



**ATTORNEY
GENERAL
DEPARTMENT
OF JUSTICE**

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ATTORNEY GENERAL**

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**OFFICE OF
CHIEF
MEDICAL
EXAMINER**

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Drug Deaths by Year

2011	201
2012	163
2013	198
2014	342
2015	444
2016	486
2017	490
2018	471

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Summary Of 2018 New Hampshire Drug Overdose Deaths

In 2018, OCME migrated data to a more robust case management software program. The enhanced search functionality of the new program enabled the identification of 24 additional drug overdose deaths not previously recorded for the years 2013 through 2017. Two of the 24 newly identified drug overdose deaths involved opiates/opioids and both occurred in 2014. Fifteen other deaths involved cocaine. The remaining deaths resulted from other drugs. Revised annual drug death statistics are shown in Table 1.

Year	Previous Total	Newly identified cases	Revised Total
2013	192	6	198
2014	332	10	342
2015	439	5	444
2016	485	1	486
2017	488	2	490

Table 1. Revised Annual Drug Deaths (2013-2017)

In 2018, 1833 deaths fell under the jurisdiction of Office of Chief Medical Examiner. Autopsies were performed on 576 (31%) of the decedents and the remaining 1257 decedents received external exams along with toxicology testing for the vast majority.

471 (26%) of all the 2018 deaths investigated by OCME were due to drug overdoses and are the subject of this review. Autopsies were performed on 211 (45%).

Of the 471 drug overdose deaths in NH, 435 of these deaths were accidents, 31 were suicides and 5 were undetermined as shown in Figure 1.

“Undetermined” is assigned when there is insufficient information to determine the manner of death. For drug deaths, this term is used when it is unclear if the death resulted from an intentional or an unintentional overdose. “Pending” is a temporary term that is amended to another manner of death after the toxicology report is received and reviewed by the pathologist.

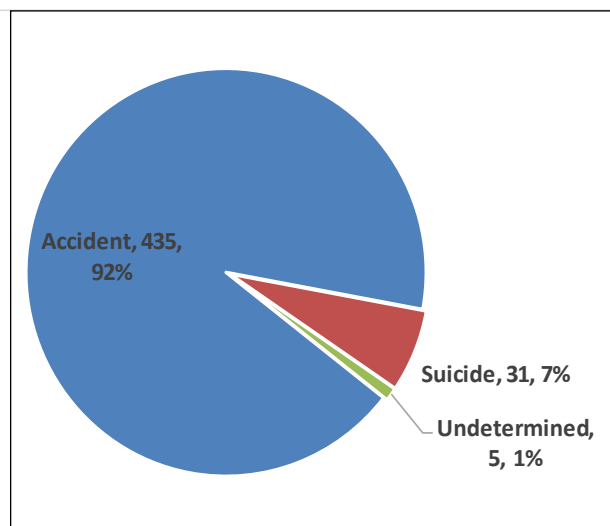


Figure 1. Drug Deaths by Manner



2018 Drug Summary

Drug Categories

Table 2 shows the number of drug deaths by manner of death for each drug category. Drug categories, defined below, are derived from the specific drug(s) determined to be the cause of death and listed on the death certificate. They do not represent all drugs detected by toxicology testing. The vast majority of drug deaths result from unintentional overdose of opiate/opioid drugs. Opiates are drugs derived naturally from the opium poppy plant (e.g. morphine, codeine) whereas opioids are drugs synthesized from opiates (e.g. heroin, hydrocodone, oxycodone, buprenorphine) or synthesized de novo (e.g. methadone, fentanyl). All exert their effects by binding to opioid receptors in the body. Fentanyl is available both as a prescription pain medication and as an illicit drug. Based on information obtained from death investigations, the vast majority of fentanyl deaths are caused by non-pharmaceutical fentanyl.

