

Maine Monthly Overdose Report

For August 2021

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Overview

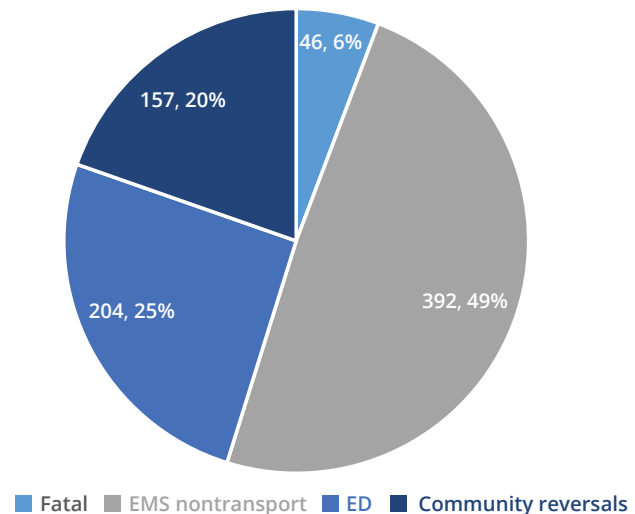
During August there were a total of 802 fatal and nonfatal overdoses in Maine, including 46 (6%) suspected and confirmed fatal and 756 (94%) nonfatal overdoses. The average proportion of fatal overdoses has been 7% January through August. Deduplicated data derived from multiple statewide sources were 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 in cases not also attended by EMS; and overdose reversals reported by community members, 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 August 2021, there were an estimated 802 fatal and nonfatal drug overdoses statewide (Figure 1), of which 48 (6%) were suspected or confirmed fatal overdoses. The remaining 756 (94%) were reported nonfatal overdoses: 392 (49%) emergency department visits; 204 (25%) EMS patients who were not transported to the emergency room; and 157 (20%) 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 reversal report was provided.

The cumulative number of reported fatal and nonfatal overdoses for January through August, 5809, is displayed in Table 1 in the far right-hand column: 399 (7%) fatal overdoses; 2811 (48%) nonfatal emergency department visits; 1424 (24%) nonfatal EMS responses not transported to the emergency department; 1138 (20%) reported community reversals; and

Figure 1: Fatal and nonfatal overdoses in August 2021



an estimated 37 (<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–August 2021

	Fatal	Nonfatal				Total overdoses
		Emergency department	EMS not transported to emergency dept.	Community reversals with naloxone	Law enforcement reversals with naloxone and without EMS—estimated	
January	55	263	163	127	5	613
February	42	263	117	100	5	527
March	59	399	169	158	5	790
April	46	326	187	139	5	703
May	48	323	157	101	5	634
June	55	396	213	189	5	858
July	48	449	214	167	4	882
August	46	392	204	157	3	802
TOTAL (%)	399 (7%)	2811 (48%)	1424 (25%)	1138 (20%)	37 (<1%)	5809 (100%)

Fatal Overdoses

The August 2021 total of 46 fatal drug overdoses consists of 13 confirmed and 33 suspected drug deaths. Figure 2 shows the considerable monthly fluctuation of deaths since January 2020. Although the 2020 monthly average is 42, the range extends from 34 to 53. The average so far for 2021 is 50, and the range is 42 to 59.

