Drugs Identified in Deceased Persons by Florida Medical Examiners



2017 Annual Report

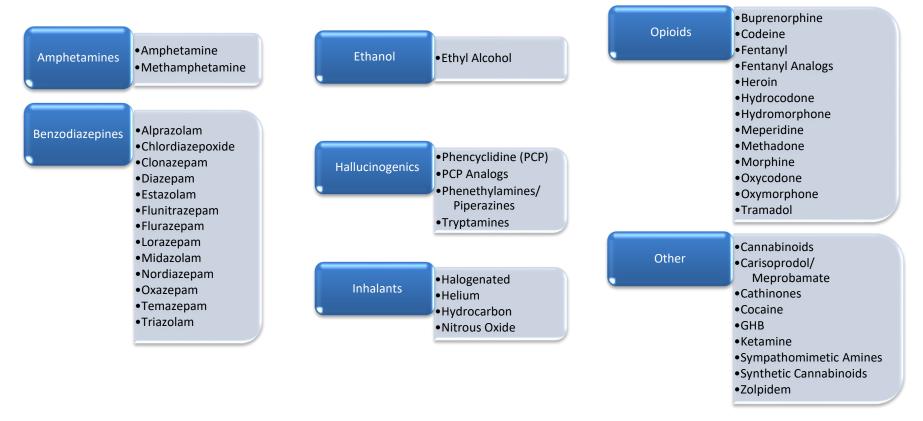
Data Collection

The State of Florida's Bureau of Vital Statistics reported 206,168 deaths in Florida during 2017. Of the 28,031 deaths investigated by Florida's medical examiners, toxicology results determined that the drugs listed below were present at the time of death in 12,439 deaths. The medical examiners assessed whether the drug(s) identified was the cause of death or merely present at the time of death. The data were then submitted to the Medical Examiners Commission (MEC) for presentation in this report. It is important to note that each death is a single case, while each time a drug is detected represents an occurrence. The vast majority of the 12,439 deaths had more than one drug occurrence.

When reporting the data, Florida's medical examiners were asked to distinguish between the drugs determined to be the cause of death and those drugs that were present in the body at the time of death. A drug is indicated as the cause of death only when, after examining all evidence, the autopsy, and toxicology results, the medical examiner determines the drug played a causal role in the death. It is not uncommon for a decedent to have multiple drugs listed as a cause of death. However, a drug may not have played a causal role in the death even when the medical examiner determines the drug is present or identifiable in the decedent. Therefore, a decedent often is found to have multiple drugs listed as present; these are drug occurrences and are not equivalent to deaths.

The MEC would like to acknowledge with much appreciation the crucial role of the members of the Quality Assurance Committee.

Data were collected on the following drugs:



Highlights

All comparisons are made to 2016 calendar year data unless otherwise noted.

- ✓ Total drug-related deaths increased by 4 percent (529 more).
- ✓ 6,178 opioid-related deaths were reported, which is an 8 percent increase (453 more). The opioids were identified as either the cause of death or merely present in the decedent.
- ✓ 4,280 opioid-caused deaths were reported, which is a 9 percent increase (358 more).
- ✓ 6,932 (4 percent more) individuals died with one or more prescription drugs in their system. The drugs were identified as either the cause of death or merely present in the decedent. These drugs may have also been mixed with illicit drugs and/or alcohol.
- ✓ 3,684 (4 percent more) individuals died with at least one prescription drug in their system that was identified as the cause of death. These drugs may have been mixed with other prescription drugs, illicit drugs, and/or alcohol.
- ✓ Prescription drugs (benzodiazepines, carisoprodol/meprobamate, zolpidem, and all opioids excluding heroin and fentanyl analogs) continued to be found more often than illicit drugs, both as the cause of death and present at death. Prescription drugs account for 58 percent of all drug occurrences in this report when ethyl alcohol is excluded. Fentanyl is also produced illicitly, and currently many fentanyl occurrences represent the ingestion of illicit fentanyl rather than pharmaceutically manufactured fentanyl.
- ✓ The seven most frequently occurring drugs found in decedents were ethyl alcohol (5,258), benzodiazepines (5,064, including 1,889 alprazolam occurrences), cocaine (3,129), cannabinoids (2,367), fentanyl (2,088), morphine (1,992), and fentanyl analogs (1,685). Since heroin is rapidly metabolized to morphine, this may lead to a substantial over-reporting of morphine-related deaths as well as significant under-reporting of heroin-related deaths.
- ✓ The drugs that caused the most deaths were cocaine (2,012), fentanyl (1,743), fentanyl analogs (1,588), benzodiazepines (1,374, including 791 alprazolam deaths), morphine (1,285), ethyl alcohol (975), and heroin (944). Fentanyl analogs (94 percent), heroin (89 percent), fentanyl (84 percent), morphine (65 percent), and cocaine (64 percent) were listed as causing death in more than 50 percent of the deaths in which these drugs were found.
- ✓ Occurrences of heroin increased by 3 percent (34 more) and deaths caused by heroin decreased by 1 percent (8 less).
- ✓ Occurrences of fentanyl increased by 27 percent (444 more) and deaths caused by fentanyl increased by 25 percent (353 more).
- Occurrences of fentanyl analogs increased by 64 percent (659 more) and deaths caused by fentanyl analogs increased by 65 percent (623 more).
- ✓ Occurrences of methadone decreased by 16 percent (79 less) and deaths caused by methadone decreased by 25 percent (83 less).
- ✓ Occurrences of hydrocodone increased by 6 percent (40 more) and deaths caused by hydrocodone decreased by 8 percent (19 less).
- ✓ Occurrences of oxycodone decreased by 7 percent (100 less) and deaths caused by oxycodone also decreased by 16 percent (113 less).