OPIATES/OPIOIDS DEATHS	Accident	Suicide	Undetermined	Total
Fentanyl (no other drugs)	202	0	0	202
Fentanyl and Other Drugs (excluding heroin)	180	0	1	181
Heroin (no other drugs)	2	0	0	2
Heroin and Other Drugs (excluding fentanyl)	0	0	0	0
Heroin and Fentanyl	3	0	0	3
Unknown Opioids	1	0	0	1
Other Opiates/Opioids	20	9	3	32
Total Deaths Caused By Opiates/Opioids	408	9	4	421
Other drugs	26	22	1	49
Unknown Drugs	1	0	0	1
Total Drug Deaths	435	31	5	471

Table 2. Number of Drug Deaths by Manner of Death and Drug Category

Drug Category Definitions

- **Fentanyl (no other drugs):** Fentanyl alone caused the death.
- **Fentanyl and Other Drugs (excluding heroin):** Fentanyl in combination with any other drugs, except heroin, caused the death.
- **Heroin (no other drugs):** Heroin alone caused the death.
- **Heroin and Other Drugs (excluding fentanyl):** Heroin in combination with any other drugs, except fentanyl, caused the death.
- **Heroin and Fentanyl:** Heroin and fentanyl, together or in combination with any other drugs, caused the death.
- **Unknown Opioids:** An opioid/opioids not further classified caused the death. This category may be used when a person overdoses and survives in the hospital for a period of time prior to death. Most routine hospital toxicology tests are qualitative screening tests that can detect the possible presence of opioids but cannot confirm nor quantitate the presence of a specific opioid. If the hospital admission specimens are discarded prior to the death then confirmatory toxicology testing cannot be performed.
- **Other Opiates/Opioids:** An opiate/opioid other than heroin or fentanyl (e.g. methadone, oxycodone, buprenorphine), alone or in combination with any other drugs, caused the death.
- **Other drugs:** Non opioid/opiate drugs caused the death.
- **Unknown Drugs:** An unknown drug or drugs caused the death. This category may be used when a person overdoses and survives in the hospital for a period of time prior to death. Hospital toxicology testing may not be performed or may not detect the drug(s) used. If the hospital admission specimens are discarded prior to the death then more comprehensive toxicology testing cannot be performed.



2018 Drug Summary

Illicit stimulants

Illicit stimulant drugs (e.g. cocaine, methamphetamine) are also included in the overdose statistics but deaths due to stimulants alone are rare and usually involve extremely high levels or coexisting heart disease or other significant natural disease.

Tables 3 and 4 show the number of drug deaths for the years 2012 through 2018 for cocaine and methamphetamine, respectively. Though the number of deaths has increased each year for both drugs, most fatal overdoses also include an opioid.

Year	Total # of Deaths Involving Cocaine	Cocaine (no other drugs)	Cocaine and Opioid(s)	Cocaine and other drug(s) (non-opioids)
2018	65	5	57	3
2017	51	5	44	2
2016	66	14	50	2
2015	48	5	43	0
2014	42	5	35	2
2013	34	1	24	9
2012	20	4	14	2

Table 3. Cocaine Related Deaths 2012-2018

Year	Total # of Deaths Involving Methamphetamine	Methamphetamine (no other drugs)	Methamphetamine and Opioid(s)	Methamphetamine and other drug(s) (non-opioids)
2018	22	4	17	1
2017	14	2	11	1
2016	13	4	8	1
2015	2	1	1	0
2014	3	0	3	0
2013	2	1	1	0
2012	1	0	1	0

Table 4. Methamphetamine Related Deaths 2012-2018

Fentanyl Analogues

Fentanyl analogues are synthetic drugs with a chemical structure similar to fentanyl. They can be more or less potent than fentanyl. Fentanyl analogues detected in drug overdose deaths in 2018 were acetyl fentanyl and para-fluoroisobutyrylfentanyl.

Alcohol

Alcohol is a drug and is included in the overdose statistics. In 2018, acute intoxication by alcohol alone caused 2 deaths and alcohol contributed to 52 other overdose deaths.



