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## Maine Monthly Overdose Report for October 2021

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# MAINE MONTHLY OVERDOSE REPORT

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For October 2021

Marcella H. Sorg  
Abby Leidenfrost  
Margaret Chase Smith Policy Center  
University of Maine

Note: The timing of this report has been substantially delayed during the last several months due to pandemic-related issues. The toxicology reports are currently returning to the Office of Chief Medical Examiner (OCME) in as much as 6-8 weeks following death; this is 3 to 4 times longer than the prepandemic turnaround time. Toxicology testing is done at a national reference laboratory out of state, and they have informed the OCME that these issues are being addressed but will likely continue for the near future. The toxicology report is needed to confirm that a case is an overdose, what substances are involved, and determine cause and manner of death. Rather than wait for the completion of the majority of cases, as we have been doing, we have decided to release this report more quickly using “suspected” overdose totals, even though only a minority of prior month’s cases will be complete. This means that, beginning with the October report, information on the cause and manner of death for October cases will be delayed.

## Overview

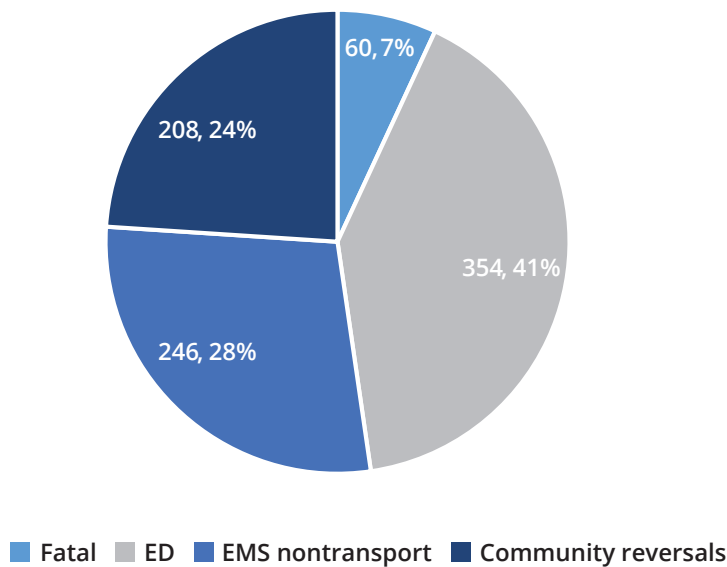
During October there were a total of 870 fatal and nonfatal overdoses, including 60 (7%) confirmed and suspected fatal overdoses and 810 (93%) nonfatal overdoses. The proportion of fatal to nonfatal overdoses has decreased from 9% to 7% between January and October. Deduplicated data derived from multiple statewide sources were compiled to reach these totals. They include nonfatal overdose incidents reported by hospital emergency rooms (ED), 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 for October

During October 2021, there were an estimated 870 fatal and nonfatal drug overdoses statewide (Figure 1), of which 60 (7%) were confirmed or suspected fatal overdoses. The remaining 810 (93%) were reported nonfatal overdoses: 354 (41%) emergency department visits; 246 (28%) EMS patients who were not transported to the emergency room; and 208 (24%) reversals reported by community members to the Maine Naloxone Distribution Initiative. There were also an additional 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 October, 7847, is displayed in Table 1 in the bottom row: 515 (7%) fatal overdoses; 3674 (47%) nonfatal emergency department visits; 1967 (25%) nonfatal EMS responses not transported to the emergency department; 1681 (21%) reported community reversals; and an estimated 10 (<1%) law enforcement reversals in cases that did not include EMS. Note that the small total for law enforcement reflects the fact that nearly all nonfatal cases include EMS. The law enforcement total does not reflect the many nonfatal cases in which law enforcement administered naloxone prior to EMS arrival.

**Figure 1: Fatal and nonfatal overdoses in October 2021**



As mentioned earlier, there were undoubtedly additional nonfatal overdose incidents that were not reported, for which the total number is unknown. Additionally, an unknown number of the reported community reversals may overlap with nonfatal EMS or law enforcement responses. The deaths, nonfatal emergency department visits, and nonfatal and non-transported EMS responses have been deduplicated.

