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Maine Monthly Overdose Report

For July 2021

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Overview

During July there were a total of 887 fatal and nonfatal overdoses, including 52 (6%) suspected and confirmed fatal overdoses in July and 835 (94%) nonfatal overdoses. The proportion of fatal overdoses declined slightly from 7% in June to 6% in July. Deduplicated data derived from multiple statewide sources were compiled to reach these totals. They include nonfatal overdose incidents reported by hospital emergency rooms (ED), nonfatal emergency medical service (EMS) responses without transport to the ED; overdose reversals reported by law enforcement; and overdose reversals reported by community members or agencies receiving state-distributed 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.

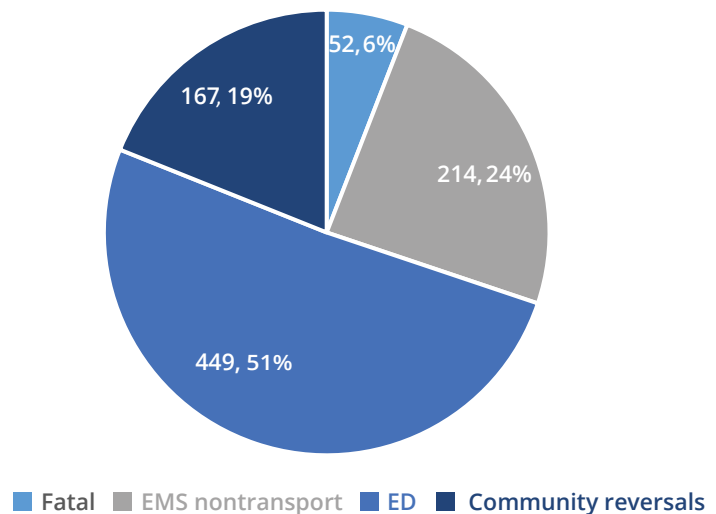
Composite Total of Fatal and Nonfatal Overdoses

During July 2021, there were an estimated 887 fatal and nonfatal drug overdoses statewide (Figure 1), of which 52 (6%) were suspected and confirmed fatal overdoses. The remaining 830 (94%) were reported nonfatal overdoses: 449 (51%) nonfatal emergency department visits; 214 (24%) EMS patients who survived and were not transported to the emergency room; and 167 (19%) reversals reported by community members to the Maine Naloxone Distribution Initiative.

There were also an unknown number of nonfatal overdoses for which 911 was not called and for which no community reversal report was provided.

The cumulative number of reported fatal and nonfatal overdoses for January through July, 5012, is displayed in Table 1 in the far right-hand column: 360 (7%) fatal overdoses; 2419 (48%) nonfatal emergency department visits; 1220 (24%) nonfatal EMS responses not transported to the emergency department; 978 (20%)

Figure 1: Fatal and nonfatal overdoses in July 2021



reported community reversals; and an estimated 35 (<1%) law enforcement reversals without EMS. As mentioned above, there were additional overdose incidents that were not reported, for which the total number is unknown. Additionally, some of the reported community reversals may overlap with EMS or law enforcement responses.

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

	Fatal	Nonfatal				Total overdoses
		Emergency department	EMS not transported to emergency dept.	Community reversals with naloxone	Law enforcement reversals with naloxone and w/out EMS— Estimated	
January	55	263	163	127	5	605
February	42	263	117	100	5	523
March	57	399	169	158	5	782
April	47	326	187	139	5	697
May	48	323	157	101	5	626
June	59	396	213	189	5	880
July	52	449	214	167	5	887
TOTAL (%)	360 (7%)	2419 (48%)	1220 (24%)	978 (20%)	35 (<1%)	5012 (100%)

Fatal Overdoses

The July 2021 total of 52 fatal drug overdoses consists of 10 confirmed drug deaths and 42 suspected drug deaths. Figure 2 shows the considerable monthly fluctuation of deaths since January 2020 months. Although the 2020 monthly average is 42, the range extends from 34 to 53. The average so far for 2021 is 51, and the range is 42 to 59.

