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MAINE MONTHLY OVERDOSE REPORT

For June 2022

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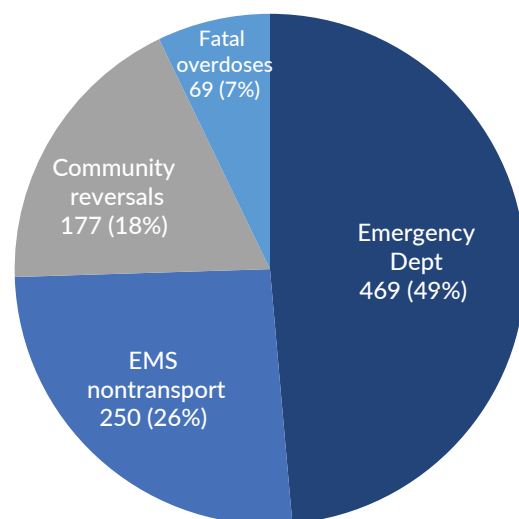
Overview

This report documents suspected and confirmed fatal and nonfatal drug overdoses in Maine during June, 2022 as well as for January-June 2022. During June, the proportion of fatal overdoses averaged 7% of total overdoses, the same level as the average for the first six months of 2022, and the same level as during 2021, 7% (Table 1). The monthly proportion of 2022 fatalities has fluctuated, however, including a low of 5% in May 2022 and a high of 8% in April. During the first half of 2022, the average number of overdoses per month was approximately 820 (55 fatal and 765 nonfatal cases). This compares to the monthly average for January–June 2021 of 695 (50 fatal and 645 nonfatal cases). The 2022 number of fatal overdoses is 9.7% higher than during the same time in 2021.

Data derived from multiple statewide sources were compiled and deduplicated to compute nonfatal overdose totals. 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 part of May and part of June (see Figure 2).

The cumulative number of reported fatal and nonfatal overdoses January through June 2022, 4922, is displayed in Table 1 in the bottom row: 329 (7%) confirmed and suspected fatal overdoses, 2247 (46%) nonfatal emergency department visits, 1267 (26%) nonfatal EMS responses not transported to the emergency department, 1074 (22%) reported community reversals, and 5 (<1%) law enforcement reversals in cases that did not include EMS. Figure 1 displays the relative proportions for these components.

Figure 1: Fatal and nonfatal overdoses in June 2022*

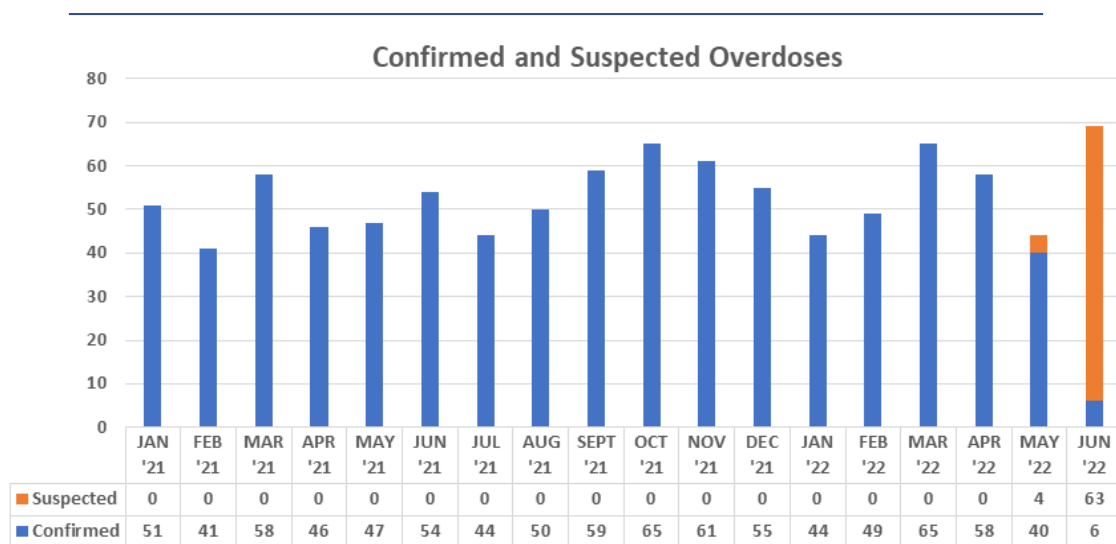


* Percentages may not total 100 due to rounding.

