribution of Suspected Nonfatal Overdoses with EMS Response

Table 4 displays the age composition of individuals suspected of experiencing nonfatal overdoses involving EMS response in January 2024 as well as January–December 2023. Overdose reversal totals reported by community partners and emergency departments are not categorized and reported by age; only EMS case data include age frequencies at a monthly cadence. Age group totals can be compared to the 2020 census proportion by age group in the far left column or the January–December 2023 totals in the center column. When comparing the January 2024 data with 2023 data, as well as with the census population proportion, caution must be exercised as the small number of cases in each month is vulnerable to random fluctuation that may not reflect a significant statistical trend. The age distribution for 2023 compared to the 2020 census proportion shows a disproportionately

large impact of suspected nonfatal overdose victims with EMS involvement in those aged 25–44. Suspected nonfatal overdoses were 3 percentage points higher than the estimated census proportion of people aged 18–24, 4 percentage points lower than the proportion of those aged 55–64, and 14 percentage points lower than the proportion of those 65 and older.

Table 4: Reported age group among suspected nonfatal overdose victims involving EMS response

	% 2020 estimated Census population	Jan–Dec 2023 Est. N = 8785	Jan 2024 Est N = 359
Under 18	18%	409 5%	14 4%
18-24	7%	877 10%	37 10%
25-34	12%	1945 22%	87 24%
35-44	12%	2375 27%	107 30%
45-54	12%	1343 15%	44 12%
55-64	16%	1074 12%	44 12%
65 and older	23%	762 9%	26 7%

Table 5 displays the reported gender of individuals experiencing nonfatal overdoses involving EMS response in January 2024 as well as January–December 2023. Overdose reversal totals reported by community partners and emergency departments, as well as fatal overdoses are not categorized by gender; only EMS case data include gender categories at a monthly cadence. Gender group totals can be compared to the 2020 census proportion by age group in the far left column or the January–December 2023 totals in the center column. When comparing the January 2024 with 2023, as well as the census population proportion, caution must be exercised as the small number of cases in each month is vulnerable to random fluctuation that may not reflect a significant statistical trend. Males represent 49% of the 2020 estimated census population and 60% of the nonfatal overdose victims with EMS involvement during 2023.

Table 5: Reported gender among suspected nonfatal overdose victims involving EMS response

	% 2020 estimated Census population	Jan–Dec 2023 Est. N = 8797	Jan 2024 Est. N = 358
Male	49%	5296 60%	218 61%
Female	51%	3476 40%	140 39%
Transgender	Not collected	25 <1%	0 0%

County Distribution of Suspected and Confirmed Fatal Overdoses

Table 6 shows the frequency distribution of fatal overdoses at the county level. The January 2024 monthly totals in the far right column can be compared either to the percentage of the census population in the far-left column or the percentage of all Maine fatal overdoses for the 2023 year as a whole. Caution must be exercised when viewing single counties with small numbers for a single month. These may fluctuate randomly, without reflecting any significant statistical trend. The 2023 percentages for most counties fall within 0 to 1 percentage points of the 2020 census distribution. Penobscot County is 4 percentage points higher than the 2020 census proportions. Androscoggin County is 3 percentage points higher and Piscataquis County as well as Washington County are 2 percentage points higher than the 2020 census proportions. York County is 5 percentage points lower, Lincoln County and Sagadahoc County are 2 percentage points lower, than the 2020 census proportions.

Table 6: County of death among suspected and confirmed fatal overdoses

	% 2020 estimated Census population	Jan-Dec 2023 Est. N = 608		Jan 2024 Est N = 51	
Androscoggin	8%	69	11%	8	16%
Aroostook	5%	39	6%	4	8%
Cumberland	22%	117	19%	5	10%
Franklin	2%	6	1%	1	2%
Hancock	4%	22	4%	3	6%
Kennebec	9%	61	10%	7	14%
Knox	3%	16	3%	3	6%
Lincoln	3%	7	1%	3	6%
Oxford	4%	25	4%	4	8%
Penobscot	11%	91	15%	2	4%
Piscataquis	1%	17	3%	0	0%
Sagadahoc	3%	7	1%	0	0%
Somerset	4%	29	5%	2	4%
Waldo	3%	10	2%	0	0%
Washington	2%	26	4%	3	6%
York	16%	64	11%	6	12%