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

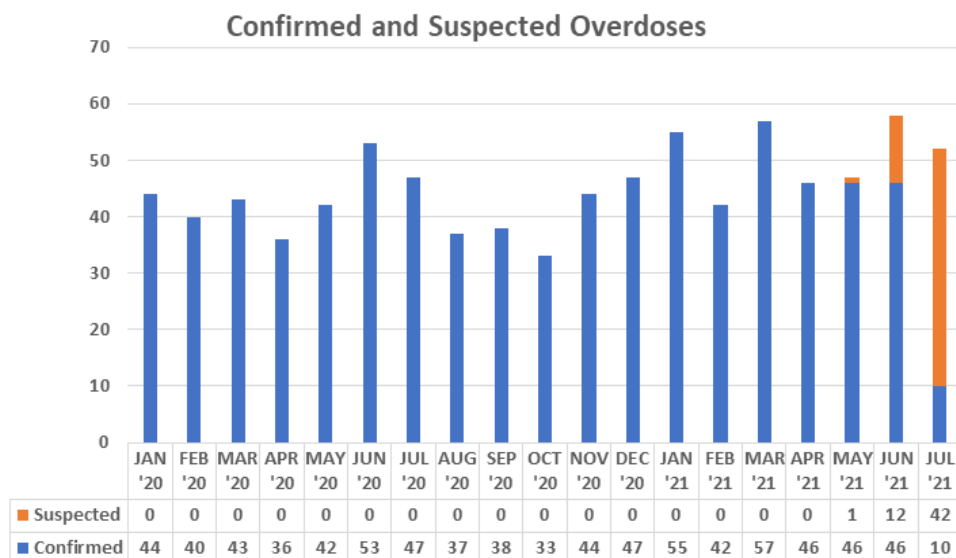


Table 2 shows the frequency distribution of deaths at the county level. The July 2021 totals can be compared either to the percentage of the census population on the far left or the percentage of all Maine drug deaths for 2019, 2020, and January–July 2021. Caution must be exercised with the small numbers for a single month. They may fluctuate randomly, without any significant statistical meaning.

The cumulative percentages of deaths for many counties for 2021 (January–July) fall within 0%–1% of the 2019 census distribution, including those of Franklin, Knox, Lincoln, and Piscataquis. Counties that are 2% or more higher than the census proportions include Androscoggin (+3%), Hancock (+2%), Kennebec (+2%), Oxford (+2%), Penobscot (+3%) and Waldo (+2%). Counties that are 2% or more lower than the census proportion include Cumberland (-9%), Somerset (-2%) and York (-3%).

The cumulative January–June 2021 percentages stayed the same from June to July for most counties. However, between June and July there was a significant increase for Penobscot County and a corresponding decrease for Cumberland County, as well as a slight increase for Kennebec, Piscataquis, Sagadahoc, Somerset, and York. Cumberland County, with 22% of the census population, had 26% of the drug deaths in 2019, 19% in 2020, 17% January through July 2021, and 12% in July alone. By contrast, Penobscot County, with 11% of the census population, had 14% of the drug deaths in 2019, 19% in 2020, 17% January through June 2021, and 25% of the July drug deaths.

Table 2: County of death among suspected and confirmed overdoses

County	Percentage 2019 Census population	Jan–Dec 2019 N=380	Jan–Dec 2020 N=504	Cumulative Jan–July 2021 Est. N=357	July 2021 Est. N=52
Androscoggin	8%	33 (9%)	52 (10%)	42 (12%)	2 (4%)
Aroostook	5%	14 (4%)	17 (3%)	16 (5%)	3 (6%)
Cumberland	22%	100 (26%)	97 (19%)	61 (17%)	6 (12%)
Franklin	2%	5 (1%)	8 (2%)	6 (2%)	1 (2%)
Hancock	4%	9 (2%)	13 (3%)	13 (4%)	1 (2%)
Kennebec	9%	42 (10%)	49 (10%)	41 (12%)	7 (14%)
Knox	3%	7 (2%)	16 (3%)	7 (2%)	2 (4%)
Lincoln	3%	11 (3%)	9 (2%)	13 (4%)	2 (4%)
Oxford	4%	9 (2%)	15 (3%)	15 (4%)	1 (2%)
Penobscot	11%	53 (14%)	94 (19%)	60 (17%)	13 (25%)
Piscataquis	1%	3 (1%)	10 (2%)	5 (1%)	2 (4%)
Sagadahoc	3%	8 (2%)	8 (2%)	4 (1%)	1 (2%)
Somerset	4%	16 (4%)	13 (3%)	8 (2%)	3 (3%)
Waldo	3%	3 (1%)	9 (2%)	9 (3%)	0 (0%)
Washington	2%	10 (3%)	20 (4%)	13 (4%)	0 (0%)
York	15%	57 (15%)	74 (15%)	44 (12%)	8 (15%)

Table 3 displays the age and gender composition of the monthly confirmed and suspected fatal overdose population. The cumulative proportion of males has stayed roughly the same since 2019. In the first six months of 2021, it was 217 (70%), which is slightly lower than 71% in 2020 and slightly higher than the 68% in 2019. In July it declined to 58%. The cumulative age distribution in January–July 2021 compared to 2019 has likewise stayed roughly similar. The percentage of those 18–39 decreased overall by 3%. The percentage of those 40–59 and those over 60 rose by 2% and 1% respectively.