Highlights (continued)

- ✓ Occurrences of buprenorphine increased by 19 percent (26 more) and deaths caused by buprenorphine also increased by 19 percent (6 more).
- ✓ Occurrences of cocaine increased by 9 percent (247 more) and deaths caused by cocaine increased by 14 percent (243 more).
- ✓ Alprazolam (Xanax), diazepam (Valium), and nordiazepam dominate the category of benzodiazepines. Occurrences of alprazolam increased by 2 percent, diazepam decreased by 9 percent, and nordiazepam decreased by 10 percent. Alprazolam, diazepam, and nordiazepam are rarely the sole cause of death, but are common as contributing to the cause of multi-drug deaths. Note that since the drugs diazepam and chlordiazepoxide (Librium) are normally broken down in the body into the drug nordiazepam, many occurrences of nordiazepam may represent ingestion of these other benzodiazepines.
- Occurrences of methamphetamine increased by 38 percent (237 more) and deaths caused by methamphetamine increased by 42 percent (137 more). Occurrences of amphetamine increased by 33 percent (214 more) and deaths caused by amphetamine increased by 29 percent (57 more). In the body, methamphetamine is metabolized to amphetamine, thus many occurrences of amphetamine likely represent illicit methamphetamine ingestion rather than pharmaceutical amphetamine use.
- Occurrences of cathinones increased by 79 percent (81 more) and deaths caused by cathinones increased by 104 percent (51 more). The majority of the cathinones reported were N-Ethylpentylone.
- ✓ Occurrences of synthetic cannabinoids increased by 245 percent (54 more) and deaths caused by synthetic cannabinoids increased by 306 percent (52 more). The increase in synthetic cannabinoid occurrences is due, in part, to increased testing. The majority of the synthetic cannabinoids reported were 5F-ADB.
- ✓ Reporting of occurrences of U-47700 was not specifically requested by the Commission in 2017. Due to the rapid rise of deaths associated with U-47700, many districts voluntarily reported data; however, the data is not complete. A total of 132 occurrences of U-47700 were reported for 2017. Reporting of U-47700 by all districts will begin with the 2018 Drugs Identified in Deceased Persons Reports.

Medical Examiners Commission Members

Stephen J. Nelson, M.A., M.D., F.C.A.P. Chairman

> District 10 Medical Examiner 1021 Jim Keene Boulevard Winter Haven, Florida 33880 (863) 298-4600

Email: StephenNelson@polk-county.net

Barbara C. Wolf, M.D.

District 5 Medical Examiner

Honorable James S. Purdy, J.D.

Public Defender, Seventh Judicial Circuit

Robin Giddens Sheppard, L.F.D.

Vice President/Funeral Director, Hardage-Giddens Funeral Home

Kenneth T. Jones

State Registrar, Department of Health

MEC Staff — Florida Department of Law Enforcement

Post Office Box 1489
Tallahassee, Florida 32302
(850) 410-8600
MEC Website

Chief of Policy and Special Programs Vickie Koenig (850) 410-8600 *VickieKoenig@fdle.state.fl.us*

Government Analyst II Doug Culbertson (850) 410-8609 <u>DougCulbertson@fdle.state.fl.us</u>

Government Analyst II Beth McNeil (850) 410-8608 <u>BethMcNeil@fdle.state.fl.us</u>

Deputy General Counsel James Martin, J.D. (850) 410-7676 JamesMartin@fdle.state.fl.us

Honorable J. Harrell Reid Sheriff, Hamilton County

Honorable Jeffrey A. Siegmeister, J.D. State Attorney, Third Judicial Circuit

Wesley H. Heidt, J.D.

Office of the Attorney General

Honorable Carol R. Whitmore, R.N. Manatee County Commissioner

Quality Assurance Committee Members

Russell S. Vega, M.D.
District Medical Examiner
District 12 Medical Examiner Office

Robert R. Pfalzgraf, M.D.
Associate Medical Examiner
District 4 Medical Examiner Office

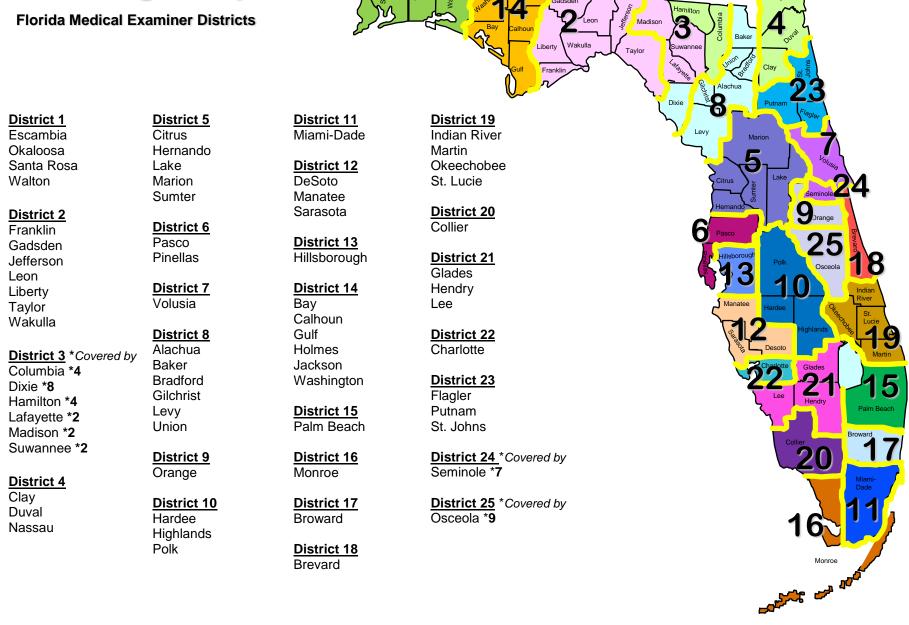
Julia M. Pearson, Ph.D.
Chief Forensic Toxicologist
District 13 Medical Examiner Office

Chris W. Chronister, Ph.D. Forensic Toxicology Laboratory Manager University of Florida