Age and Sex Distribution of Fatal Overdose Victims

Table 7 displays the age and sex composition¹ of the January 2024 fatal overdose population, the 2023 year-to-date fatal overdose population, and the 2020 estimated census population. When comparing the January 2024 data with 2023 as well as the census population proportion, caution must be exercised as the small number of cases in each month is vulnerable to random fluctuation that may not reflect a significant statistical trend. The cumulative proportion of males is slightly lower in January 2024 (71%) as in 2023 (73%). The age distribution for 2023 compared to the 2020 census population shows a disproportionately large impact of fatal overdoses in those aged 35–64. Fatal overdoses were 2 percentage points higher than the census proportion in those aged 25–34, 2 percentage points lower than the proportion of those aged 18–24, and a 17 percentage points lower than the proportion of those 65 and older.

Table 7: Decedent reported age group and sex among suspected and confirmed fatal overdoses*

	% 2020 estimated Census population	Jan-Dec 2023 Est. N= 608		Jan 2024 Est. N = 51	
Male	49%	443	73%	36	71%
Under 18	18%	3	<1%	0	0%
18–24	7%	28	5%	1	2%
25–34	12%	84	14%	5	10%
35–44	12%	199	33%	21	41%
45–54	12%	136	22%	13	25%
55–64	16%	120	20%	9	18%
65 and older	23%	38	6%	2	4%

*Percentages may not total 100 due to rounding.

¹ Note that death certificate reports sex as male or female without other gender categories.

Table 8 displays the reported race and ethnicity of confirmed and suspected fatal overdoses January 2024 and January–December 2023 compared to the 2020 census population. Note that race and ethnicity are not finalized until the full death certificate is entered into Vital Records, and a small number of decedents' records currently lack information about these variables. Out of 608 decedents for whom race was reported January through December 2023, 91% were identified as White, 4% as Black/African American, and 2% as American Indian/Alaska Native. Out of 592 decedents for whom Hispanic ethnicity status was reported, 1% were identified as Hispanic.

Table 8: Decedent race and ethnicity among suspected and confirmed fatal overdoses*

	% 2020 estimated Census population: Race & Hispanic/Latinx Ethnicity	Jan-Dec 2023 Race N = 606 Ethnicity N = 590		Jan 2024 Race Est. N = 50 Ethnicity Est. N = 50	
White alone, non-Hispanic	91%	553	91%	46	92%
Black/African American alone, non-Hispanic	2%	24	4%	0	0%
American Indian/Alaska Native, non-Hispanic	1%	12	2%	2	4%
Other race and 2+ races combined, non-Hispanic	7%	11	2%	2	4%
Hispanic/Latinx alone or in combination	2%	7	1%	0	0%

*Race and ethnicity data for some cases are unavailable until drug deaths are confirmed.

†Percentages may not total 100 due to rounding.

Military Status and Housing Stability of Fatal Overdose Victims

Out of the 607 cases for which military background was reported January–December 2023, 33 (5%) were identified as having a military background. Out of the 51 cases in January 2024 where military background was reported, 2 (4%) were identified as having a military background.

Of the 607 total suspected and confirmed fatal overdose cases year-to-date in 2023, undomiciled or transient housing status was reported for 73 (12%) of victims. Among those 73, the largest proportions of undomiciled persons were found in Cumberland County (25, 34%), Penobscot County (16, 22%), Androscoggin County (11, 15%) and Kennebec County (7, 10%). In January 2024, 5 decedents (10%) were identified as undomiciled.