During January through July 2021, out of 357 confirmed and suspected fatal overdoses for which race was reported, 327 (92%) of the victims were identified as White, 17 (5%) as Black or African American, and 10 (3%) as American Indian/Alaska Native. Out of 352 for which Hispanic ethnicity status was reported, 349 (99%) were reported as not Hispanic, and 3 (1%) were identified as Hispanic. Out of the 357 cases, 23 (6%) were identified as having a military background. Prior overdose history was reported for 119 (33%) of the victims. Transient housing status was reported for 29 (8%) of the victims.

Table 3: Decedent characteristics among suspected and confirmed overdoses

Characteristics	Jan–Dec 2019 N=380	Jan–Dec 2020 N=504	Cumulative Jan–July 2021 Est. N=357	July 2021 Est. N=52
Males	258 (68%)	357 (71%)	244 (68%)	30 (58%)
Under 18	0 (0%)	2 (<1%)	2 (1%)	0 (0%)
18–39	171 (45%)	213 (42%)	144 (40%)	22 (42%)
40–59	175 (46%)	235 (47%)	172 (48%)	25 (48%)
60+	33 (9%)	54 (11%)	39 (11%)	5 (10%)

Table 4 reports some of the basic incident patterns. Roughly similar to 2020, during January through July of 2021, both EMS and police responded to most fatal overdoses, 76%. Law enforcement was more likely to respond to a scene alone (19%) than EMS (5%). The overwhelming majority (96%) of drug overdoses were ruled as accidental manner of death. During January through July of this year, 38% of cases had naloxone administered at the scene or in the ambulance, whether by EMS, bystanders, or law enforcement. In 2020, that percentage was 33%. This increase may be due to the greater availability of police trained to administer it through programs like the Attorney General’s Naloxone Distribution Initiative. It may also be due to the greater availability in the community due to the Maine Naloxone Distribution Initiative. Although most cases had bystanders present at the scene when first responders arrived, the details about who may have been present at the time of the overdose were usually unclear. No one experiencing an overdose in July had a known naloxone prescription, but 7 did in 2020 and 4 for January through June this year.

Based on 289 suspected or confirmed drug death cases with EMS involvement during January to July, 136 (47%) victims were already deceased when EMS arrived. Of the remaining 153 (53%), resuscitation was attempted either at the scene or in the ambulance during transport to the emergency room. Of the 153 cases who were still alive when EMS arrived, 49 were transported,

and 104 did not survive to be transported. Thus, out of 289 fatal cases with EMS response, only 49 (17%) remained alive long enough to be transported but died during transport or at the emergency room.

Table 4: Event characteristics among suspected and confirmed fatal overdoses

Event characteristics	Jan–Dec 2020 N=504	Cumulative Jan–July 2021 Est. N=357	July 2021 Est. N=52
Manner of death (suspected or confirmed)			
Accident	457 (91%)	344 (96%)	51 (98%)
Suicide	33 (7%)	9 (3%)	1 (2%)
Undetermined	14 (3%)	4 (1%)	0 (0%)
First Responder			
EMS response alone	28 (6%)	16 (5%)	4 (8%)
Law enforcement alone	107 (21%)	67 (19%)	7 (14%)
EMS and law enforcement	365 (72%)	273 (77%)	40 (77%)
Naloxone Administration			
Naloxone administration at scene and/or (presumably) in ambulance during transport to emergency room	127 (33%)	135 (38%)	19 (37%)
Naloxone administration reported at the scene	83 (22%)	112 (31%)	14 (27%)
Bystander only administered	11 (2%)	22 (6%)	4 (8%)
Law enforcement only administered	8 (2%)	13 (4%)	0 (0%)
EMS only administered	55 (11%)	51 (14%)	6 (12%)
EMS and law enforcement administered	4 (1%)	16 (5%)	2 (4%)
EMS and bystander administered	8 (2%)	8 (2%)	1 (2%)
Law enforcement and bystander administered	0 (0%)	2 (<1%)	1 (2%)
EMS, bystander, and law enforcement administered	-	1 (<1%)	0 (0%)

Table 5 displays the frequencies of the most prominent drug categories causing death among confirmed drug deaths. As expected, nonpharmaceutical fentanyl was the most frequent cause of death so far for 2021 at 232 (77%), a full 10% higher than in 2020 (67%).