Table of Contents

Map of Florida Medical Examiner Districts	1	Fentanyl Deaths	30
Summary of Drug Occurrences in Decedents	2	Fentanyl Deaths by Age	31
Frequency of Occurrence of Drugs in Decedents	4	Fentanyl Deaths by County	32
Comparison of Drug Occurrences in Decedents, 2016 – 2017	5	Historical Overview of Fentanyl Occurrences	33
Comparison of Drug Caused Deaths, 2015 – 2017	7	Prescription Drugs in Medical Examiner Deaths	34
Frequency of Occurrence of Benzodiazepines	8	Frequency of Occurrence of Fentanyl Analogs	35
Alprazolam Deaths	9	Fentanyl Analog Deaths	36
Alprazolam Deaths by Age	10	Fentanyl Analog Deaths by Age	37
Alprazolam Deaths by County	11	Fentanyl Analog Deaths by County	38
Diazepam Deaths	12	Cocaine Deaths	39
Diazepam Deaths by Age	13	Cocaine Deaths by Age	40
Diazepam Deaths by County	14	Cocaine Deaths by County	41
Historical Overview of Alprazolam & Diazepam Occurrences	15	Cocaine Related Deaths by Medical Examiner District	42
Oxycodone Deaths	16	Historical Overview of Cocaine Occurrences	43
Oxycodone Deaths by Age	17	Heroin Deaths	44
Oxycodone Deaths by County	18	Heroin Deaths by Age	45
Hydrocodone Deaths	19	Heroin Deaths by County	46
Hydrocodone Deaths by Age	20	Heroin Related Deaths by Medical Examiner District	47
Hydrocodone Deaths by County	21	Historical Overview of Heroin Occurrences	48
Methadone Deaths	22	Methamphetamine Deaths	49
Methadone Deaths by Age	23	Methamphetamine Deaths by Age	50
Methadone Deaths by County	24	Methamphetamine Deaths by County	51
Historical Overview of Hydrocodone, Oxycodone, & Methadone Occurrences	25	Historical Overview of Methamphetamine Occurrences	52
Historical Overview of Deaths Caused by Hydrocodone, Oxycodone, & Methadone	26	Drug Detected at Death: Cause vs. Present	53
Morphine Deaths	27	Manner of Death for Cases Reported	57
Morphine Deaths by Age	28	Glossary	61
Morphine Deaths by County	29		

Coverage Map



$\begin{array}{c} \textbf{Summary of Drug Occurrences in Decedents} \\ 2017 \end{array}$

	Drug Present in Body	Cause	Present	TOTAL OCCURRENCES
amines	Amphetamine	256	598	854
Amphetamines	Methamphetamine	464	394	858
	Alprazolam	791	1,098	1,889
	Chlordiazepoxide	18	79	97
	Clonazepam	106	437	543
	Diazepam	178	429	607
Jes	Estazolam	2	2	4
epir	Flunitrazepam	1	0	1
diaz	Flurazepam	1	5	6
Benzodiazepines	Lorazepam	40	262	302
Be	Midazolam	4	177	181
	Nordiazepam	109	529	638
	Oxazepam	39	296	335
	Temazepam	83	374	457
	Triazolam	2	2	4
	Ethanol	975	4,283	5,258
CS	Phencyclidine (PCP)	2	1	3
ogeni	PCP Analogs	2	0	2
Hallucinogenics	Phenethylamines/Piperazines	18	18	36
I	Tryptamines	1	3	4

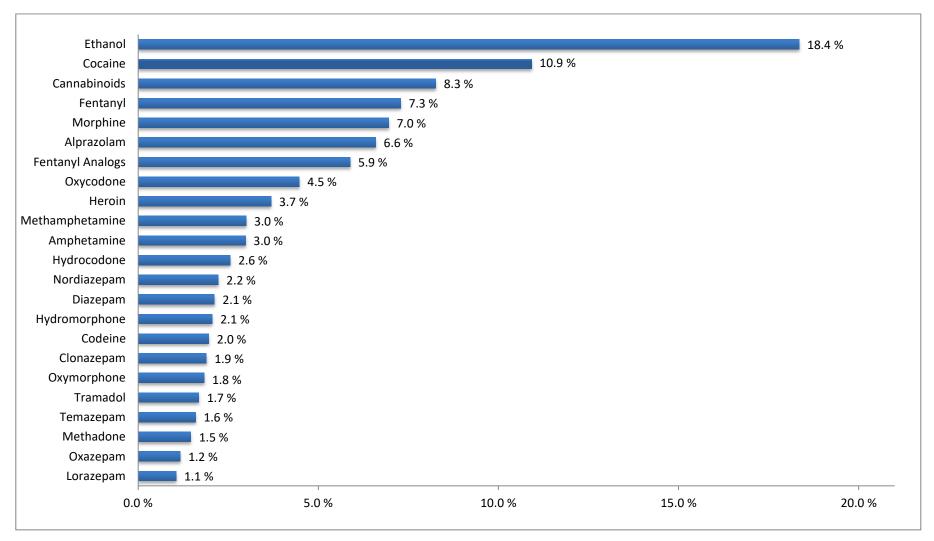
Summary of Drug Occurrences in Decedents (continued)

	Drug Present in Body	Cause	Present	TOTAL OCCURRENCES
S	Halogenated	52	2	54
Inhalants	Helium	11	1	12
ıhal	Hydrocarbon	2	0	2
=	Nitrous Oxide	0	0	0
	Buprenorphine	38	123	161
	Codeine	69	493	562
	Fentanyl	1,743	345	2,088
	Fentanyl Analogs	1,588	97	1,685
	Heroin	944	113	1,057
gs	Hydrocodone	226	506	732
Opioids	Hydromorphone	175	414	589
ō	Meperidine	2	18	20
	Methadone	247	173	420
	Morphine	1,285	707	1,992
	Oxycodone	610	672	1,282
	Oxymorphone	107	419	526
	Tramadol	102	381	483
	Cannabinoids	7	2,360	2,367
	Carisoprodol/Meprobamate	23	86	109
	Cathinones	100	83	183
<u>_</u>	Cocaine	2,012	1,117	3,129
Other	GHB	4	2	6
O	Ketamine	12	102	114
	Sympathomimetic Amines	6	23	29
	Synthetic Cannabinoids	69	7	76
	Zolpidem	55	160	215

Note: The total occurrences for buprenorphine and cannabinoids are under-reported due to the variability in analytical protocols in place at medical examiner offices. Medical examiners were asked to identify any metabolites of parent drugs. Since heroin is rapidly metabolized to morphine, this may lead to a substantial over-reporting of morphine-related deaths as well as significant under-reporting of heroin-related deaths. Many deaths were found to have several drugs contributing to the death; therefore, the count of specific drugs listed is greater than the number of deaths.

Frequency of Occurrence of Drugs in Decedents¹

January - December 2017



¹Drugs not included individually constituted less than one percent of occurrences.

Note: Percentages may not sum to 100 percent because of rounding.

Comparison of Drug Occurrences in Decedents

2016 to 2017

	DRUG PRESENT IN BODY	2016	2017	PERCENTAGE CHANGE
Amphetamines	Amphetamine	640	854	33.4%
Amphe	Methamphetamine	621	858	38.2%
	Alprazolam	1,851	1,889	2.1%
	Chlordiazepoxide	100	97	-3.0%
	Clonazepam	546	543	-0.5%
	Diazepam	664	607	-8.6%
nes	Estazolam	4	4	*
epi	Flunitrazepam	0	1	*
Benzodiazepines	Flurazepam	6	6	*
uzo	Lorazepam	241	302	25.3%
Be	Midazolam	164	181	10.4%
	Nordiazepam	709	638	-10.0%
	Oxazepam	363	335	-7.7%
	Temazepam	511	457	-10.6%
	Triazolam	8	4	*
	Ethanol	5,318	5,258	-1.1%
Si	Phencyclidine (PCP)	0	3	*
ogen	PCP Analogs	2	2	*
Hallucinogenics	Phenethylamines/Piperazines	46	36	-21.7%
Ha	Tryptamines	1	4	*

^{*}Due to the small number of occurrences, percent changes were not calculated.

