

# MAINE MONTHLY OVERDOSE REPORT

For January 2023

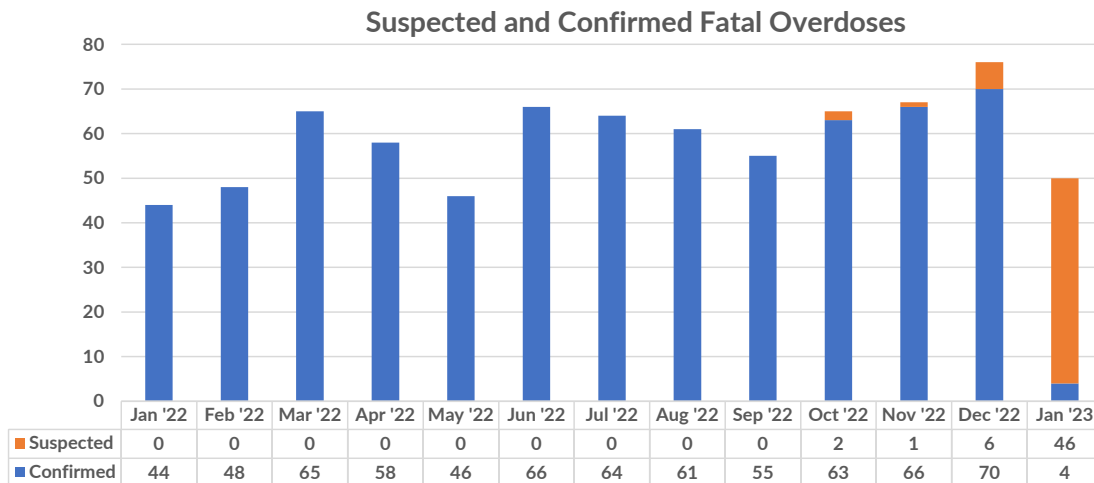
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## Overview

This report documents suspected and confirmed fatal and nonfatal drug overdoses in Maine during January 2023 as well as for the period January 2022–January 2023 (Table 1). During January 2023, the proportion of fatal overdoses averaged 6.7% of total overdoses. Monthly proportions of 2022 fatalities have fluctuated from a low of 5.1% in May to a high of 9.0% in December. During the period January–December 2022, fatal overdoses comprised 7.0% of all overdoses, slightly higher than the 6.5% for 2021. Data derived from multiple statewide sources were compiled and deduplicated to compute 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. There are also an unknown number of private overdose reversals that were not reported, and an unknown number of the 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).

**Figure 1.** Suspected and confirmed fatal overdoses, all drugs, January 2022 through January 2023



**Table 1: Composite reported overdose totals, all drugs, January 2022–January 2023**

	Nonfatal					Total confirmed and suspected fatal overdoses	Total overdoses
	Emergency Dept.	EMS not transported to emergency	Community reversals with naloxone	Law enforcement reversals with naloxone and without EMS	Total nonfatal overdoses		
January 2022	296	206	178	1	681	44	725
February 2022	333	185	153	4	675	48	723
March 2022	457	201	202	7	867	65	932
April 2022	290	178	189	7	664	58	722
May 2022	402	248	186	12	848	46	894
June 2022	482	250	177	10	919	66	985
July 2022	348	287	183	4	822	64	886
August 2022	385	272	255	7	919	61	980
September 2022	458	256	153	6	873	55	928
October 2022	283	238	177	6	704	65	769
November 2022	286	206	200	5	697	67	764
December 2022	352	212	198	4	766	76	842
2022 total	4372 (43.1%)	2739 (27.0%)	2251 (22.2%)	73 (0.7%)	9435 (93.0%)	715 (7.0%)	10150 (100%)
January 2023	288	220	184	2	694	50	744
2023 YTD total	288 (38.7%)	220 (29.6%)	184 (24.7%)	2 (0.3%)	694 (93.3%)	50 (6.7%)	744 (100%)

\*Law enforcement reversals are updated as cases are reported by departments and agencies. Thus, there may be significant changes in the data reported for January compared to previous months as lagged reporting catches up. Law enforcement cases have EMS involvement most of the time. Due to the need to deduplicate overdoses, law enforcement numbers only include those where EMS is not present.

