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MAINE MONTHLY OVERDOSE REPORT

For July 2022

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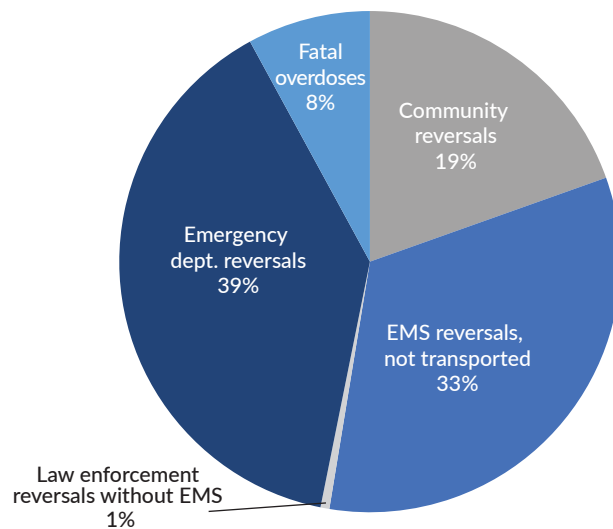
Overview

This report documents suspected and confirmed fatal and nonfatal drug overdoses in Maine during July 2022 as well as for the period January-July 2022 (Table 1). During July, the proportion of fatal overdoses averaged 7.9% of total overdoses. Monthly proportions of 2022 fatalities have fluctuated from a low of 5.3% in May 2022 to a high of 8.0% in April. During the first seven months of 2022, the average number of overdoses per month was approximately 836 (57 fatal and 779 nonfatal incidents). This compares to the monthly average for January–July 2021 of 727 (49 fatal and 678 nonfatal cases). The 2022 number of fatal overdoses January–July is 17.0% higher than during the same time in 2021. During the period January–July 2022, fatal overdoses comprised 6.8% of all overdoses, about the same level as during the first seven months of 2021, 6.7%.

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, June, and July (see Figure 2).

The total number of reported fatal and nonfatal overdoses January through July 2022, 5852, is displayed in Table 1 in the bottom row: 399 (6.8%) confirmed and suspected fatal overdoses, 2595 (44.3%) nonfatal emergency department visits, 1554 (26.6%) nonfatal EMS responses not transported to the emergency department, 1255 (21.5%) reported community overdose reversals, and 49 (0.8%) law enforcement reversals in incidents that did not include EMS. Figure 1 displays the relative proportions for these components during the month of July.

Figure 1: Fatal and nonfatal overdoses in July 2022*



* Percentages may not total 100 due to rounding.

Table 1: Composite overdose totals by month, calendar months January 2021–July 2022, with updated community reversal and law enforcement totals for January–July 2022

	Nonfatal				Total nonfatal overdoses	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			
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	178	1	681	44	725
February 2022	333	185	153	4	675	49	724
March 2022	457	201	202	9	869	66	935
April 2022	290	177	189	7	663	58	721
May 2022	402	248	186	12	848	47	895
June 2022	479	250	177	11	917	66	983
July 2022	338	287	170	5	800	69	869
2022 YTD total	2595 (44.3%)	1554 (26.6%)	1255 (21.4%)	49 (0.8%)	5453 (93.2%)	399 (6.8%)	5852 (100.0%)

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. These may fluctuate randomly, without reflecting any significant statistical trend.

The cumulative percentages of 2022 deaths for all counties except Cumberland and Penobscot (January–July) fall within 0–1% of the 2020 census distribution. Cumberland County is 3% lower than the 2020 census proportion in 2022 and Penobscot County is 4% higher. Comparing 2022 with 2021, all counties are within plus or minus 2% of 2021 proportions, except York, which is 5% higher in 2022.