Basic Incident Patterns of Fatal Overdoses

Table 9 reports some of the basic incident patterns for fatal overdoses. January 2024 can be compared to 2023 as a whole. Caution must be exercised interpreting a single month of data as numbers may fluctuate randomly and not reflect a statistically significant trend. In addition, data totals may change slightly as suspected cases are confirmed or eliminated. Both EMS and police responded together to most fatal overdoses (73%) in 2023. Law enforcement was more likely to respond to a scene alone (19%) than EMS (6%). The overwhelming majority (93%) of confirmed fatal drug overdoses were ruled as, or suspected of being, accidental manner of death. Of the 608 confirmed or suspected fatal overdoses in 2023, 206 (34%) had a history of prior overdose. Although most cases had bystanders or witnesses present at the scene by the time first responders arrived, the details about who was present at the time of the overdose were frequently unclear. However, responding family and friends or bystanders administered naloxone for 82 (13%) of the 2023 fatal overdoses, higher than 2022 (11%), 2021 (9%), and 2020 (4%). Often, bystanders or witnesses administered naloxone in addition to EMS and/or law enforcement. During 2023, 26% of suspected and confirmed fatal overdose cases had naloxone administered at the scene by EMS, bystanders, and/or law enforcement. This rate slightly higher than in 2022 (25%).

Of the 483 suspected or confirmed drug death cases with EMS involvement during 2023, 266 (55%) victims were already deceased when EMS arrived. In the remaining 217 (45%) cases, resuscitation was attempted either at the scene or presumably in the ambulance during transport to the emergency room. Of those 217 who were still alive when EMS arrived, 64 (29%) were transported, and 151 (70%) did not survive to be transported and 1 had

an unknown status. Thus, out of 483 ultimately fatal cases with EMS response, only 64 (13%) remained alive long enough to be transported but died during transport or at the emergency room. This outcome is likely due to a combination of the high number of cases with fentanyl as a cause of death and individuals using alone. Fentanyl acts more quickly than other opioids, and there is less time for bystanders to find an overdose victim alive, administer naloxone, and call 911.

Table 9: Incident characteristics among suspected and confirmed fatal overdoses

	Jan-Dec 2023 Est. N = 608		Jan 2024 Est N = 51	
EMS response alone	37	6%	2	4%
Law enforcement alone	119	19%	13	25%
EMS and law enforcement	444	73%	35	69%
Private transport to Emergency Dept.	5	1%	1	2%
Naloxone administration reported at the scene	157	26%	8	16%
Bystander only administered	40	7%	1	2%
Law enforcement only administered	15	2%	0	0%
EMS only administered	43	7%	5	10%
EMS and law enforcement administered	10	2%	0	0%
EMS and bystander administered	30	5%	0	0%
Law enforcement and bystander administered	8	1%	0	0%
EMS, bystander, and law enforcement administered	4	1%	0	0%
Naloxone administered by unspecified person	4	0%	0	0%
History of prior overdose	206	34%	22	43%

Table 10 displays the frequencies of the most prominent drug categories causing death among confirmed drug deaths. As expected, within the 593 confirmed drug death cases so far in 2023, nonpharmaceutical fentanyl was the most frequent cause of death, mentioned on the death certificate of 461 (78%) victims.

Fentanyl is nearly always found in combination with multiple other drugs. Heroin involvement, declining rapidly in recent years, was reported as a cause of death in 12 (2%) of 2023 deaths. Xylazine and nonpharmaceutical tramadol were identified as co-intoxicants with fentanyl for the first time in 2021. Among 593 confirmed deaths in 2023, there were 57 cases (10%) with xylazine listed in addition to fentanyl as a cause of death and 1 case without fentanyl listed as a cointoxicant, and 3 cases (1%) with tramadol listed along with fentanyl.

Stimulants continue to increase as a cause of death, usually in combination with other drugs, particularly fentanyl. Cocaine-involved fatalities constituted 220 (37%) of confirmed cases in 2023, an increase from 29% in 2022. Fentanyl is mentioned as a cause in combination with cocaine in 187 cases, 84% of 2023 cocaine cases. Methamphetamine was cited as a cause of death in 193 (33%) of the confirmed fatal overdoses in 2023, the one percentage point higher than in 2022; 160 (83%) of the methamphetamine deaths also involved fentanyl as a co-intoxicant cause of death. Cocaine and methamphetamine are named together on 53 (9%) death certificates in 2023, in most of those cases (47, 89%) as co-intoxicants of fentanyl.