The total number of fatal and reported nonfatal overdoses for January 2023, 744, is displayed in Table 1 in the bottom row: 50 (6.7%) confirmed and suspected fatal overdoses, 288 (38.7%) nonfatal emergency department visits, 220 (29.6%) nonfatal EMS responses not transported to the emergency department, 184 (24.7%) reported community overdose reversals, and 2 (0.3%) law enforcement reversals in incidents that did not include EMS.

## Law Enforcement Response to Fatal and Nonfatal Overdose Incidents

Due to the method we used to deduplicate nonfatal overdose incidents to derive a composite number of overdoses for the month, the activity of law enforcement officials is underrepresented in the above chart. 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 2023 as well as 2022. During January 2023, law enforcement officers responded to a reported 146 overdose incidents (48 fatal; 98 nonfatal) and Maine EMS responded to a reported 791 incidents (37 fatal; 754 nonfatal). During 2022, law enforcement officers responded to a reported 2,138 incidents (667 fatal; 1,471 nonfatal) and Maine EMS responded to a reported 9,773 incidents (579 fatal; 9,194 nonfatal).

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

	Fatal Overdose Response Jan–Dec 2022	Nonfatal Overdose Response Jan–Dec 2022	Total Overdose Response Jan–Dec 2022	Fatal Overdose Response Jan 2023	Nonfatal Overdose Response Jan 2023	Total Overdose Response Jan 2023
Maine EMS	579	9194	9773	37	754	791
Law Enforcement	667	1471	2138	48	98	146

\*January 2023 EMS overdose response numbers in this table are greater than the total January 2023 overdose numbers in Table 1 because the overlapping cases have been removed and some cases EMS initially thought were overdoses were subsequently removed at the ED with more medical evaluation and testing. 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

Table 3 shows the frequency distribution of nonfatal overdoses at the county level. Due to how overdose reversals are reported by community partners and emergency departments, only EMS overdoses are included. In future reports, deduplicated law enforcement events will also be included. The January 2023 monthly totals can be compared to the percentage of the census population on the far-left or the percentage of deduplicated law enforcement and EMS nonfatal overdoses in the center. Caution must be exercised viewing single counties with small numbers for a single month. These may fluctuate randomly, without reflecting any significant statistical trend.

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

	% 2020 estimated Census population	Jan–Dec 2022 Est. N = 9194	Jan 2023 Est. N = 791
Androscoggin	8%	1084 (12%)	84 (11%)
Aroostook	5%	517 (6%)	41 (5%)
Cumberland	22%	2248 (24%)	181 (23%)
Franklin	2%	145 (2%)	10 (1%)
Hancock	4%	304 (3%)	32 (4%)
Kennebec	9%	960 (10%)	87 (11%)
Knox	3%	255 (3%)	33 (4%)
Lincoln	3%	164 (2%)	9 (1%)
Oxford	4%	434 (5%)	36 (5%)
Penobscot	11%	1365 (15%)	103 (13%)
Piscataquis	1%	92 (1%)	12 (2%)
Sagadahoc	3%	132 (1%)	9 (1%)
Somerset	4%	414 (5%)	34 (4%)
Waldo	3%	218 (2%)	22 (3%)
Washington	2%	234 (3%)	15 (2%)
York	16%	1207 (13%)	83 (10%)

\*EMS nonfatal overdose counts include incidents where a patient may have died after admission to the ED. January 2023 EMS overdose response numbers in this table are greater than the total January 2023 overdose total in Table 1 because the overlapping cases have been removed and some cases EMS initially thought were overdoses were subsequently removed at the ED with more medical evaluation and testing. 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.

The 2022 percentages for most counties fall within 0 to 1 percentage points of the 2020 census distribution. York County is 3 percentage points lower; Sagadahoc County is 2 percentage points lower than the 2020 census proportion. Androscoggin County and Penobscot County are 4 percentage points higher while Cumberland County is 2 percentage points higher than the 2020 census proportion. The proportion of January 2023 nonfatal overdoses contain only a single month of data and caution must be used as monthly data randomly fluctuates, both up and down, and changes may not be statistically significant.