Table 1: Composite overdose totals by month, calendar months January 2021–June 2022

	Nonfatal					Total confirmed and suspected fatal overdoses	Total overdoses
	Emergency department	EMS not transported to emergency dept.	Community reversals with naloxone	Law enforcement reversals with naloxone and without EMS	Total nonfatal overdoses		
January 2021	270	164	127	0	561	51	612
February 2021	277	118	100	0	495	41	536
March 2021	329	172	156	2	659	58	717
April 2021	334	190	136	0	660	46	706
May 2021	409	163	100	1	673	47	720
June 2021	411	223	189	0	823	54	877
July 2021	482	225	167	0	874	44	918
August 2021	428	232	222	3	885	50	935
September 2021	473	234	276	2	985	59	1044
October 2021	383	246	208	2	839	65	904
November 2021	308	219	195	2	724	61	785
December 2021	344	198	176	11	729	55	784
2021 Total	4448 (46.6%)	2384 (25.0%)	2052 (21.5%)	23 (0.2%)	8907 (93.4%)	631 (6.6%)	9538 (100.0%)
January 2022	296	206	177	1	680	44	724
February 2022	333	185	153	1	672	49	721
March 2022	458	201	202	0	861	65	926
April 2022	290	177	186	3	656	58	714
May 2022	401	248	179	0	828	44	872
June 2022	469	250	177	0	896	69	965
2022 YTD total	2247 (45.7%)	1267 (25.7%)	1074 (21.8%)	5 (0.1%)	4593 (93.3%)	329 (6.7%)	4922 (100.0%)

Figure 2: Number of suspected and confirmed fatal overdoses by month



County Distribution of Fatal Overdoses

Table 2 shows the frequency distribution of fatal overdoses at the county level. The monthly totals can be compared either to the percentage of the census population on the far left column or the percentage of all Maine drug fatal overdoses for 2021 and 2022. Caution must be exercised viewing single counties with small numbers for a single month. They may fluctuate randomly, without reflecting any significant statistical trend.

The cumulative percentages of deaths for many counties in 2022 (January–June) fall within 0–1% of the 2020 census distribution, including those of Androscoggin, Aroostook, Franklin, Knox, Lincoln, Oxford, Piscataquis, Sagadahoc, Somerset, Waldo, Washington, and York. The only county that is 2% or more higher than the 2020 census proportions in 2022 is Penobscot (+5%). Counties that are 2% or more lower than the 2020 census proportion are Cumberland (-3%), Hancock (-2%), and Kennebec (-2%).

Table 2: County of death among suspected and confirmed fatal overdoses

	% 2020 Estimated Census Population	Jan–Dec 2021 Est. N=631	Jan–Jun 2022 Est. N=329	Jun 2022 Est. N=69
Androscoggin	8%	69 (11%)	30 (9%)	7 (10%)
Aroostook	5%	39 (6%)	21 (6%)	5 (7%)
Cumberland	22%	114 (18%)	62 (19%)	12 (17%)
Franklin	2%	8 (1%)	9 (3%)	1 (1%)
Hancock	4%	22 (3%)	8 (2%)	3 (4%)
Kennebec	9%	64 (10%)	23 (7%)	8 (12%)
Knox	3%	11 (2%)	8 (2%)	2 (3%)
Lincoln	3%	16 (3%)	5 (2%)	1 (1%)
Oxford	4%	28 (4%)	16 (5%)	4 (6%)
Penobscot	11%	106 (17%)	52 (16%)	8 (12%)
Piscataquis	1%	11 (2%)	4 (1%)	0 (0%)
Sagadahoc	3%	7 (1%)	5 (2%)	0 (0%)
Somerset	4%	26 (4%)	13 (4%)	1 (1%)
Waldo	3%	15 (2%)	12 (4%)	2 (3%)
Washington	2%	25 (4%)	6 (2%)	1 (1%)
York	16%	70 (11%)	55 (17%)	14 (20%)

Table 3 displays the age and gender composition of the monthly fatal overdose population. The overall age distribution has remained stable compared to 2021. The cumulative proportion of males has risen from 71% in 2021 to 73% in the first half of 2022. The cumulative age distribution for 2022 compared to 2021 shows 2 deaths under 18 in 2021 and 1 death in 2022, no change in the proportion of those aged 18–39, a 1% decrease in those aged 40–59, and a 2% increase in the proportion of those 60 and above.