Table 10: Key drug categories and combinations causing death among confirmed overdoses

Cause of death (alone or in combination with other drugs) Sample size for confirmed cases only	Jan-Dec 2023 Est. N = 593	Jan 2024 Est. N = 29
Fentanyl or fentanyl analogs	461 78%	18 62%
Heroin	12 2%	1 3%
Cocaine	220 37%	8 28%
Methamphetamine	193 33%	11 38%
Xylazine	58 10%	
Pharmaceutical opioids**	109 18%	0 0%
Fentanyl and heroin	12 2%	1 3%
Fentanyl and cocaine	187 32%	6 21%
Fentanyl and methamphetamine	160 27%	9 31%
Fentanyl and xylazine	57 10%	4 14%
Fentanyl and tramadol	3 1%	0 0%

**Nonpharmaceutical tramadol is now being combined with fentanyl in pills and powders for illicit drug use. When found in combination with fentanyl, and in the absence of a known prescription, tramadol is categorized as a nonpharmaceutical opioid.

Background Information about this Report

This report, funded jointly by the Maine Office of Attorney General and the Office of Behavioral Health,¹ provides an overview of statistics regarding suspected and confirmed fatal and nonfatal drug overdoses each month. Data for the fatal overdoses were collected at the Office of Chief Medical Examiner and data regarding nonfatal overdoses were contributed by the Maine CDC, Maine Emergency Medical Services, Maine ODMAP initiative, Maine Naloxone Distribution Initiative, and Office of Attorney General Naloxone Distribution. Year-to-date numbers are updated as medical examiner cases are finalized, and their overdose status is confirmed or ruled out, and as occasional lagged EMS, ED, and ODMAP data totals are finalized. The totals are expected to shift as case completion occurs. In addition, due to the small sample size in each month, we expect totals to fluctuate from month to month because of random variation. The monthly reports are posted on mainedrugdata.org.

A “drug death” is confirmed when one or more drugs are mentioned on the death certificate as a cause or significant contributing factor for the death. Most drug-induced fatalities are accidents related primarily to drug lethality, the unique vulnerability of the drug user, such as underlying medical conditions, and the circumstances surrounding drug use during that moment.

A “suspected” drug fatality is identified by physiological signs of overdose as well as physical signs at the scene and witness information. To be confirmed as a drug death, the medical examiner must have issued a final death certificate which includes the names of the specific drugs. A forensic toxicology exam must also have been done, which includes a minimum of two toxicology tests, one to screen for drugs present, and another that will quantify the levels of drugs in the decedent’s system. All cases receive a thorough external examination and comprehensive toxicology tests. In some cases, a complete autopsy is also done. Additional data, such as medical records and police incident reports are also collected. Normally cases are completed within one month; however, due to recent problems being experienced by our national toxicology testing service, completion of cases is occurring at about 6–8 weeks after death, and occasionally longer.

By highlighting drug deaths at the monthly level, this report brings attention to the often-dramatic shifts in totals that can occur from month to month. These fluctuations are common with small numbers and will tend toward an average over time. Whereas the overall number of overdose deaths are a critical indicator of individual and societal stress, this metric itself can be quite resistant to public policy interventions due to its complexity. Overdose fatalities occur because of multiple unique and interacting factors, as mentioned above. For that reason, these reports will seek to monitor components that can be directly affected by specific public health education and harm reduction interventions. The statistics in this report reflect both suspected and confirmed “occurrent” deaths, that is, deaths that occur in the State of Maine, even though they may not be Maine residents. These totals also do not include Maine residents who die in other states. For these reasons, totals will differ slightly from the statistics reported by the National Center for Health Statistics, which reports only confirmed “resident” deaths. In addition, due to recently reported updates of toxicology results and newly confirmed or eliminated drug death cases, both the 2021 and 2022 statistics have changed slightly from those reported in the previous monthly report.

1 The Office of Attorney General supports ongoing research on fatal overdoses by the University of Maine. Additionally, the Overdose Data to Action cooperative agreement from the U.S. Centers for Disease Control & Prevention also provides funding to the State of Maine’s Office of Behavioral Health and Maine Center for Disease Control, which also supports university programs involving fatal and nonfatal overdoses surveillance and enables the collection of nonfatal metrics included in this report. The conclusions in this report do not necessarily represent those of the U.S. Centers for Disease Control and Prevention.