Note: Many deaths were found to have several drugs contributing to the death; therefore, the count of specific drugs listed is greater than the number of deaths.

Comparison of Drug Occurrences in Decedents (continued)

	DRUG PRESENT IN BODY	2016	2017	PERCENTAGE CHANGE
S	Halogenated	50	54	8.0%
ant	Helium	13	12	*
Inhalants	Hydrocarbon	1	2	*
=	Nitrous Oxide	1	0	*
	Buprenorphine	135	161	19.3%
	Codeine	507	562	10.8%
	Fentanyl	1,644	2,088	27.0%
	Fentanyl Analogs	1,026	1,685	64.2%
	Heroin	1,023	1,057	3.3%
g	Hydrocodone	692	732	5.8%
Opioids	Hydromorphone	595	589	-1.0%
ŏ	Meperidine	6	20	*
	Methadone	499	420	-15.8%
	Morphine	2,040	1,992	-2.4%
	Oxycodone	1,382	1,282	-7.2%
	Oxymorphone	562	526	-6.4%
	Tramadol	510	483	-5.3%
	Cannabinoids	2,292	2,367	3.3%
	Carisoprodol/Meprobamate	123	109	-11.4%
	Cathinones	102	183	79.4%
_	Cocaine	2,882	3,129	8.6%
Other	GHB	4	6	*
0	Ketamine	88	114	29.5% ¹
	Sympathomimetic Amines	25	29	*
	Synthetic Cannabinoids	22	76	245.5% ²
	Zolpidem	248	215	-13.3%

^{*}Due to the small number of occurrences, percent changes were not calculated.

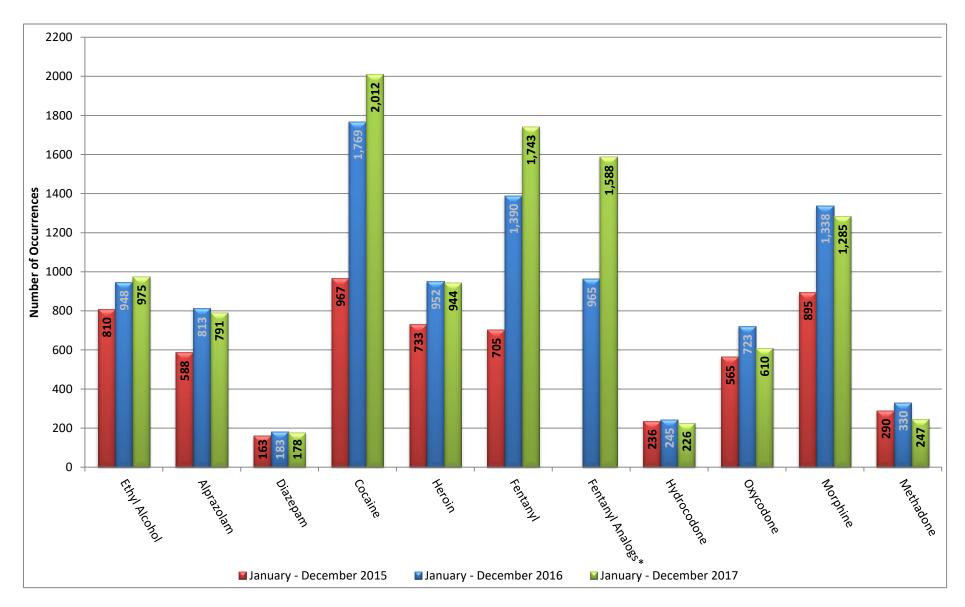
Note: Many deaths were found to have several drugs contributing to the death; therefore, the count of specific drugs listed is greater than the number of deaths.

¹The increase in ketamine occurrences is largely due to the clinical use of ketamine as a sedative and anesthetic in the hospital.

²The increase in synthetic cannabinoids is due, in part, to increased testing.

Comparison of Drug Caused Deaths

2015 to 2017

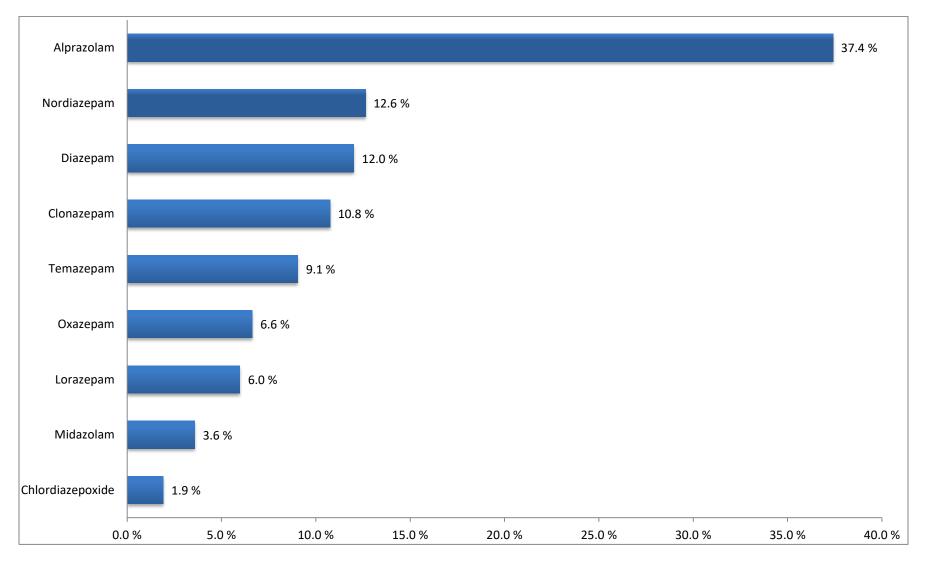


Note: Not all drugs are included in the above chart.

^{*}Reporting of fentanyl analogs by all districts began in 2016.