Fentanyl is nearly always found in combination with multiple other drugs. Illicit stimulants have been increasingly mentioned as co-intoxicants of fentanyl during the past several years. Heroin involvement, declining each year, was reported as a cause in 6% of 2021 deaths, compared to 11% last year. Methamphetamine was cited as a cause in 25% of the overdoses, which is 5% more than in 2020. Cocaine-involved fatalities January–July constituted 22% of cases, slightly less than the 23% in 2020. Fentanyl is found in combination with cocaine in 19% of 2021 cases, and in combination with methamphetamine in 19%. Xylazine and nonpharmaceutical tramadol were identified as co-intoxicants with fentanyl for the first time in 2021. Among 302 confirmed deaths caused by fentanyl January–July, the number and percent of cases with xylazine listed as an additional cause of death is 30 (10%) of confirmed overdose deaths, and 15 (5%) with tramadol listed as one of the causes of death.

Table 5: Key drug categories and combinations causing death among confirmed overdoses

Cause of death (alone or in combination with other drugs) <i>Sample size for completed cases only</i>	Jan–Dec 2020 N=504	Cumulative Jan–July 2021 N=302	July 2021 N=10***
Nonpharmaceutical opioids			
Fentanyl or fentanyl analogs	336 (67%)	232 (77%)	8 (80%)
Heroin	57 (11%)	17 (6%)	2 (20%)
Nonpharmaceutical stimulants			
Cocaine	118 (23%)	65 (22%)	3 (30%)
Methamphetamine	99 (20%)	74 (25%)	1 (10%)
Pharmaceutical opioids**	118 (23%)	69 (23%)	3 (30%)
Key combinations			
Fentanyl and heroin	47 (9%)	21 (6%)	2 (20%)
Fentanyl and cocaine	97 (19%)	56 (19%)	3 (30%)
Fentanyl and methamphetamine	70 (14%)	58 (19%)	1 (10%)
Fentanyl and xylazine	0 (0%)	30 (10%)	1 (10%)
Fentanyl and tramadol	0 (0%)	15 (5%)	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 no longer counted as a pharmaceutical opioid.

***Only 10 July cases out of 52 were completed at the time this report. The totals for each of these categories are too small to be statistically meaningful.

Highlight of the Month Regarding Substance Use Disorder Public Policy Response

Department of Corrections Efforts to Provide Medically Assisted Treatment to All Residents in DOC Custody

In 2019 the Department of Corrections (DOC) began its pilot to provide Medically Assisted Treatment (MAT) to all residents in their custody. Since implementing the MAT pilot, the program has provided MAT to over 1200 residents, with 780 of the residents being released with continuity of care plans in place following discharge. It is anticipated that 800 current residents could be receiving treatment by the end of the year, as the intent is to have MAT universally available to any adult with a Substance Use Disorder (SUD) diagnosis, regardless of the length of their sentence. That this effort grew during the global pandemic, at a time when many of the county jail programs were contracting, is a credit to Commissioner Liberty, Deputy Commissioner Thornell and the entire DOC team. They presented a breakout session on the program at the July 15 Governor's Opioid Summit.

There is currently a strong effort to get contracts in place to assist the jail medical/MAT providers. The State is furnishing Narcan to residents when they are released by the DOC, as well as by a number of jails. For example, Aroostook County Sheriff Gillen and his staff and medical/MAT team has provided MAT services to 151 residents in the jail in the previous 12 months (during the pandemic). They currently have 32 inmates on MAT.

Background Information about this Report

This report, funded jointly by the Maine Office of Attorney General and the Office of Behavioral Health¹, provides an overview of statistics regarding suspected and confirmed fatal and nonfatal drug overdoses in Maine during the month of March 2021. Data for the fatal overdoses were collected at the Office of Chief Medical Examiner and data regarding non-fatal 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. Monthly reports are designed to improve transparency and timeliness regarding Maine’s epidemic of substance use morbidity and mortality. Year-to-date numbers are updated with each monthly report, 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 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. Most cases are completed within one month.

By highlighting drug death 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 is 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. Maine Monthly Overdose 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 also provides funding to the State of Maine’s Office of Behavioral Health and Center for Disease Control, which support university programs involving fatal and non-fatal overdoses, and enable collection of data included in this report. The conclusions represented here do not necessarily represent those of the U.S. CDC.