Table 4 displays the reported race and ethnicity of confirmed and suspected fatal overdoses for whom race and ethnicity was reported in 2021 and 2022, compared to the 2020 census

population. Note that race and ethnicity are not usually reported until the drug death is confirmed. Race and ethnicity proportions in 2022 have remained stable compared to 2021. The white subpopulation is somewhat larger in proportion than other subpopulations compared to the 2020 census. Out of 327 for whom race was reported January through June 2022, 95% of the victims were identified as White, 3% as Black or African American, 1% as American Indian/Alaska Native, 1% as American Indian/Alaska Native-White, and <1%) as Hawaiian/Pacific Islander. This compares to 91% White in the U.S. Census total for Maine. Out of 320 for whom Hispanic ethnicity status was reported, 1% were identified as Hispanic. As mentioned earlier, these are “occurrent” rather than “resident” deaths, that is, these totals may include individuals who were not Maine residents.

Out of the 329 cases for which military background was reported in 2022, 28 (9%) were identified as having a military background. Prior overdose history was reported for 124 (38%) of the victims. Undomiciled or transient housing status was reported for 42 (13%) of the victims: 19 in Cumberland County, 10 in Penobscot County, 4 in York County, 2 in Androscoggin County, 2 in Aroostook County, 2 in Kennebec County, 1 in Franklin County, 1 in Somerset County, and one from out of state.

Table 5 reports some of the basic incident patterns for fatal overdoses. Both EMS and police responded to most (77%) fatal overdoses in both 2021 and the first half of 2022. Law enforcement was more likely to respond to a scene alone (17%) than EMS (5%) in 2021 and are more likely to respond (18%) than EMS (5%) in 2022. The overwhelming majority (95%) of drug overdoses were ruled as, or suspected of being, accidental manner of death.

Table 3: Decedent reported age and sex characteristics among suspected and confirmed fatal overdoses

	% 2020 Estimated Census Population	Jan–Dec 2021 Est. N=631	Jan–Jun 2022 Est. N=329	Jun 2022 Est. N=69
Males	49%	451 (71%)	240 (73%)	48 (70%)
Under 18	19%	2 (<1%)	1 (<1%)	1 (1%)
18–39	26%	247 (39%)	128 (39%)	27 (39%)
40–59	27%	316 (50%)	160 (49%)	34 (49%)
60+	29%	66 (10%)	40 (12%)	7 (10%)

Table 4: Decedent race and ethnicity among suspected and confirmed fatal overdoses*

	% 2020 Estimated Census Population: Race & Hispanic/Latinx Ethnicity	Jan–Dec 2021 Est. N = 627 Race [†] N = 621 Ethnicity	Jan–Jun 2022 Est. N = 327 Race N = 320 Ethnicity
White alone, non-Hispanic	91%	587 (94%)	311 (95%)
Black/African American alone, non-Hispanic	2%	22 (4%)	9 (3%)
American Indian- Alaska Native alone, non-Hispanic	1%	14 (2%)	3 (1%)
Other race and 2+ races combined, non-Hispanic	7%	7 (1%)	4 (1%)
Hispanic/Latinx alone or in combination	2%	10 (2%)	4 (1%)

*Race and ethnicity data are usually unavailable until drug deaths are confirmed.
 †Percentages may not total 100 due to rounding.

Table 5: Event characteristics among suspected and confirmed fatal overdoses

	Jan–Dec 2021 Est. N=631	Jan–Jun 2022 Est. N=329	Jun 2022 Est. N=69
First Responder			
EMS response alone	30 (5%)	16 (5%)	3 (4%)
Law enforcement alone	104 (16%)	59 (18%)	16 (23%)
EMS and law enforcement	485 (77%)	252 (77%)	50 (72%)
Private transport to Emerg. Dept.	7 (1%)	2 (<1%)	0 (0%)
Naloxone administration reported at the scene			
Bystander only administered	36 (6%)	20 (6%)	3 (4%)
Law enforcement only administered	22 (3%)	14 (4%)	5 (7%)
EMS only administered	84 (13%)	29 (9%)	6 (9%)
EMS and law enforcement administered	20 (3%)	6 (2%)	1 (1%)
EMS and bystander administered	15 (2%)	16 (5%)	1 (1%)
Law enforcement and bystander administered	5 (1%)	4 (1%)	0 (0%)
EMS, bystander, and law enforcement administered	2 (<1%)	4 (1%)	1 (1%)

During 2022, 29% of suspected and confirmed fatal overdose cases had naloxone administered at the scene by EMS, bystanders, or law enforcement. This rate is about the same as the 30% found in 2021.

Although most cases had bystanders present at the scene by the time first responders arrived, the details about who was present at the time of the overdose were usually unclear. However, responding family and friends administered naloxone for 13% of the 2022 fatal overdoses, often in addition to EMS and/or law enforcement. The 2020 drug death report documented only 4% of victims had received bystander-administered naloxone, and in 2021 that percentage increased to only 9%.

