

# MAINE 2nd QUARTER DRUG DEATH REPORT

## JANUARY – JUNE, 2018

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*This report, funded by the Maine Office of Attorney General, provides a summary of statistics regarding drug fatalities in Maine during January-June, 2018. Data for the report were collected at the Office of Chief Medical Examiner. A “drug death” is identified when one or more drugs are mentioned on the death certificate as a cause or significant contributing factor for the death.*

### Overview

Total fatalities due to drugs during the first and second quarter of 2018 number 180, slightly fewer than the total of 185 last year in the same period. The high number of fatal overdoses in Maine continues to be driven by non-pharmaceutical fentanyl and fentanyl analogs, 61% of deaths, whereas pharmaceutical opioids caused 26% of deaths. Compared to 2017 as a whole, the proportion of illicit (non-pharmaceutical) drug deaths has stayed the same, at 73%, while the proportion of pharmaceutical drugs has decreased from 61% to 57%. The 2018 deaths involving fentanyl and fentanyl analogs are less likely than in 2017 to involve other opioids or alcohol. As in previous years, quarterly totals do tend to fluctuate; there are generally slightly more deaths in the second and third quarters than in the first and fourth.

**Manners of death:** Of 180 deaths during the first and second quarter combined, 162 (90%) were accidental overdoses, 14 (8%) were suicides, and 4 (2%) undetermined manner.

#### **Overall patterns of note during the first two quarters:**

- Most (78%) drug deaths were caused by two or more drugs (includes alcohol). The average cause of death mentions 3 drugs. The proportion of deaths caused by only one drug was 21%, up slightly compared to 20% in 2017 as a whole.
- The vast majority of overdoses (84%) were caused by at least one opioid, including both pharmaceutical and illicit (non-pharmaceutical) opioid drugs, about the same as 2016 (84%) and 2017 (85%).
- Pharmaceutical opioid deaths constituted 26% of drug deaths, continuing a general trend downward from 33% in 2016 and 30% in 2017.
- Non-pharmaceutical fentanyl (and/or its analogs) caused 61% of deaths, alone or in combination with other drugs, continuing to trend upward from 52% in 2016, and 59% in 2017<sup>1</sup>.
- Compared to 2017 as a whole, deaths in the first two quarters of 2018 due to non-pharmaceutical fentanyl (and/or its analogs) were less likely to involve any other drugs (50% compared to 79% in 2017). Specifically, the 2018 fentanyl deaths were less likely to involve heroin (22% compared to 28% in 2017), pharmaceutical opioids (9% compared to 18% in

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<sup>1</sup> The 2017 annual report cited 58% due to opioid drugs, but this figure was later updated to 59%.

2017), alcohol (28% compared to 30% in 2017), benzodiazepines (17% compared to 18% in 2017), and cocaine (22% compared to 30% in 2017).

- Heroin caused 21% of 2018 deaths, alone or in combination with other drugs, proportionally less than 32% in 2016, and the same as 21% in 2017.
- Cocaine or crack caused 25% of deaths, alone or in combination with other drugs, continuing to increase compared to 16% in 2016 and 22% in 2017.
- Naloxone was present in the toxicology findings of 31% of opioid deaths, the same level as in 2017. (Cases with buprenorphine in the toxicology findings were excluded from this total.)

**Table 1. Demographic patterns:**

	<b>Total</b>	<b>Average Age</b>	<b>Age Range</b>	<b>Number and Percent Male</b>
<b>All drug deaths</b>	180	42	0-79	127 (71%)
<b>Accidents</b>	162	41	0-73	117 (72%)
<b>Suicides</b>	14	47	30-79	7 (50%)

**Table 2. Involvement of specific drug categories**

<b>Specific drug or drug category causing the death (alone or in combination with other drugs and/or alcohol)<sup>2</sup></b>	<b>Number</b>	<b>Percent of 180 drug deaths</b>
Deaths caused by two or more drugs	141	78%
Any pharmaceutical drug	102	57%
Any pharmaceutical opioid drug	47	26%
Any opioid (pharmaceutical or non-pharmaceutical) 47 (31%) of 152 opioid deaths had received Naloxone*	152	84%
Any illicitly manufactured drug (includes heroin/morphine, non-pharmaceutical fentanyl, fentanyl analogs, other illicitly-manufactured opioids, cocaine, and methamphetamine)	131	73%
Any non-pharmaceutical opioid drug (heroin/morphine, fentanyl, fentanyl analogs, U-47700, mitragynine).	118	66%
Heroin/morphine and/or fentanyl or fentanyl analogs	117	65%
Fentanyl and/or fentanyl analogs	109	61%
Heroin/morphine (known pharmaceutical morphine removed)	37	21%
Any benzodiazepine	39	22%
Cocaine	45	25%
Methamphetamine	10	6%

\*Excludes cases with buprenorphine in toxicology.