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

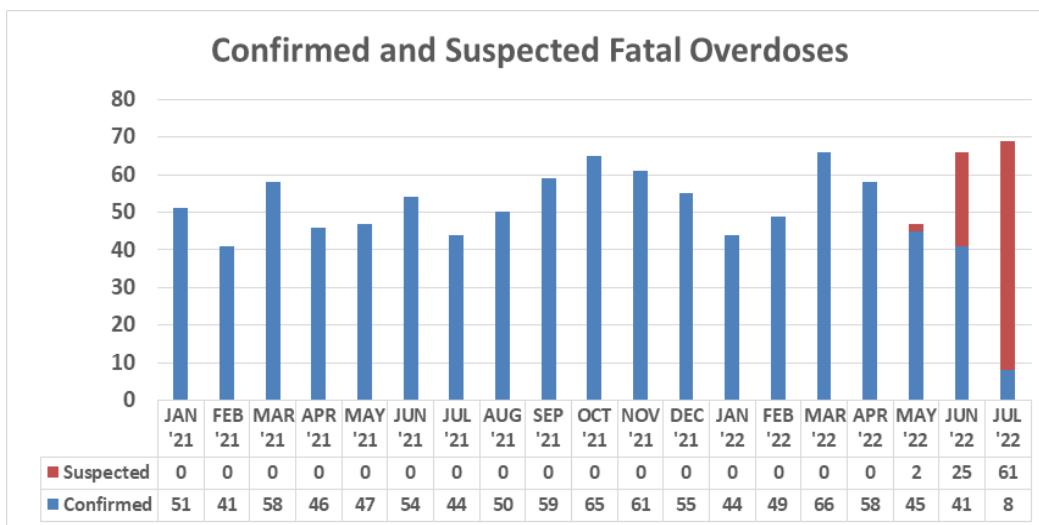


Table 2: County of death among suspected and confirmed fatal overdoses

	% 2020 estimated Census population	Jan–Dec 2021 Est. N=631	Jan–Jul 2022 Est. N=399	Jul 2022 Est. N=69
Androscoggin	8%	69 (11%)	37 (9%)	7 (10%)
Aroostook	5%	39 (6%)	25 (6%)	4 (6%)
Cumberland	22%	114 (18%)	75 (19%)	11 (16%)
Franklin	2%	8 (1%)	9 (2%)	0 (0%)
Hancock	4%	22 (3%)	10 (3%)	2 (3%)
Kennebec	9%	64 (10%)	33 (8%)	11 (16%)
Knox	3%	11 (2%)	9 (2%)	1 (1%)
Lincoln	3%	16 (3%)	6 (2%)	1 (1%)
Oxford	4%	28 (4%)	18 (5%)	2 (3%)
Penobscot	11%	106 (17%)	61 (15%)	9 (13%)
Piscataquis	1%	11 (2%)	4 (1%)	0 (0%)
Sagadahoc	3%	7 (1%)	6 (2%)	1 (1%)
Somerset	4%	26 (4%)	19 (5%)	5 (7%)
Waldo	3%	15 (2%)	14 (4%)	3 (4%)
Washington	2%	25 (4%)	9 (2%)	3 (4%)
York	16%	70 (11%)	64 (16%)	9 (13%)

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 72% in the first seven months 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 finalized until the full death certificate is entered into Vital Records. Race and ethnicity proportions in 2022 have remained relatively stable, within 1%–2%, compared to 2021. Out of 397 decedents for whom race was reported January through July 2022, 95% of the victims were identified as White, 3% as Black/ African American, and 1% as American Indian/Alaska Native. Out of 387 decedents for whom Hispanic ethnicity status was reported, 2% 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 but whose death occurred in Maine.

Out of the 399 cases for which military background was reported in 2022, 30 (8%) were identified as having a military background. Undomiciled or transient housing status was reported for 46 (12%) of the victims. The largest totals of undomiciled persons (January–July 2022) were found in Cumberland County (20, 43%), and Penobscot County (11, 24%), with under 5 each in York, Androscoggin, Aroostook, Kennebec, and Somerset Counties .

Table 5 reports some of the basic incident patterns for fatal overdoses. Both EMS and police responded to most fatal overdoses (75%) in the first seven months of 2022. Law enforcement was more likely to respond to a scene alone (19%) than EMS (5%). The overwhelming majority (95%) of drug overdoses were ruled as, or suspected of being, accidental manner of death. Of the 399 confirmed or suspected fatal overdoses in 2022, 145 (36%) had a history of prior overdose.

During 2022, 27% of suspected and confirmed fatal overdose cases had naloxone administered at the scene by EMS, bystanders, or law enforcement. This rate is slightly lower than in 2021 (30%).