The month of October included the greatest number of fatal and overdoses in 2021, but the increase has not been steady or consistent. Nonfatal overdoses for October are

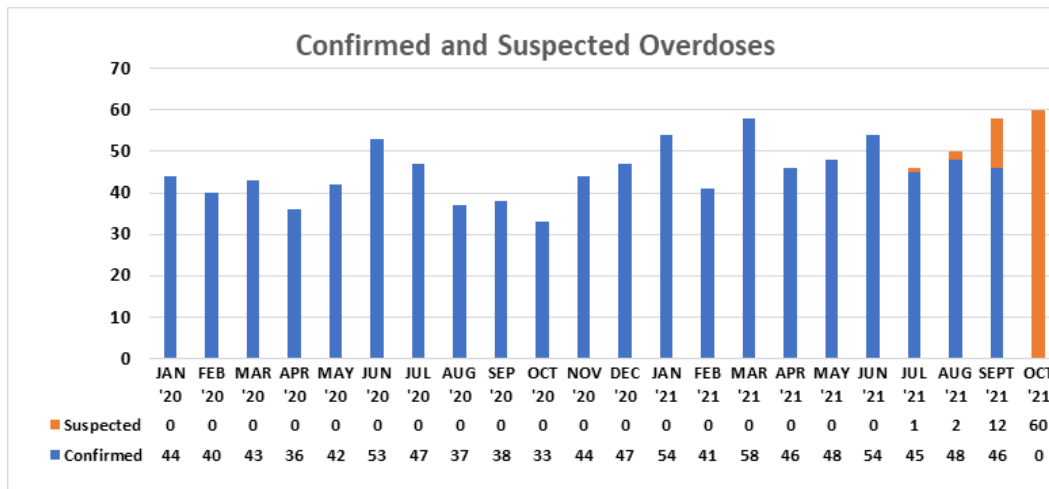
down slightly from September, but still greater than at the beginning of the year. The total fatal overdoses have fluctuated up and down, ranging from lows of 41 in February and 46 in April and July to highs of 58 in September and 60 in October. As can be seen in Table 1, the total emergency department visits fluctuated as well, from a low of 263 in January and 265 in February to highs of 465 in July and 454 in September, then dropping substantially in October to 354. The total EMS

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

Month	Fatal	Nonfatal				Total overdoses
		Emergency department	EMS not transported to emergency dept.	Community reversals with naloxone	Law enforcement reversals with naloxone and without EMS <sup>1</sup>	
January	54	263	164	127	0	608
February	41	265	118	100	0	524
March	58	324	172	156	2	712
April	46	401	190	136	0	773
May	48	325	163	100	1	637
June	54	404	223	189	0	870
July	46	465	225	167	0	903
August	50	419	232	222	3	926
September	58	454	234	276	2	1024
October	60	354	246	208	2	870
TOTAL (%)	515 (7%)	3674 (47%)	1967 (25%)	1681 (21%)	10 (<1%)	7847 (100%)

<sup>1</sup> The totals in this column have been recently changed as a result of a methodology correction.

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



responses in which the patient declined transport to the emergency department has fluctuated fairly widely from lows of 118 in February and 163 in May to highs of 234 in September and 246 in October. The number of community-reported reversals has ranged from lows of 100 in both February and May to highs of 222 in August and 276 in September. The combined total of nonfatal overdoses has ranged from lows of 483 in February and 554 in January to highs of 876 in August and 966 in September.

### Fatal Overdoses

The October 2021 total of 60 fatal drug overdoses consists of 0 confirmed drug deaths and 60 suspected drug deaths. Figure 2 shows the considerable monthly fluctuation of monthly death totals since January 2020 at the start of the pandemic. Although the 2020 monthly average is 42, the range extends from 33 to 53. The average so far for 2021 is 51, and the range is 41 to 60.

Table 2 shows the frequency distribution of deaths at the county level. The October 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–October 2021. Caution must be exercised viewing single counties with the small numbers for a single month. They may fluctuate randomly, without reflecting any significant statistical trend.

The cumulative percentages of deaths for many counties for 2021 (January–October) fall within 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 (+4%), Kennebec (+3%), Penobscot (+4%), and Washington (+2%). Counties that are 2% or more lower than the census proportion include Cumberland (-3%), Sagadahoc (-2%), and York (-3%).