Of the 268 suspected or confirmed drug death cases with EMS involvement during 2022, 138 (51%) victims were already deceased when EMS arrived. In the remaining 130 (49%) cases, resuscitation was attempted either at the scene or in the ambulance during transport to the emergency room. Of those 130 who were still alive when EMS arrived, 41 were transported, and 89 did not survive to be transported. Thus, out of 268 fatal cases with EMS response, only 41 (15%) remained alive long enough to be transported but died during transport or at the emergency room. This is likely due to the high number of cases with fentanyl as a cause of death. Fentanyl acts more quickly than other opioids and there is less time for bystanders to find an overdose victim alive and respond by administering naloxone and calling 911.

Table 6 displays the frequencies of the most prominent drug categories causing death among confirmed drug deaths. As expected, within the 271 cases in 2022, nonpharmaceutical fentanyl was the most frequent cause of death mentioned on the death certificate at 208 (77%), which is the same rate as in 2021 (77%) but 10 percentage points higher than the rate in 2020 (67%).

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 only 2% of 2022 deaths, compared to 3% in 2021 and 11% in 2020. Xylazine and nonpharmaceutical tramadol were

identified as co-intoxicants with fentanyl for the first time in 2021. Among 271 confirmed deaths in 2022, there were 17 cases (6%) with xylazine listed in addition to fentanyl as a cause of death, and 6 cases (2%) with tramadol listed along with fentanyl.

Stimulants continue to increase as a cause of death. Methamphetamine was cited as a cause of death in 35% of the fatal overdoses in 2022, an increase from 27% in 2021. Cocaine-involved fatalities constituted 28% of cases in 2022, an increase from 25% in 2021. Fentanyl is mentioned as a cause in combination with cocaine in 22% of 2022 cases, and in combination with methamphetamine in 29%.

Table 6: 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 2021 N=631		Jan-Jun 2022 N=271		Jun 2022 N=15	
Fentanyl or fentanyl analogs	489	(77%)	208	(77%)	13	(87%)
Heroin	22	(3%)	5	(2%)	0	(0%)
Cocaine	156	(25%)	75	(28%)	1	(7%)
Methamphetamine	172	(27%)	96	(35%)	5	(33%)
Pharmaceutical opioids**	130	(21%)	57	(21%)	1	(7%)
Fentanyl and heroin	20	(3%)	5	(2%)	0	(0%)
Fentanyl and cocaine	127	(20%)	59	(22%)	0	(0%)
Fentanyl and methamphetamine	133	(21%)	78	(29%)	5	(33%)
Fentanyl and xylazine	53	(8%)	17	(6%)	1	(7%)
Fentanyl and tramadol	24	(4%)	6	(2%)	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

Maine Substance Use Disorders Learning Community

The Co-Occurring Collaborative Serving Maine in partnership with and with funding from the Maine Department of Health and Human Services supports Prescribing Clinicians and their Teams to provide more evidence-based treatment to individuals and their families affected by Substance Use Disorders and Opioid Use Disorder (SUD/OD) to promote recovery and reduce drug overdose deaths. The aim is to increase the number of prescribing clinicians offering evidence-based treatments and the number of patients that they serve. The Statewide SUD Learning Community offers an array of education and support modalities for Prescribers (physicians, nurse practitioners, and physician assistants) and their entire Practice Team through an array of highly accomplished faculty consultants and with support from Muskie School of Public Policy e-learning team and AdCare Educational Institute Maine.

More information and all the available course offerings can be viewed on the project's website at <http://mesudlearningcommunity.org>

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 Management 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. 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 will be 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 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. 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 was delayed.

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. This 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.

Following a death, a toxicology report is needed to confirm that a case is an overdose, what substances are involved, and to determine cause and manner of death. Toxicology testing for Maine is done at a national reference laboratory located out-of-state. Prior to the pandemic, toxicology tests were customarily available to the Office of the Chief Medical Examiner within two to three weeks; in the pandemic period, turnaround times have extended to between eight and ten weeks. Emergent substances requiring out-of-scope toxicology testing have also caused additional delays. However, the national laboratory has informed the OCME that these issues are being addressed and turnaround is improving. We have resumed monthly reports. Any anticipated delays will be announced on mainedrugdata.org.

1 The Office of Attorney General supports ongoing research regarding 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 support University programs involving fatal and nonfatal overdoses surveillance and enable the collection of metrics included in this report. The conclusions in this report do not necessarily represent those of the U.S. CDC.