2018 Drug Summary

Drug Deaths by Manner, Sex and Age

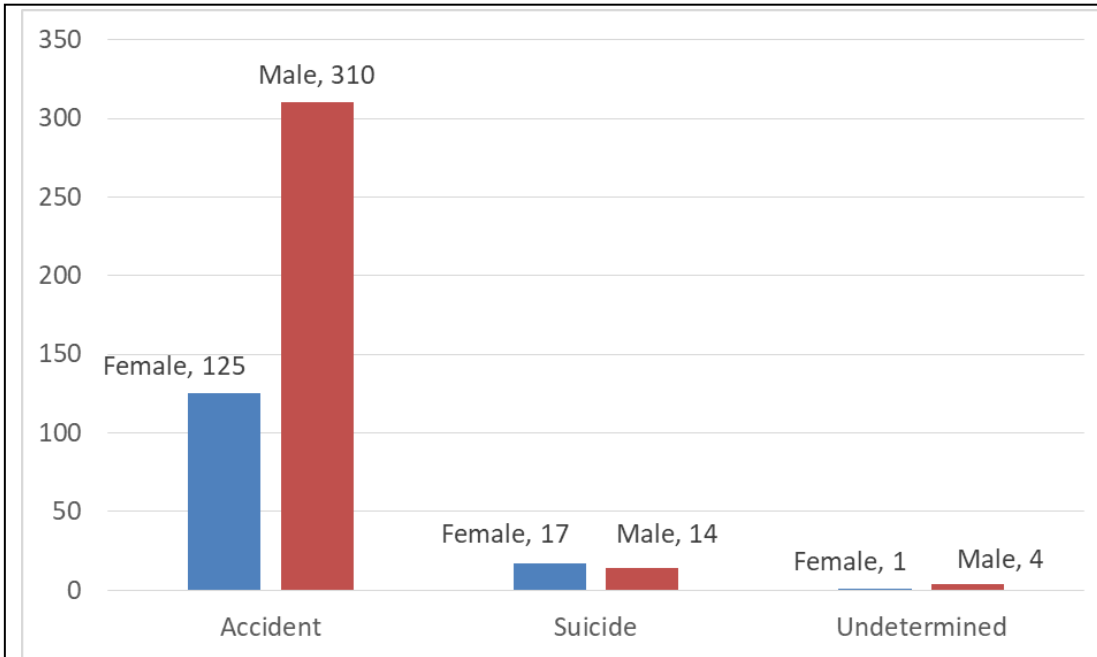


Figure 2 shows the number of drug deaths by manner of death and sex of the decedent. For accidental overdose deaths, males far outnumber females whereas there were slightly more female suicidal overdose deaths.

Figure 2. Number of drug deaths by Manner of Death and Sex

Figure 3 shows the number of drug deaths by age group for accidents, suicides and undetermined deaths. The highest number of accidental overdose deaths occurred in 30 to 39 year olds whereas most suicidal overdoses occurred in 50 to 59 year olds. Only five undetermined overdose deaths occurred in 2018. Not charted is the undetermined overdose death of a 20 month old child.

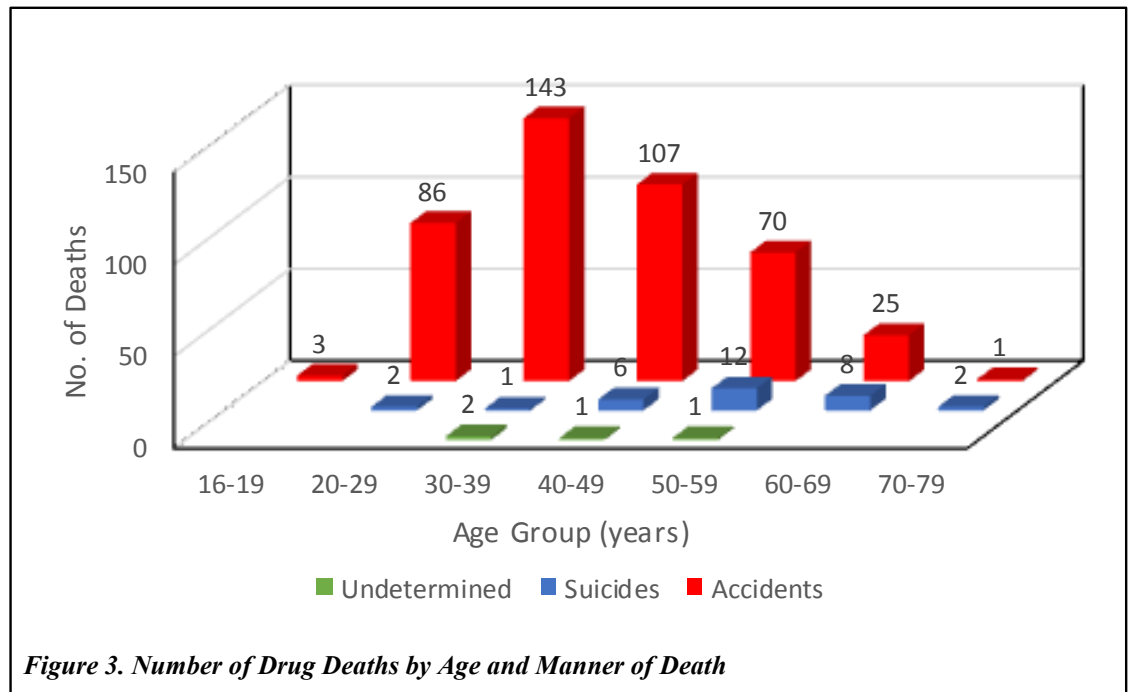


Figure 3. Number of Drug Deaths by Age and Manner of Death



2018 Drug Summary

Drug Deaths by Month

Figure 4 shows the number of drug deaths occurring in each month of the year. The greatest number of drug deaths occurred in July and the lowest in June.