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

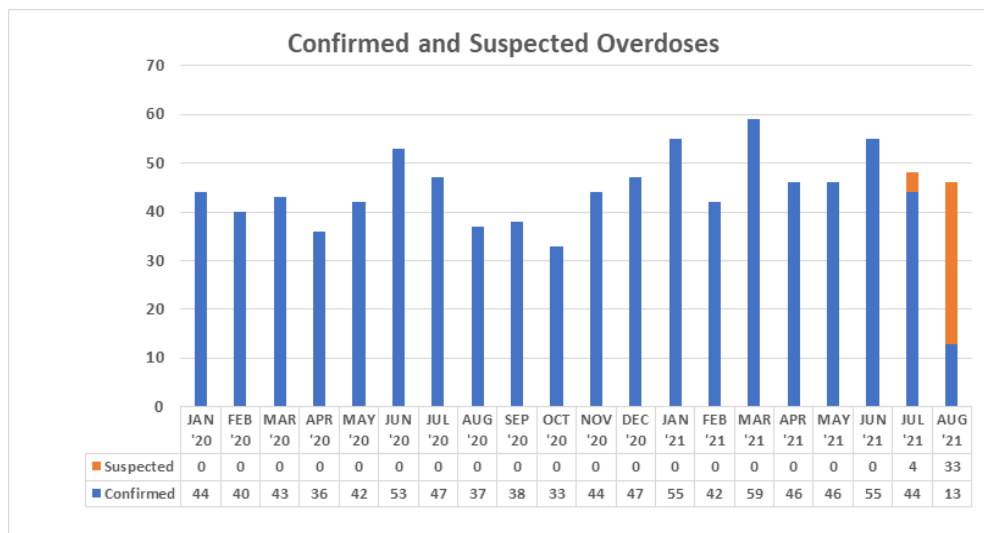


Table 2 shows the frequency distribution of deaths at the county level. The August 2021 totals can be compared either to the percentage of the census population on the far left or the percentage of all Maine drug deaths for 2019, 2020, and January–August 2021. Caution must be exercised with the small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

The cumulative percentages of deaths for many counties for 2021 (January–August) fall within plus or minus 0%–1% of the 2019 census distribution, including those of Aroostook, Franklin, Hancock, Knox, Lincoln, Oxford, Piscataquis, Somerset, and Waldo. Counties that are 2% or more higher than the census proportions include Androscoggin (+5%), Kennebec (+3%), Penobscot (+5%), and Washington (+2%). Counties that are 2% or more lower than the census proportion include Cumberland (-5%), Sagadahoc (-2%), and York (-3%).

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–August 2021 Est. N=399	August 2021 Est. N=46
Androscoggin	8%	33 (9%)	52 (10%)	50 (13%)	7 (15%)
Aroostook	5%	14 (4%)	17 (3%)	19 (5%)	3 (7%)
Cumberland	22%	100 (26%)	97 (19%)	68 (17%)	9 (20%)
Franklin	2%	5 (1%)	8 (2%)	7 (2%)	0 (0%)
Hancock	4%	9 (2%)	13 (3%)	15 (4%)	1 (2%)
Kennebec	9%	42 (10%)	49 (10%)	46 (12%)	7 (15%)
Knox	3%	7 (2%)	16 (3%)	7 (2%)	0 (0%)
Lincoln	3%	11 (3%)	9 (2%)	13 (3%)	1 (2%)
Oxford	4%	9 (2%)	15 (3%)	15 (4%)	0 (0%)
Penobscot	11%	53 (14%)	94 (19%)	64 (16%)	5 (11%)
Piscataquis	1%	3 (1%)	10 (2%)	6 (2%)	1 (2%)
Sagadahoc	3%	8 (2%)	8 (2%)	4 (1%)	0 (0%)
Somerset	4%	16 (4%)	13 (3%)	11 (3%)	3 (7%)
Waldo	3%	3 (1%)	9 (2%)	10 (3%)	1 (2%)
Washington	2%	10 (3%)	20 (4%)	17 (4%)	4 (9%)
York	15%	57 (15%)	74 (15%)	47 (12%)	4 (9%)

Table 3 displays the age and gender composition of the monthly fatal overdose population. The cumulative proportion of males has stayed roughly the same since 2019. In the first eight months of 2021, it was 273 (68%), which is slightly lower than 71% in 2020 and the same as the 68% in 2019. The cumulative age distribution January–August 2021 compared to 2020 and 2019 shows increasingly more decedents in older categories. The percentage of those 18–39 decreased overall by 5%. The percentage of those 40–59 and those over 60 rose by 2% and 3% respectively.

During January through August 2021, out of 397 confirmed and suspected fatal overdoses for which race was reported, 371 (93%) of the victims were identified as White, 17 (4%) as Black or African American, and 9 (2%) as American Indian/Alaska Native. Out of 393 for whom Hispanic ethnicity status was reported, 391 (99%) were reported as not Hispanic, and 2 (1%) were identified as Hispanic. Out of the 393 cases, 27 (7%) were identified as having a military background. Prior overdose history was reported for 138 (35%) of the victims. Transient housing status was reported for 31 (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-August 2021 Est. N=399	August 2021 Est. N=46
Males	258 (68%)	357 (71%)	273 (68%)	31 (67%)
Under 18	0 (0%)	2 (<1%)	1 (<1%)	0 (0%)
18-39	171 (45%)	213 (42%)	160 (40%)	18 (39%)
40-59	175 (46%)	235 (47%)	192 (48%)	21 (46%)
60+	33 (9%)	54 (11%)	46 (12%)	7 (15%)

Table 4 reports some of the basic incident patterns. Roughly similar to 2020, during January through August of 2021, both EMS and police responded to most fatal overdoses, 77%. Law enforcement was more likely to respond to a scene alone (19%) than EMS (4%). The overwhelming majority (95%) of drug overdoses were ruled as accidental manner of death.