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–Jul 2022 Est. N=399	Jul 2022 Est. N=69
Males	49%	451 (71%)	286 (72%)	46 (67%)
Under 18	19%	2 (<1%)	1 (<1%)	0 (0%)
18–39	26%	247 (39%)	165 (39%)	36 (52%)
40–59	27%	316 (50%)	186 (49%)	27 (39%)
60+	29%	66 (10%)	47 (12%)	6 (9%)

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–Jul 2022 Est. N = 397 Race N = 387 Ethnicity
White alone, non-Hispanic	91%	585 (93%)	376 (95%)
Black/African American alone, non-Hispanic	2%	21 (3%)	10 (3%)
American Indian/Alaska Native, non- Hispanic	1%	14 (2%)	4 (1%)
Other race and 2+ races combined, non-Hispanic	7%	7 (1%)	6 (1%)
Hispanic/Latinx alone or in combination	2%	10 (2%)	6 (2%)

*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–Jul 2022 Est. N=399	Jul 2022 Est. N=69
First Responder			
EMS response alone	30 (5%)	21 (5%)	5 (7%)
Law enforcement alone	104 (16%)	76 (19%)	16 (23%)
EMS and law enforcement	485 (77%)	299 (75%)	47 (68%)
Private transport to Emerg. Dept.	7 (1%)	3 (<1%)	1 (2%)
Naloxone administration reported at the scene	187 (30%)	107 (27%)	14 (20%)
Bystander only administered	36 (6%)	25 (6%)	5 (7%)
Law enforcement only administered	22 (3%)	15 (4%)	1 (2%)
EMS only administered	84 (13%)	31 (8%)	4 (6%)
EMS and law enforcement administered	20 (3%)	8 (2%)	2 (3%)
EMS and bystander administered	15 (2%)	18 (5%)	2 (3%)
Law enforcement and bystander administered	5 (1%)	4 (1%)	0 (0%)
EMS, bystander, and law enforcement administered	2 (<1%)	4 (1%)	0 (0%)
History of prior overdose	216 (34%)	145 (36%)	22 (32%)

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 13% 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.

Of the 320 suspected or confirmed drug death cases with EMS involvement during 2022, 164 (51%) victims were already deceased when EMS arrived. In the remaining 156 (49%) cases, resuscitation was attempted either at the scene or in the ambulance during transport to the emergency room. Of those 156 who were still alive when EMS arrived, 52 (33%) were transported, and 104 (67%) did not survive to be transported. Thus, out of 320 ultimately fatal cases with EMS response, only 52 (16%) 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 325 confirmed drug death cases in 2022, nonpharmaceutical fentanyl was the most frequent cause of death mentioned on the death certificate at 256 (79%).

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 325 confirmed deaths in 2022, there were 18 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 confirmed fatal overdoses in 2022, a substantial increase from 27% in 2021. Cocaine-involved fatalities constituted 26% of cases in 2022, a slight increase from 25% in 2021. Fentanyl is mentioned as a cause in combination with cocaine in 21% 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–Jul 2022 N=325	Jul 2022 N=8
Fentanyl or fentanyl analogs	489 (77%)	256 (79%)	8 (100%)
Heroin	22 (3%)	7 (2%)	0 (0%)
Cocaine	156 (25%)	85 (26%)	2 (25%)
Methamphetamine	172 (27%)	114 (35%)	3 (38%)
Pharmaceutical opioids**	130 (21%)	65 (20%)	0 (0%)
Fentanyl and heroin	20 (3%)	7 (2%)	0 (0%)
Fentanyl and cocaine	127 (20%)	68 (21%)	2 (25%)
Fentanyl and methamphetamine	133 (21%)	93 (29%)	3 (38%)
Fentanyl and xylazine	53 (8%)	18 (6%)	0 (0%)
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

TREAT ME

TREAT ME is a project of the Maine Chapter, American Academy of Pediatrics, the purpose of which is to offer, at no cost, quality education for primary pediatric providers focused on treatment of adolescent substance use disorder. This learning collaborative is organized by the Chapter, the Maine Medical Association Center for Quality Improvement, DayOne, and the Opioid Response Network in collaboration with OCFS, DHHS, and the Governor's Office of Policy Innovation and the Future. An advisory committee has met for the past year to provide input into the structure and content of the education. The education was be offered through both live events and asynchronous recordings. All asynchronous recordings will be completed by September 22, and the first will be available in October. The first monthly webinar will be presented on November 17, and two live half-day sessions will be offered in 2023.

Recruitment of participants has begun. The faculty for the course has been drawn primarily from the Adolescent Addiction program at Boston Children's Hospital and similar programs at Boston Medical Center and Yale. The program will complement educational sessions held during the past 12 months by OCFS and the SBIRT initiatives ongoing within DHHS. For more information and enrollment information, contact dee.kerry@maineaap.org.

TREAT ME funded by the Maine Health Access Foundation with support from the State of Maine and the Opioid Response Network.

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.