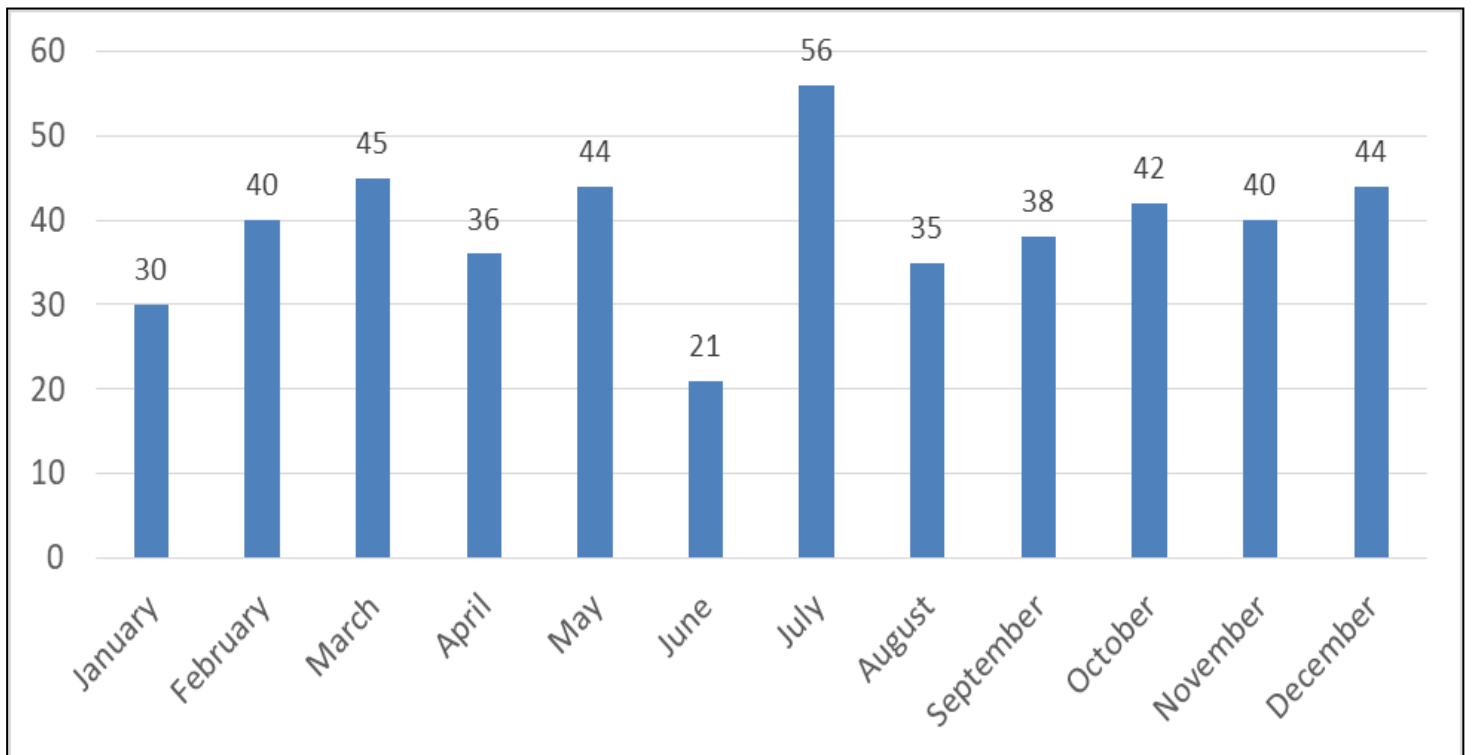


Figure 4. Number of Drug Deaths by Month



2018 Drug Summary

Figure 5 shows the number of fatal drug overdoses by county. "Overdose" refers to the county where drug use occurred. The total number of fatal drug overdoses by county does not match the total number of drug deaths in 2018 because some overdoses occurred out of state but death occurred in a New Hampshire hospital. Most drug overdoses (and deaths) occurred in the more populated counties of Hillsborough and Rockingham.