Frequency of Occurrence of Benzodiazepines

January - December 2017



Note: Benzodiazepines not included individually constituted less than one percent of occurrences. Percentages may not sum to 100 percent because of rounding. Several benzodiazepines (for example, diazepam) are metabolized to other benzodiazepines in the body (for example, nordiazepam, oxazepam, and temazepam). Thus, occurrences of nordiazepam, oxazepam, and temazepam may be due to the ingestion of diazepam, chlordiazepoxide, and/or temazepam.

Alprazolam Deaths January – December 2017

Medical Examiner District and Area of Florida			
District	Area of Florida		
1	Pensacola		
2	Tallahassee		
3	Live Oak		
4	Jacksonville		
5	Leesburg		
6	St. Petersburg		
7	Daytona Beach		
8	Gainesville		
9	Orlando		
10	Lakeland		
11	Miami		
12	Sarasota		
13	Tampa		
14	Panama City		
15	West Palm Beach		
16	Florida Keys		
17	Ft. Lauderdale		
18	Melbourne		
19	Ft. Pierce		
20	Naples		
21	Ft. Myers		
22	Port Charlotte		
23	St. Augustine		
24	Sanford		
25	Kissimmee		
Statewide Totals			

Total Deaths with Alprazolam				
Total	Cause	Present		
55	36	19		
7	7	0		
4	2	2		
171	59	112		
77	19	58		
128	58	70		
63	15	48		
26	14	12		
105	41	64		
81	34	47		
232	82	150		
92	42	50		
88	47	41		
38	6	32		
238	101	137		
15	7	8		
162	111	51		
84	37	47		
38	3	35		
35	10	25		
65	30	35		
13	1	12		
19	10	9		
29	8	21		
24	11	13		
1,889	791	1,098		

Deaths w	Deaths with Alprazolam Only				
Total	Cause	Present			
4	1	3			
0	0	0			
1	1	0			
5	0	5			
2	1	1			
6	2	4			
3	0	3			
3	0	3			
9	3	6			
11	1	10			
20	0	20			
11	2	9			
7	0	7			
4	0	4			
14	4	10			
0	0	0			
4	2	2			
11	1	10			
2	0	2			
1	0	1			
2	0	2			
1	0	1			
1	0	1			
0	0	0			
1	0	1			
123	18	105			

	Deaths with Alprazolam in					
Combination with Other Drugs						
Total	Cause	Present				
51	35	16				
7	7	0				
3	1	2				
166	59	107				
75	18	57				
122	56	66				
60	15	45				
23	14	9				
96	38	58				
70	33	37				
212	82	130				
81	40	41				
81	47	34				
34	6	28				
224	97	127				
15	7	8				
158	109	49				
73	36	37				
36	3	33				
34	10	24				
63	30	33				
12	1	11				
18	10	8				
29	8	21				
23	11	12				
1,766	773	993				

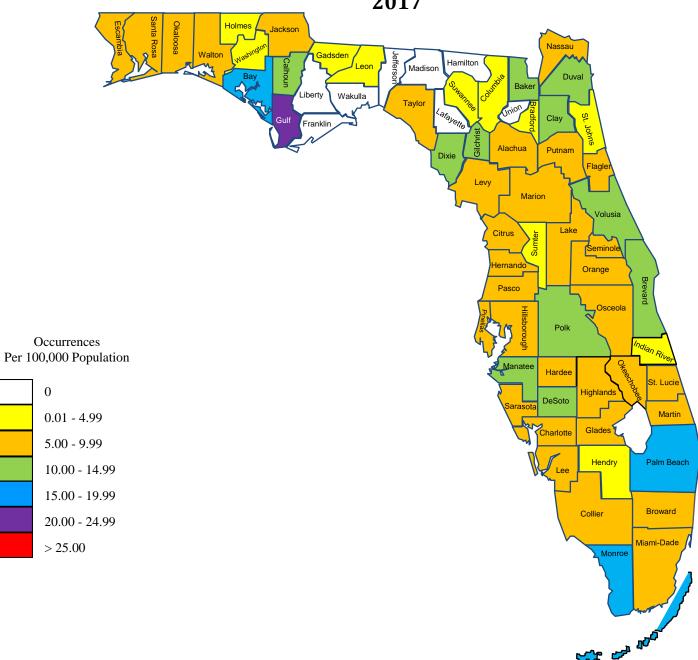
Alprazolam Deaths by Age January – December 2017

Medical Examiner District and Area of Florida			
District	Area of Florida	Total	
1	Pensacola	55	
2	Tallahassee	7	
3	Live Oak	4	
4	Jacksonville	171	
5	Leesburg	77	
6	St. Petersburg	128	
7	Daytona Beach	63	
8	Gainesville	26	
9	Orlando	105	
10	Lakeland	81	
11	Miami	232	
12	Sarasota	92	
13	Tampa	88	
14	Panama City	38	
15	West Palm Beach	238	
16	Florida Keys	15	
17	Ft. Lauderdale	162	
18	Melbourne	84	
19	Ft. Pierce	38	
20	Naples	35	
21	Ft. Myers	65	
22	Port Charlotte	13	
23	St. Augustine	19	
24	Sanford	29	
25	Kissimmee	24	
Stat	1,889		

	Alprazolam Caused Death				
		Age of D	ecedent		
Total	<18	18-25	26-34	35-50	>50
36	0	4	9	14	9
7	0	0	3	1	3
2	0	0	0	1	1
59	0	8	13	19	19
19	0	3	4	7	5
58	0	7	12	21	18
15	0	0	1	7	7
14	0	1	2	8	3
41	0	5	12	15	9
34	0	0	4	11	19
82	1	16	14	26	25
42	0	1	8	22	11
47	1	7	9	11	19
6	0	0	2	3	1
101	0	8	32	31	30
7	0	1	1	3	2
111	0	11	41	33	26
37	1	1	8	16	11
3	0	0	0	1	2
10	0	1	1	1	7
30	0	5	9	6	10
1	0	0	0	0	1
10	0	1	4	3	2
8	0	1	2	3	2
11	0	3	3	4	1
791	3	84	194	267	243