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. For January–October 2021, it was 360 (70%), which is slightly lower than 71% in 2020 and slightly higher than 68% in 2019. In October, it increased to 73%. The cumulative age distribution January–October 2021 compared to 2020 and 2019 shows increasingly more decedents in older categories. The percentage of those

**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-Oct 2021 Est. N=515	October 2021 Est. N=60
Androscoggin	8%	33 (9%)	52 (10%)	64 (12%)	10 (17%)
Aroostook	5%	14 (4%)	17 (3%)	25 (5%)	4 (7%)
Cumberland	22%	100 (26%)	97 (19%)	95 (19%)	13 (22%)
Franklin	2%	5 (1%)	8 (2%)	6 (1%)	0 (0%)
Hancock	4%	9 (2%)	13 (3%)	19 (4%)	2 (3%)
Kennebec	9%	42 (10%)	49 (10%)	56 (11%)	5 (8%)
Knox	3%	7 (2%)	16 (3%)	10 (2%)	0 (0%)
Lincoln	3%	11 (3%)	9 (2%)	15 (3%)	0 (0%)
Oxford	4%	9 (2%)	15 (3%)	20 (4%)	3 (5%)
Penobscot	11%	53 (14%)	94 (19%)	79 (15%)	11 (18%)
Piscataquis	1%	3 (1%)	10 (2%)	9 (2%)	0 (0%)
Sagadahoc	3%	8 (2%)	8 (2%)	6 (1%)	1 (2%)
Somerset	4%	16 (4%)	13 (3%)	18 (4%)	4 (7%)
Waldo	3%	3 (1%)	9 (2%)	14 (3%)	1 (2%)
Washington	2%	10 (3%)	20 (4%)	20 (4%)	0 (0%)
York	15%	57 (15%)	74 (15%)	59 (12%)	6 (10%)

**Table 3:** Decedent characteristics among suspected and confirmed overdoses

Characteristics	Jan-Dec 2019 N=380	Jan-Dec 2020 N=504	Cumulative Jan-Oct 2021 Est. N=515	October 2021 Est. N=60
Males	258 (68%)	357 (71%)	360 (70%)	44 (73%)
Under 18	0 (0%)	2 (<1%)	1 (<1%)	0 (0%)
18-39	171 (45%)	213 (42%)	208 (40%)	26 (43%)
40-59	175 (46%)	235 (47%)	251 (49%)	30 (50%)
60+	33 (9%)	54 (11%)	55 (11%)	4 (7%)

18-39 decreased overall by 5%. The percentage of those 40-59 and those over 60 rose by 3% and 2%, respectively.

During January through October 2021, out of 515 confirmed and suspected fatal overdoses for which race was reported, 478 (93%) of the victims were identified as White, 19 (4%) as Black or African American, and 11 (2%) as American Indian/Alaska Native. Out of 506 for whom Hispanic ethnicity status was reported, 500 (97%) were reported as not Hispanic, and 6 (1%) were identified as Hispanic. Out of the 515 cases for which military background was reported, 33 (6%) were identified as having a military background. Prior overdose history was reported for 171 (33%) of the victims. Transient housing status was reported for 49 (10%) of the victims.

Table 4 reports some of the basic incident patterns for fatal overdoses. Roughly similar to 2020, during January through October of 2021, both EMS and police responded to most fatal overdoses, 77%. Law enforcement was more likely to respond to a scene alone (17%) than EMS

**Table 4:** Event characteristics among suspected and confirmed fatal overdoses

	Jan-Dec 2020 N=504	Cumulative Jan-Oct 2021 Est. N=515	October 2021 Est. N=60
<b>Manner of death (suspected or confirmed)</b>			
Accident	457 (91%)	490 (95%)	55 (92%)
Suicide	33 (7%)	19 (4%)	5 (8%)
Undetermined	14 (3%)	6 (1%)	0 (0%)
<b>First Responder</b>			
EMS response alone	28 (6%)	21 (4%)	1 (2%)
Law enforcement alone	107 (21%)	89 (17%)	11 (18%)
EMS and law enforcement	365 (72%)	398 (77%)	46 (77%)
<b>Naloxone Administration</b>			
Naloxone administration at scene and/or (presumably) in ambulance during transport to emergency room	127 (33%)	185 (36%)	16 (27%)
Naloxone administration reported at the scene	83 (22%)	156 (30%)	14 (23%)
Bystander only administered	11 (2%)	29 (6%)	2 (3%)
Law enforcement only administered	8 (2%)	17 (3%)	0 (0%)
EMS only administered	55 (11%)	70 (14%)	9 (15%)
EMS and law enforcement administered	4 (1%)	18 (4%)	1 (2%)
EMS and bystander administered	8 (2%)	16 (3%)	2 (3%)
Law enforcement and bystander administered	0 (0%)	5 (1%)	0 (0%)
EMS, bystander, and law enforcement administered	-	1 (<1%)	0 (0%)

(4%). The overwhelming majority (95%) of drug overdoses were ruled as, or suspected of being, accidental manner of death.