2018 Number of Fatal Overdoses by County

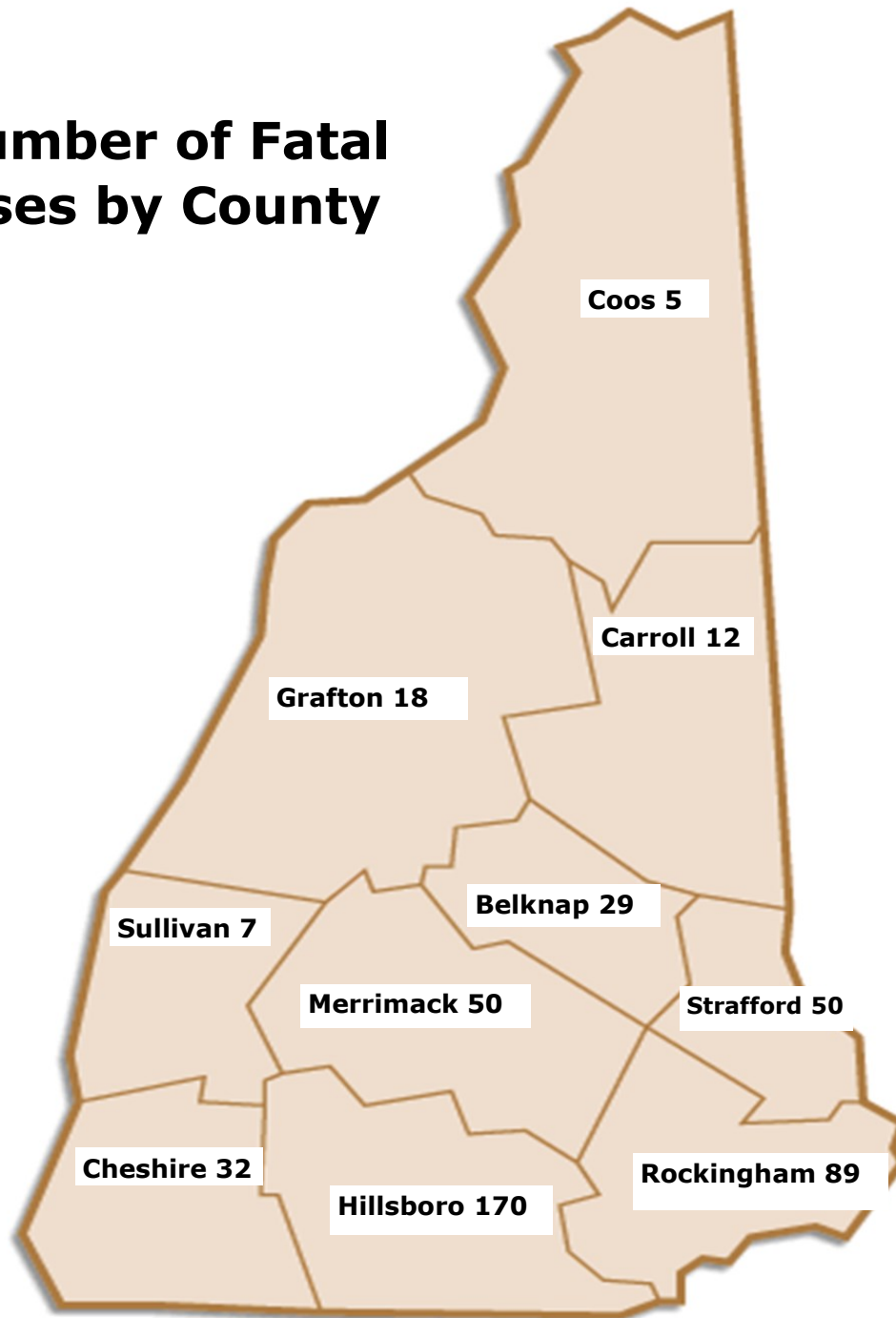


Figure 5. Fatal Drug Overdoses by County



2018 Drug Summary

Fatal Overdoses by City/Town

Figure 6 shows the 20 cities/towns in New Hampshire with the highest number of fatal overdoses in 2018. “Overdoses” refers to the city/town where drug use occurred, not necessarily the city/town where death occurred. For example, a person who overdoses in Goffstown may be transported to a hospital in Manchester where death occurred. In this scenario, the “overdose” occurred in Goffstown but the “death” occurred in Manchester. Thus cities and towns with hospitals may have more deaths than overdoses and, conversely, cities and towns without hospitals may have fewer deaths than overdoses.