	Alpra	zolam Pre	esent at D	eath	
		Age of D	ecedent		
Total	<18	18-25	26-34	35-50	>50
19	0	2	7	3	7
0	0	0	0	0	0
2	1	0	0	1	0
112	2	9	31	33	37
58	0	5	9	21	23
70	1	9	12	18	30
48	0	5	11	22	10
12	0	0	2	4	6
64	0	5	8	22	29
47	0	7	4	14	22
150	1	18	37	35	59
50	0	2	1	20	27
41	0	3	7	8	23
32	0	3	8	10	11
137	1	16	37	38	45
8	0	0	2	1	5
51	1	7	9	17	17
47	1	4	8	14	20
35	0	0	6	12	17
25	0	4	4	5	12
35	0	5	11	8	11
12	0	0	1	4	7
9	0	0	4	4	1
21	0	1	6	9	5
13	0	2	0	5	6
1,098	8	107	225	328	430

Alprazolam Deaths by County 2017



Diazepam Deaths

January – December 2017

Medical Examiner District and Area of Florida			
District			
1	Pensacola		
2	Tallahassee		
3 4	Live Oak		
	Jacksonville		
5	Leesburg		
6	St. Petersburg		
7	Daytona Beach		
8	Gainesville		
9	Orlando		
10	Lakeland		
11	Miami		
12	Sarasota		
13	Tampa		
14	Panama City		
15	West Palm Beach		
16	Florida Keys		
17	Ft. Lauderdale		
18	Melbourne		
19	Ft. Pierce		
20	Naples		
21	Ft. Myers		
22	Port Charlotte		
23	St. Augustine		
24	Sanford		
25	Kissimmee		
Statewide Totals			

Total Deaths with Diazepam			
Total	Cause	Present	
13	6	7	
6	1	5 7	
9	2	7	
43	13	30	
33	0	33	
58	32	26	
20	4	16	
9	2	7	
27	0	27	
18	7	11	
55	12	43	
38	10	28	
31	19	12	
5	3	2	
53	17	36	
6	1	5	
34	17	17	
38	7	31	
37	1	36	
16	2	14	
25	10	15	
1	0	1	
17	7	10	
9	2	7	
6	3	3	
607	178	429	

Deaths with Diazepam Only			
Total	Cause	Present	
0	0	0	
0	0	0	
1	0	1	
1	0	1	
0	0	0	
1	0	1	
0	0	0	
0	0	0	
0	0	0	
0	0	0	
8	0	8	
1	0	1	
0	0	0	
0	0	0	
1	1	0	
0	0	0	
3	0	3	
2	0	2	
2	1	1	
1	0	1	
0	0	0	
0	0	0	
0	0	0	
0	0	0	
0	0	0	
21	2	19	

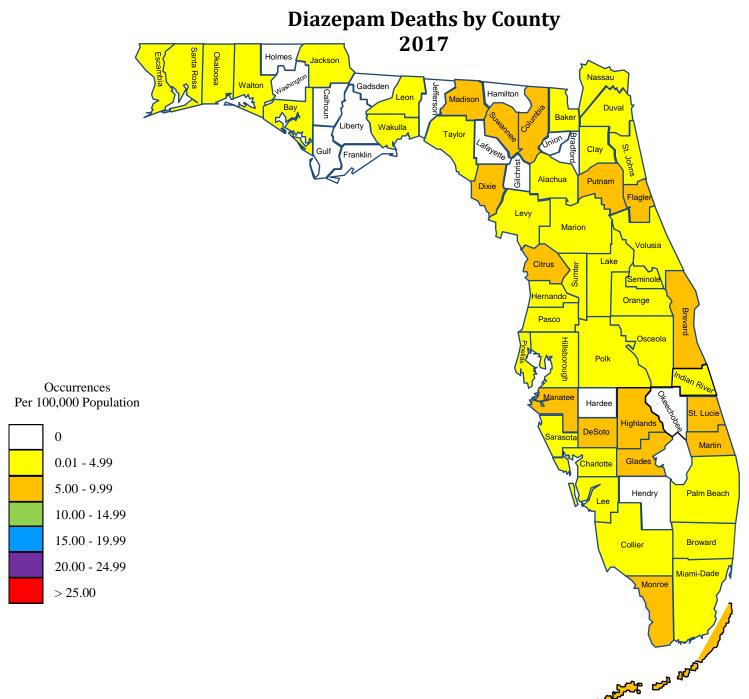
Deaths with Diazepam in			
Combination with Other Drugs			
Total	Cause	Present	
13	6	7	
6	1	5	
8	2	6	
42	13	29	
33	0	33	
57	32	25	
20	4	16	
9	2	7	
27	0	27	
18	7	11	
47	12	35	
37	10	27	
31	19	12	
5	3	2	
52	16	36	
6	1	5	
31	17	14	
36	7	29	
35	0	35	
15	2	13	
25	10	15	
1	0	1	
17	7	10	
9	2	7	
6	3	3	
586	176	410	

Diazepam Deaths by Age January – December 2017

Medical Examiner District and Area of Florida			
District	Area of Florida	Total	
1	Pensacola	13	
2	Tallahassee	6	
3	Live Oak	9	
4	Jacksonville	43	
5	Leesburg	33	
6	St. Petersburg	58	
7	Daytona Beach	20	
8	Gainesville	9	
9	Orlando	27	
10	Lakeland	18	
11	Miami	55	
12	Sarasota	38	
13	Tampa	31	
14	Panama City	5	
15	West Palm Beach	53	
16	Florida Keys	6	
17	Ft. Lauderdale	34	
18	Melbourne	38	
19	Ft. Pierce	37	
20	Naples	16	
21	Ft. Myers	25	
22	Port Charlotte	1	
23	St. Augustine	17	
24	Sanford	9	
25	Kissimmee	6	
Statewide Totals 607			