During January through August of this year, 39% of cases had naloxone administered at the scene or in the ambulance, whether by EMS, bystanders, or law enforcement. This 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. However, bystanders, including family and friends, administered naloxone in 10% of the fatal overdoses, often in addition to EMS and/or law enforcement.

Based on 321 suspected or confirmed drug death cases with EMS involvement during January to August, 150 (47%) victims were already deceased when EMS arrived. In the remaining 171 (53%), resuscitation was attempted either at the scene or in the ambulance during transport to the emergency room. Of the 171 cases who were still alive when EMS arrived, 53 were transported, and 118 did not survive to be transported. Thus, out of 321 fatal cases with EMS response, only 53 (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–August 2021 Est. N=399	August 2021 Est. N=46
Manner of death (suspected or confirmed)			
Accident	457 (91%)	381 (95%)	40 (91%)
Suicide	33 (7%)	13 (3%)	6 (9%)
Undetermined	14 (3%)	5 (1%)	0 (0%)
First Responder			
EMS response alone	28 (6%)	17 (4%)	3 (7%)
Law enforcement alone	107 (21%)	75 (19%)	8 (17%)
EMS and law enforcement	365 (72%)	306 (77%)	35 (76%)
Naloxone Administration			
Naloxone administration at scene and/or (presumably) in ambulance during transport to emergency room	127 (33%)	154 (39%)	20 (43%)
Naloxone administration reported at the scene	83 (22%)	127 (32%)	16 (35%)
Bystander only administered	11 (2%)	23 (6%)	1 (2%)
Law enforcement only administered	8 (2%)	16 (4%)	3 (7%)
EMS only administered	55 (11%)	58 (15%)	8 (17%)
EMS and law enforcement administered	4 (1%)	15 (4%)	0 (0%)
EMS and bystander administered	8 (2%)	13 (3%)	4 (9%)
Law enforcement and bystander administered	0 (0%)	2 (<1%)	0 (0%)
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 mentioned on the death certificate so far for 2021 at 240 (75%), a 8% 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 5% 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–August constituted 22% of cases, slightly less than the 23% in 2020. Fentanyl is mentioned as a cause in combination with cocaine in 18% 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 399 confirmed deaths January–August, the number and percent of cases with xylazine listed as an additional cause in fentanyl deaths is 30 (10%) of confirmed overdose deaths, and 15 (5%) with tramadol.

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–August 2021 N=319	August 2021 N=13
Nonpharmaceutical opioids			
Fentanyl or fentanyl analogs	336 (67%)	240 (75%)	7 (5%)
Heroin	57 (11%)	17 (5%)	0 (0%)
Nonpharmaceutical stimulants			
Cocaine	118 (23%)	70 (22%)	4 (31%)
Methamphetamine	99 (20%)	79 (25%)	0 (0%)
Pharmaceutical opioids**	118 (23%)	75 (24%)	2 (15%)
Key combinations			
Fentanyl and heroin	47 (9%)	16 (5%)	0 (0%)
Fentanyl and cocaine	97 (19%)	59 (18%)	2 (15%)
Fentanyl and methamphetamine	70 (14%)	61 (19%)	1 (8%)
Fentanyl and xylazine	0 (0%)	31 (10%)	1 (8%)
Fentanyl and tramadol	0 (0%)	16 (5%)	1 (8%)

**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.

Highlight of the Month Regarding Substance Use Disorder Public Policy Response

At the beginning of September, the Maine Office of Behavioral Health in partnership with the University of Maine launched a new website to guide users in the process of obtaining naloxone (Narcan®) in the state of Maine: <https://getmainenalozone.org/>. The website highlights pathways for individuals, organizations, businesses, and emergency responders to obtain naloxone to have on hand in case of an emergency or to obtain for the purpose of community redistribution. It also contains information regarding how to respond to an overdose emergency, frequently asked questions about naloxone, and links to the OD-ME mobile application for overdose emergency response, which was developed in 2019. In the future, an interactive GIS dashboard will provide guide users to the closest location to obtain naloxone.

This website is part of the broader mission of the Maine Naloxone Distribution Initiative to get naloxone (Narcan®) into the hands of individuals that have the greatest chance of responding to an overdose emergency event. From the start of distribution in July of 2019 through July of 2021, the Maine Naloxone Distribution Initiative has distributed nearly 101,000 doses of naloxone into the community and has reported 2,285 opioid overdose reversals. The [Get Maine Naloxone](#) website will expand naloxone access in Maine and allow users to quickly obtain initial or refill doses of this lifesaving overdose reversal medication.

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.