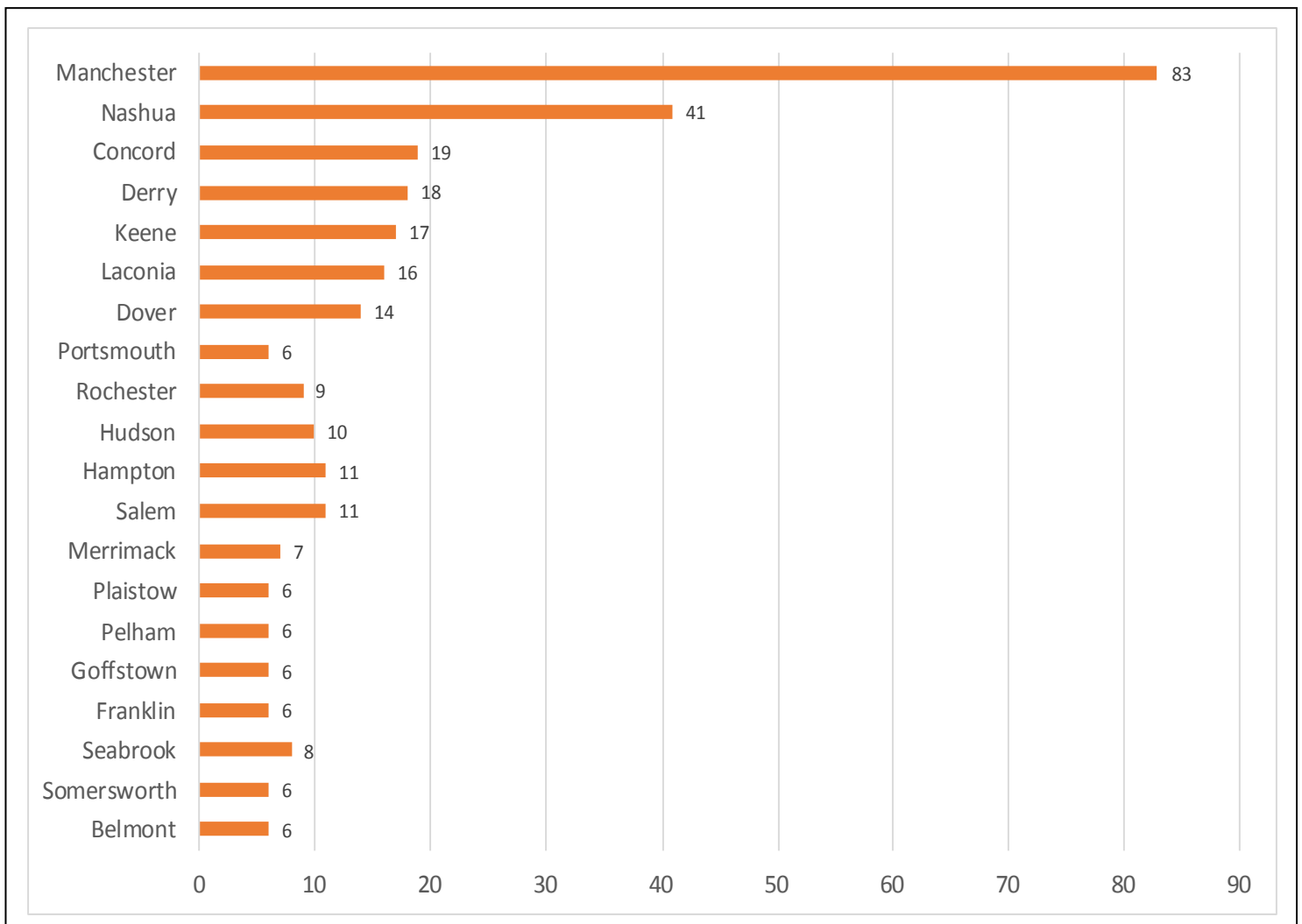


Figure 6. Top 20 Fatal Overdose Cities/Towns in 2018



2018 Drug Summary

Drug Deaths 2008–2018

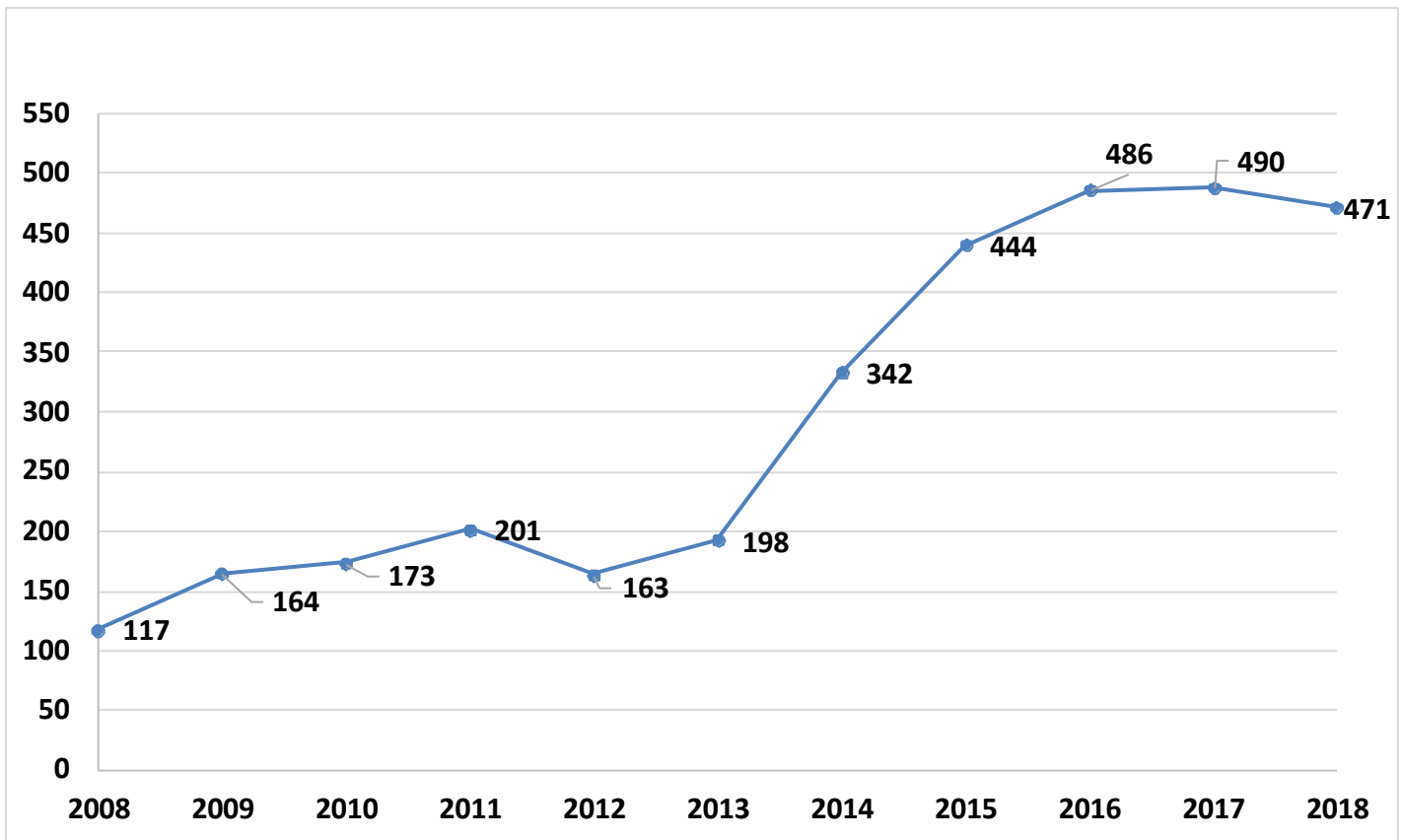


Figure 7. Number of Deaths from Drug Overdoses

As shown in Figure 7, drug deaths rose dramatically after 2013. In 2014, there was a 73% increase in drug deaths from the previous year, followed by a 30% increase in 2015 and a 9% increase in 2016. In 2017, the increase was less than 1% and in 2018, deaths decreased by 4%. Not included in these statistics, however, are deaths from other (non-drug) causes while intoxicated by drugs.