During January through October of this year, 36% of fatal overdose cases had naloxone administered at the scene or in the ambulance, whether by EMS, bystanders, or law enforcement. This is higher than the 33% reported as administered by EMS, bystanders, or law enforcement at the scene in 2020, and considerably higher than the 28% found in the toxicology reports for 2020 fatal overdose victims.<sup>1</sup> 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 by the time 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 for 11% of the fatal overdoses, often in addition to EMS and/or law enforcement. The 2020 drug death report documents only 4% of victims receiving bystander-administered naloxone.

Based on 419 suspected or confirmed drug death cases with EMS involvement during January to October, 200 (48%) victims were already deceased when EMS arrived. In the remaining 219 (52%) cases, resuscitation was attempted either at the scene or in the ambulance during transport to the emergency room. Of the 219 cases who were still alive when EMS arrived, 62 were transported, and 157 did not survive to be transported. Thus, out of 419 fatal cases with EMS response, only 62

1 Note that toxicology samples are taken at a slightly later time than the scene visit, and values for naloxone may be lower.

(15%) remained alive long enough to be transported but died during transport or at the emergency room.

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 336 (76%), which is 9% 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 only 4% 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 constituted 26% of cases, slightly more than the 23% in 2020. Fentanyl is mentioned as a cause in combination with cocaine in 21% 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 441 confirmed deaths January–October, the number and percent of cases with xylazine listed as an additional cause in fentanyl deaths is 41 (9%) of confirmed overdose deaths; tramadol is mentioned in 19 (4%) cases.

**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–Oct 2021 N=441	October 2021 N=0
<b>Nonpharmaceutical opioids</b>			
Fentanyl or fentanyl analogs	336 (67%)	336 (76%)	0 (0%)
Heroin	57 (11%)	19 (4%)	0 (0%)
<b>Nonpharmaceutical stimulants</b>			
Cocaine	118 (23%)	113 (26%)	0 (0%)
Methamphetamine	99 (20%)	111 (25%)	0 (0%)
Pharmaceutical opioids**	118 (23%)	93 (21%)	0 (0%)
<b>Key combinations</b>			
Fentanyl and heroin	47 (9%)	18 (4%)	0 (0%)
Fentanyl and cocaine	97 (19%)	92 (21%)	0 (0%)
Fentanyl and methamphetamine	70 (14%)	84 (19%)	0 (0%)
Fentanyl and xylazine	0 (0%)	41 (9%)	0 (0%)
Fentanyl and tramadol	0 (0%)	19 (4%)	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.

## **Highlight of the Month Regarding Substance Use Disorder Public Policy Response**

### **RECOVERY SUPPORT NAVIGATOR**

#### **Washington County**

The New England Regional Judicial Opioid Initiative (NEJOI), a collaboration of the six state Supreme Court justices in the region, has awarded a one-year grant to support the hiring of a recovery support navigator to be available in the courts in Washington County to individuals who are before the courts with a substance use disorder. The navigator has been hired by the Aroostook Mental Health Center (AMHC) and began training on November 29. NEJOI is supporting one navigator in each of the New England states. In Maine, Washington County was chosen for the pilot because of its high incidence of fatal overdoses. The purpose of the grant is to add resources to the communities in New England hardest hit by SUD fatalities by providing a navigator to help connect individuals with community resources. The partnership will consist of the local court, a treatment provider (AMHC) and the National Center for State Courts.

The duties and responsibilities of the navigator include the following:

- Provide nonclinical services to engage, educate, and support people with substance use disorders for individuals who are court involved
- Assist with identifying and accessing treatment and recovery resources in the community, including but not limited to prescribers for medications for opioid use disorder and psychiatric medications
- Help individuals develop and clarify personal goals and objectives around treatment and recovery from SUD
- Assist with health insurance enrollment and adjustments
- Serve as a point of contact for care coordination with the client, justice agencies, medical and behavioral health providers, and other agencies and supports as indicated
- Provide overdose prevention and access to naloxone distribution
- Connect potential eligible individuals to housing and transportation resources, as appropriate

An advisory committee is being established to advise the project. As the pilot project concludes in a year, Wayne State University will conduct an evaluation for the NERJOI.



## 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 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](http://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 is being extended to two or more months.*

*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.*

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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 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.