<sup>2</sup> Any cases with known pharmaceutical fentanyl or known pharmaceutical morphine are included in the pharmaceutical opioid totals rather than the illicit, non-pharmaceutical fentanyl or heroin totals.

## **Non-Pharmaceutical (“Illicit”) Fentanyl and/or Fentanyl Analog Deaths**

This category includes deaths caused by non-pharmaceutical (illicitly manufactured) fentanyl or fentanyl analogs. We removed all cases that involved known pharmaceutical fentanyl from these totals. There were 109 overdoses due to non-pharmaceutical fentanyl and/or fentanyl analogs in the first two quarters of 2018.

- 85 (78%) are male and 24 (22%) are female.
- The average age in non-pharmaceutical fentanyl/fentanyl analog deaths is 38 (age range 23-69).

*Table 3. Involvement of co-intoxicant drugs in non-pharmaceutical fentanyl deaths*

Specific co-intoxicants in addition to fentanyl and/or fentanyl analogs identified as a cause of death	Number	Percent of Fentanyl/Fentanyl Analog Deaths N=109
<b>FENTANYL and FENTANYL ANALOG COMBINATIONS</b>		
• Fentanyl (with or without fentanyl analogs)	101	93%
• Fentanyl analogs (with or without fentanyl)	37	34%
• Both non-pharmaceutical fentanyl and at least one fentanyl analog	29	27%
<b>CO-INTOXICANTS IDENTIFIED IN FENTANYL and/or FENTANYL ANALOG DEATHS</b>		
• One or more drugs (or alcohol) in addition to fentanyl and/or fentanyl analogs	89	82%
• One or more pharmaceutical opioids in addition to fentanyl and/or fentanyl analogs	10	9%
• Heroin/morphine in addition to fentanyl and/or fentanyl analogs	29	27%
• Alcohol in addition to fentanyl and/or fentanyl analogs	33	30%
• One or more benzodiazepines in addition to fentanyl and/or fentanyl analogs	19	17%
• Cocaine in addition to fentanyl and/or fentanyl analogs	33	30%

*Table 4. Fentanyl analogs identified as a cause of death January-June 2018*

Fentanyl Analog Identified	Total Number of Cases*	Percent of 37 Fentanyl Analog-Involved Deaths
Acetyl fentanyl	28	76%
Carfentanil	1	3%
Cyclopropyl fentanyl	2	5%
Furanyl fentanyl	2	5%
Methoxyacetyl fentanyl	3	8%
Para-fluorobutyl fentanyl	2	5%
Para-fluoroisobutyl fentanyl	1	3%

\*Some cases had more than one analog.

## Heroin/Morphine Deaths

Heroin/morphine deaths include any death in which the cause of death identifies “heroin” or “morphine.” We have removed all cases involving known pharmaceutical morphine, so the heroin/morphine deaths are all suspected heroin overdoses. In the first two quarters of 2018 there were 37 deaths due to (non-pharmaceutical) heroin/morphine alone or in combination with other drugs, 21% of all drug deaths. The proportion is the same than 2017 as a whole, when heroin deaths comprised 21% of all drug deaths. All of the first two quarters' heroin/morphine deaths had co-intoxicants mentioned.

## County Totals

This table provides totals for those counties with 10 or more deaths during the first three months of 2018. The reader is cautioned that, because the numbers for individual counties are relatively small, fluctuations may be due more to random chance than to actual changes in underlying epidemiological trends.

*Table 5. Total drug deaths statewide and by county for 2017 and projected<sup>3</sup> for 2018, compared to percent of Maine 2016 census population*

	<b>Percent of Maine Estimated Census Population 2016</b>	<b>2017 Total Drug Deaths 417<sup>4</sup></b>	<b>2018 Projected Number and Percent of Drug Deaths (Jan-Jun totals times two) Projected Total 358</b>
<b>Statewide</b>			
Androscoggin	8%	24 (6%)	40 (11%)
Cumberland	22%	109 (26%)	78 (22%)
Kennebec	9%	47 (11%)	42 (12%)
Penobscot	12%	65 (16%)	52 (15%)
York	15%	82 (20%)	52 (15%)

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<sup>3</sup> The reader is cautioned that the first quarter totals may not be a good indicator of the year as a whole, due to seasonal fluctuation.

<sup>4</sup> The reported total for 2017 was 418. This total was updated to 417.