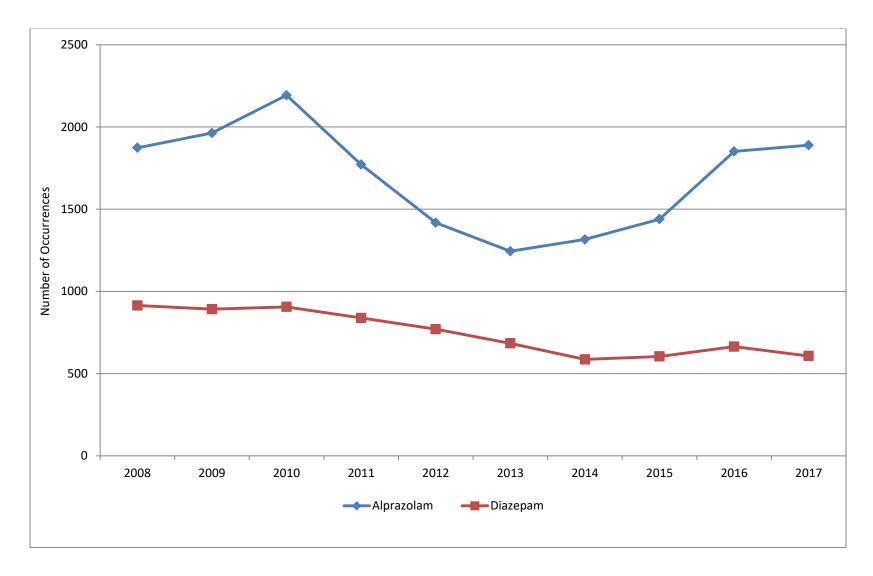
	Diazepam Caused Death				
		Age of D	ecedent		
Total	< 18	18-25	26-34	35-50	>50
6	0	0	2	1	3
1	0	0	0	1	0
2	0	0	0	1	1
13	0	0	1	2	10
0	0	0	0	0	0
32	0	0	5	9	18
4	0	0	1	0	3
2	0	0	0	2	0
0	0	0	0	0	0
7	0	0	0	1	6
12	0	0	2	6	4
10	0	1	2	4	3
19	0	2	2	5	10
3	0	0	0	2	1
17	0	1	3	4	9
1	0	0	0	1	0
17	0	0	6	5	6
7	0	0	1	2	4
1	0	0	0	0	1
2	0	1	0	0	1
10	0	2	1	2	5
0	0	0	0	0	0
7	0	1	2	2	2
2	0	0	0	1	1
3	0	0	1	0	2
178	0	8	29	51	90

Diazepam Present at Death					
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
7	0	0	1	1	5
5	0	0	0	1	4
7	0	1	1	1	4
30	0	1	5	11	13
33	0	1	4	9	19
26	1	4	2	4	15
16	0	0	5	4	7
7	0	0	0	2	5
27	1	0	2	8	16
11	0	1	1	2	7
43	0	2	6	9	26
28	0	1	6	4	17
12	1	0	0	4	7
2	0	1	0	1	0
36	0	3	9	9	15
5	0	0	2	0	3
17	1	1	4	5	6
31	0	1	4	9	17
36	0	0	4	11	21
14	0	1	0	2	11
15	0	0	2	4	9
1	0	0	0	0	1
10	0	0	1	3	6
7	0	1	1	5	0
3	0	0	1	2	0
429	4	19	61	111	234



Historical Overview of Alprazolam and Diazepam Occurrences

(Present and Cause) 2008 to 2017



Oxycodone Deaths

January – December 2017

Medical Examiner District and Area of Florida		
District	Area of Florida	
1	Pensacola	
2	Tallahassee	
3	Live Oak	
4	Jacksonville	
5	Leesburg	
6	St. Petersburg	
7	Daytona Beach	
8	Gainesville	
9	Orlando	
10	Lakeland	
11	Miami	
12	Sarasota	
13	Tampa	
14	Panama City	
15	West Palm Beach	
16	Florida Keys	
17	Ft. Lauderdale	
18	Melbourne	
19	Ft. Pierce	
20	Naples	
21	Ft. Myers	
22	Port Charlotte	
23	St. Augustine	
24	Sanford	
25	Kissimmee	
Statewide Totals		

Total Deaths with Oxycodone			
Total	Cause	Present	
26	11	15	
13	6	7	
14	7	7	
142	55	87	
85	36	49	
122	71	51	
26	14	12	
25	16	9	
52	18	34	
36	18	18	
96	49	47	
47	18	29	
89	42	47	
25	6	19	
121	53	68	
9	6	3	
92	54	38	
92	55	37	
48	19	29	
18	7	11	
39	21	18	
16	6	10	
20	11	9	
10	4	6	
19	7	12	
1,282	610	672	

Deaths with Oxycodone Only			
Total	Cause	Present	
3	1	2	
1	0	1	
5	1	4	
5	0	5	
9	3	6	
9	5	4	
2	0	2	
5	4	1	
6	1	5	
6	2	4	
2	0	2	
3	1	2	
9	1	8	
3	0	3	
8	3	5	
1	0	1	
9	4	5	
5	2	3	
6	0	6	
0	0	0	
3	0	3	
0	0	0	
2	1	1	
1	0	1	
3	0	3	
106	29	77	

Deaths with Oxycodone in			
Combination with Other Drugs			
Total	Cause	Present	
23	10	13	
12	6	6	
9	6	3	
137	55	82	
76	33	43	
113	66	47	
24	14	10	
20	12	8	
46	17	29	
30	16	14	
94	49	45	
44	17	27	
80	41	39	
22	6	16	
113	50	63	
8	6	2	
83	50	33	
87	53	34	
42	19	23	
18	7	11	
36	21	15	
16	6	10	
18	10	8	
9	4	5	
16	7	9	
1,176	581	595	

Oxycodone Deaths by Age January - December 2017

Medical Examiner District and Area of Florida			
District	Area of Florida	Total	
1	Pensacola	26	
2	Tallahassee	13	
3	Live Oak	14	
4	Jacksonville	142	
5	Leesburg	85	
6	St. Petersburg	122	
7	Daytona Beach	26	
8	Gainesville	25	
9	Orlando	52	
10	Lakeland	36	
11	Miami	96	
12	Sarasota	47	
13	Tampa	89	
14	Panama City	25	
15	West Palm Beach	121	
16	Florida Keys	9	
17	Ft. Lauderdale	92	
18	Melbourne	92	
19	Ft. Pierce	48	
20	Naples	18	
21	Ft. Myers	39	
22	Port Charlotte	16	
23	St. Augustine	20	
24	Sanford	10	
25	Kissimmee	19	
Stat	1,282		

Oxycodone Caused Death						
	Age of Decedent					
Total	< 18	18-25	26-34	35-50	>50	
11	0	1	1	3	6	
6	0	0	1	1	4	
7	0	0	0	2	5	
55	0	0	10	17	28	
36	0	0	2	19	15	
71	0	5	12	26	28	
14	0	0	3	4	7	
16	0	0	3	6	7	
18	0	0	2	6	10	
18	0	1	0	7	10	
49	1	7	6	17	18	
18	0	0	1	5	12	
42	1	4	7	11	19	
6	0	0	1	4	1	
53	0	3	7	22	21	
6	0	0	2	3	1	
54	0	6	10	18	20	
55	1	1	8	24	21	
19	0	1	1	4	13	
7	0	0	1	2	4	
21	0	2	2	7	10	
6	0	0	1	1	4	
11	0	0	2	2	7	
4	0	0	1	3	0	
7	0	2	1	2	2	
610	3	33	85	216	273	