### County Distribution of Fatal Overdoses

Table 4 shows the frequency distribution of fatal overdoses at the county level. The January 2023 monthly totals 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 2022. Caution must be exercised viewing single counties with small numbers for a single month. These may fluctuate randomly, without reflecting any significant statistical trend.

The 2022 percentages for most counties fall within 0 to 1 percentage points of the 2020 census distribution. Cumberland County is 4 percentage points lower; Sagadahoc County and York County are 2 percentage points lower than the 2020 census proportions. Androscoggin County and Aroostook County are 2 percentage points higher and Penobscot County is 4 percentage points higher than the 2020 census proportions.

**Table 4: County of death among suspected and confirmed fatal overdoses**

	% 2020 estimated Census population	Jan-Dec 2022 Est. N = 715	Jan 2023 Est. N = 50
Androscoggin	8%	79 (10%)	9 (18%)
Aroostook	5%	47 (7%)	1 (2%)
Cumberland	22%	130 (18%)	16 (32%)
Franklin	2%	14 (2%)	0 (0%)
Hancock	4%	24 (3%)	1 (2%)
Kennebec	9%	55 (8%)	4 (8%)
Knox	3%	20 (3%)	0 (0%)
Lincoln	3%	14 (2%)	1 (2%)
Oxford	4%	36 (5%)	2 (4%)
Penobscot	11%	106 (15%)	4 (8%)
Piscataquis	1%	9 (1%)	1 (2%)
Sagadahoc	3%	10 (1%)	0 (0%)
Somerset	4%	35 (5%)	3 (6%)
Waldo	3%	21 (3%)	1 (2%)
Washington	2%	24 (3%)	3 (6%)
York	16%	101 (14%)	4 (8%)

### Age and Biological Sex Distribution of Fatal Overdose Victims

Table 5 displays the age and biological sex composition of the January 2023 fatal overdose population, the 2022 fatal overdose population, and the 2020 estimated census population. When comparing the January 2023 data with 2022, and the census population proportion, caution must be exercised as the small number of cases in a given month creates random fluctuation that may not reflect a significant statistical trend. The

2022 overall age categories are within 2 to 4 percentage points of 2021. The cumulative proportion of males has risen from 71% in 2021 to 73% in the 2022. The cumulative age distribution for 2022 compared to 2021 shows 2 deaths under 18 in 2021 and 3 deaths in 2022, an increase of 2 percentage points in the proportion of those aged 18–39, a decrease of 4 percentage points in those aged 40–59, and a 2-percentage point increase in the proportion of those 60 and above. Note that death certificate data records biological sex and does not contain gender categories.

**Table 5: Decedent reported age group and biological sex among suspected and confirmed fatal overdoses\***

	% 2020 estimated Census population	Jan–Dec 2022 Est. N = 715	Jan 2023 Est. N = 50
Males	49%	521 (73%)	34 (68%)
Under 18	19%	3 (<1%)	0 (0%)
18–39	26%	291 (41%)	17 (34%)
40–59	27%	332 (46%)	25 (50%)
60+	29%	89 (12%)	8 (16%)

\*Percentages may not total 100 due to rounding.

Table 6 displays the reported race and ethnicity of confirmed and suspected fatal overdoses in 2021, 2022, and 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 lack information about these variables. Race and ethnicity proportions in 2022 have remained relatively stable, within 1 percentage point, compared to 2021. Out of 712 decedents for whom race was reported January through December 2022, 93% of the victims were identified as White, 2% as Black/African American, and 2% as American Indian/Alaska Native. Out of 698 decedents for whom Hispanic ethnicity status was reported, 1% were identified as Hispanic. Please note, January 2023 only contains one month of data, and thus contains random variation of data due to small numbers. Changes in proportion compared to 2022 are not statistically significant.

**Table 6: Decedent race and ethnicity among suspected and confirmed fatal overdoses\***

	% 2020 estimated Census population: Race & Hispanic/ Latinx ethnicity	Jan–Dec 2022 Race N = 712 Ethnicity N = 698	Jan 2023 Race N = 48 Ethnicity N = 48
White alone, non-Hispanic	91%	664 (93%)	43 (90%)
Black/African American alone, non-Hispanic	2%	16 (2%)	3 (6%)
American Indian/Alaska Native, non-Hispanic	1%	14 (2%)	0 (0%)
Other race and 2+ races combined, non-Hispanic	7%	12 (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 715 cases for which military background was reported January–December 2022, 53 (7%) were identified as having a military background. Out of the 48 cases in January 2023 where military background was reported, 1 (2%) was identified as having a military background.

Of the 715 total suspected and confirmed overdoses cases in 2022, undomiciled or transient housing status was reported for 80 (11%) of victims. Among those 80, the largest proportions of undomiciled persons were found in Cumberland County (31, 39%), Penobscot County (20, 25%) and Androscoggin County (10, 13%). In January 2023, 6 decedents were identified as undomiciled.

## Basic Incident Patterns of Fatal Overdoses

Table 7 reports some of the basic incident patterns for fatal overdoses. January 2023 can be compared to 2022. Caution must be exercised interpreting a single month of data as numbers fluctuate randomly and may not reflect a statistically significant trend. In addition, data totals may change slightly as suspected cases are confirmed. Both EMS and police responded to most fatal overdoses (75%) in 2022. Law enforcement was more likely to respond to a scene alone (18%) than EMS (6%). The overwhelming majority (95%) of confirmed fatal drug overdoses were ruled as, or suspected of being, accidental manner of death. Of the 715 confirmed or suspected fatal overdoses in 2022, 268 (37%) 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 (11%) of the 2022 fatal overdoses, an increase over the previous two years (4% in 2020 and 9% in 2021). Often, bystanders or witnesses administered naloxone in addition to EMS and/or law enforcement. During 2022, 25% of suspected and confirmed fatal overdose cases had naloxone administered at the scene by EMS, bystanders, and/or law enforcement. This rate is lower than in 2021 (30%).

**Table 7: Event characteristics among suspected and confirmed fatal overdoses**

	Jan-Dec 2022 Est. N = 715	Jan 2023 Est. N = 50
EMS response alone	39 (6%)	2 (4%)
Law enforcement alone	127 (18%)	13 (26%)
EMS and law enforcement	540 (75%)	35 (70%)
Private transport to Emergency Dept.	13 (2%)	0 (0%)
Naloxone administration reported at the scene	181 (25%)	10 (20%)
Bystander only administered	45 (6%)	2 (4%)
Law enforcement only administered	32 (5%)	0 (0%)
EMS only administered	55 (8%)	5 (10%)
EMS and law enforcement administered	11 (2%)	1 (2%)
EMS and bystander administered	26 (4%)	1 (2%)
Law enforcement and bystander administered	5 (1%)	1 (2%)
EMS, bystander, and law enforcement administered	6 (1%)	0 (0%)
Naloxone administered by unspecified person	10 (1%)	0 (0%)
History of prior overdose	268 (37%)	20 (40%)

Of the 579 suspected or confirmed drug death cases with EMS involvement during 2022, 302 (52%) victims were already deceased when EMS arrived. In the remaining 277 (48%) cases, resuscitation was attempted either at the scene or presumably in the ambulance during transport to the emergency room. Of those 277 who were still alive when EMS arrived, 85 (31%) were transported, and 192 (69%) did not survive to be transported. Thus, out of 579 ultimately fatal cases with EMS response, only 85 (15%) 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 8 displays the frequencies of the most prominent drug categories causing death among confirmed drug deaths. As expected, within the 706 confirmed drug death cases so far in 2022, nonpharmaceutical fentanyl was the most frequent cause of death, mentioned on the death certificate of 551 (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 3% (19) of 2022 deaths, the same as in 2021 (3%, 22), and significantly lower than 2020 (11%, 57). Xylazine and nonpharmaceutical tramadol were identified as co-intoxicants with fentanyl for the first time in 2021. Among 706 confirmed deaths in 2022, there were 45 cases (6%) with xylazine listed in addition to fentanyl as a cause of death, and 9 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. Methamphetamine was cited as a cause of death in 231 (33%) of the confirmed fatal overdoses in 2022, an increase from 27% in 2021; 187 (81%) of the methamphetamine deaths also involved fentanyl as a co-intoxicant cause of death. Cocaine-involved fatalities constituted 211 (30%) of confirmed cases in 2022, an increase from 25% in 2021. Fentanyl is mentioned as a cause in combination with cocaine in 171 (81%) of 2022 cocaine cases. Cocaine and methamphetamine are named together on 52 (7%) death certificates in 2022, in most cases (44, 85%) as combined co-intoxicants also combined with fentanyl.

**Table 8: 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 2022 N = 706	Jan 2023 N = 4
Fentanyl or fentanyl analogs	551 (78%)	4 (100%)
Heroin	18 (3%)	0 (0%)
Cocaine	209 (30%)	2 (50%)
Methamphetamine	230 (33%)	3 (75%)
Pharmaceutical opioids**	147 (21%)	0 (0%)
Fentanyl and heroin	17 (2%)	0 (0%)
Fentanyl and cocaine	169 (24%)	2 (50%)
Fentanyl and methamphetamine	186 (27%)	3 (75%)
Fentanyl and xylazine	45 (6%)	0 (0%)
Fentanyl and tramadol	9 (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.

## Highlight of the Month

### MEDICATION FOR OPIOID USE DISORDER IN MAINE JAILS AND DOC FACILITIES

This month, we highlight the work going on inside Maine's county jails and Department of Correction facilities to ensure that jail and prison residents with substance use disorders are offered treatment with one or more of the standard medications available to treat such disorders. In Feb. 2019, newly inaugurated Governor Janet T. Mills signed Executive Order II, AN ORDER TO IMPLEMENT IMMEDIATE RESPONSES TO MAINE'S OPIOID EPIDEMIC. Among other provisions, the Order directed the Director of Opioid Response to use funds available to the office of Substance Abuse and Mental Health Services (now the Office of Behavioral Health) to encourage every county jail to have MAT (medication-assisted treatment) services available for persons incarcerated who are suffering from a substance use disorder, and help such individuals released from jails to continue to receive support services and to assist the Department of Corrections pilot program to provide MAT to inmates, focusing first on those patients with a release date within four years, and help individuals released from the Department to continue to receive like support services.

Led by the Department of Corrections and with the cooperation of Maine's sheriffs and jail administrators, the efforts begun in 2019 have resulted to date in over 2000 individuals receiving medication for substance use disorders in Maine's prisons and jails. The Department of Corrections has treated over 1,000 individuals and at any one time, between 400 and 600 residents in DOC facilities are receiving such medication. While taking longer to achieve uniform application, all of Maine's jails now have MOUD (medications for opioid use disorder) programs and in the fourth quarter of 2021, 1,151 residents were receiving medication, 273 having been induced for the first time once in jail (others were continued on the medication as they had an existing prescription when entering the facility).

The Office of Behavioral Health provides some financial support for the medication effort in seven of the county jails and provided a portion of the initial funds for the DOC pilot. The pilot quickly expanded eligibility from those residents being released within 90 days to those being released within 180 days and eventually to all residents with a SUD diagnosis, regardless of their release date.

While most of the medication offered is Suboxone, a combination of the synthetic opioid buprenorphine and naloxone, some jails and facilities are able to offer additional medication such as Sublocade (an injectible form of buprenorphine) and methadone. The goal of the Mills Administration is to have all forms of medication offered with the understanding that all forms of recovery, including abstinence without medication, are supported and encouraged. Well over fifty percent of the incarcerated population have a substance use disorder. About 40% of DOC residents across all the facilities are now receiving medication for this diagnosis and also offered counseling.

The Department of Corrections program was recognized nationally in 2022 by the Office of National Drug Control Policy and the Director, Rahul Gupta, M.D, visited the Maine State Prison in July, 2022 to personally talk with residents and staff about the program. More recently, the national publication, POLITICO, published an extensive article on the program. (<https://www.politico.com/news/magazine/2023/01/08/maines-prisons-opioids-00076822>)



## Background Information about this Report

*This report, funded jointly by the Maine Office of Attorney General and the Office of Behavioral Health,<sup>1</sup> 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 due to the effects of random variation. The monthly reports are posted on [mainedrugdata.org](https://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 particular 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. In order 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.*

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<sup>1</sup> 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. CDC.