Oxycodone Present at Death					
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
15	0	1	2	2	10
7	0	0	1	1	5
7	0	0	2	1	4
87	0	6	13	32	36
49	0	3	9	12	25
51	0	2	8	11	30
12	0	0	0	8	4
9	0	0	0	4	5
34	0	1	5	10	18
18	0	0	3	7	8
47	0	4	8	11	24
29	0	4	0	7	18
47	0	2	5	14	26
19	0	1	1	7	10
68	0	6	13	24	25
3	0	0	0	1	2
38	0	1	5	16	16
37	1	1	4	13	18
29	0	0	0	8	21
11	0	0	1	5	5
18	0	1	1	8	8
10	0	1	0	3	6
9	0	0	1	3	5
6	0	0	0	3	3
12	0	1	0	3	8
672	1	35	82	214	340

Oxycodone Deaths by County 2017 Jackson Gadsden Madison Liberty Taylor Alachua Putnam Dixie Levy Marion Volusia Seminole Hernando Orange Pasco _Osceola Polk Occurrences Per 100,000 Population Highlands DeSoto 0 Martin 0.01 - 4.99 Glades 5.00 - 9.99 Hendry Palm Beach 10.00 - 14.99 15.00 - 19.99 Broward Collier 20.00 - 24.99 Miami-Dade Monroe > 25.00

Hydrocodone Deaths January – December 2017

Medical Examiner District			
and Area of Florida			
District	Area of Florida		
1	Pensacola		
2	Tallahassee		
3	Live Oak		
4	Jacksonville		
5	Leesburg		
6	St. Petersburg		
7	Daytona Beach		
8	Gainesville		
9	Orlando		
10	Lakeland		
11	Miami		
12	Sarasota		
13	Tampa		
14	Panama City		
15	West Palm Beach		
16	Florida Keys		
17	Ft. Lauderdale		
18	Melbourne		
19	Ft. Pierce		
20	Naples		
21	Ft. Myers		
22	Port Charlotte		
23	St. Augustine		
24	Sanford		
25 Kissimmee			
Statewide Totals			

Total Deaths with Hydrocodone			
Total	Cause	Present	
43	8	35	
13	5	8	
7	1	6	
92	32	60	
41	13	28	
63	25	38	
26	10	16	
16	3	13	
51	7	44	
39	10	29	
29	10	19	
40	9	31	
37	15	22	
32	9	23	
32	14	18	
8	2	6	
30	13	17	
38	15	23	
27	5	22	
8	1	7	
21	10	11	
12	1	11	
9	2	7	
10	6	4	
8	0	8	
732	226	506	

Deaths with Hydrocodone Only			
Total	Cause	Present	
6	1	5	
3	1	2	
0	0	0	
8	2	6	
11	1	10	
13	1	12	
1	0	1	
4	0	4	
15	0	15	
7	1	6	
2	0	2	
7	1	6	
4	0	4	
3	0	3	
2	0	2	
0	0	0	
3	0	3	
7	2	5	
7	1	6	
0	0	0	
2	0	2	
1	0	1	
0	0	0	
0	0	0	
2	0	2	
108	11	97	

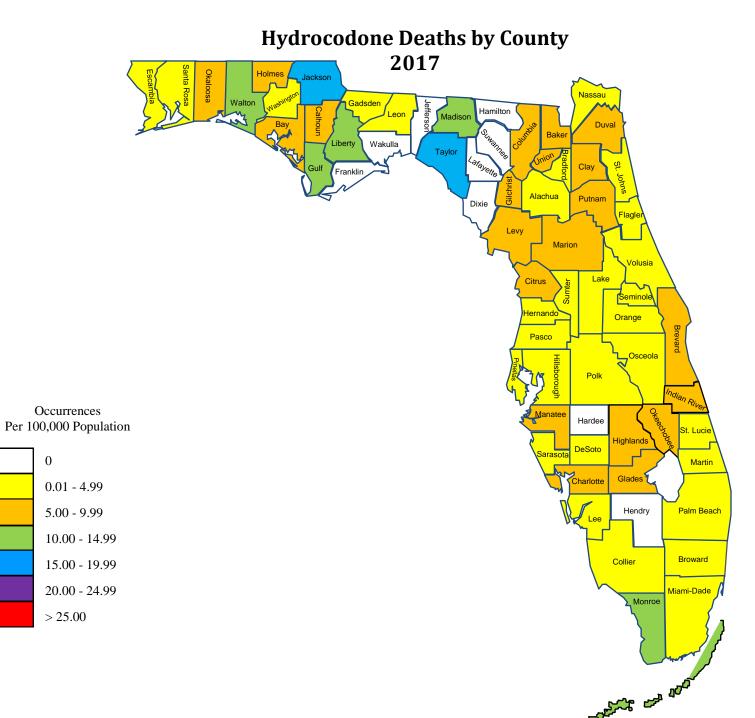
Deaths with Hydrocodone in Combination with Other Drugs			
Total	Cause	Present	
37	7	30	
10	4	6	
7	1	6	
84	30	54	
30	12	18	
50	24	26	
25	10	15	
12	3	9	
36	7	29	
32	9	23	
27	10	17	
33	8	25	
33	15	18	
29	9	20	
30	14	16	
8	2	6	
27	13	14	
31	13	18	
20	4	16	
8	1	7	
19	10	9	
11	1	10	
9	2	7	
10	6	4	
6	0	6	
624	215	409	

Hydrocodone Deaths by Age January – December 2017

Medical Examiner District and Area of Florida			
District	Area of Florida	Total	
1	Pensacola	43	
2	Tallahassee	13	
3	Live Oak	7	
4	Jacksonville	92	
5	Leesburg	41	
6	St. Petersburg	63	
7	Daytona Beach	26	
8	Gainesville	16	
9	Orlando	51	
10	Lakeland	39	
11	Miami	29	
12	Sarasota	40	
13	Tampa	37	
14	Panama City	32	
15	West Palm Beach	32	
16	Florida Keys	8	
17	Ft. Lauderdale	30	
18	Melbourne	38	
19	Ft. Pierce	27	
20	Naples	8	
21	Ft. Myers	21	
22	Port Charlotte	12	
23	St. Augustine	9	
24	Sanford	10	
25	Kissimmee	8	
Statewide Totals 732			

	Hydrocodone Caused Death				
		Age of D	ecedent		
Total	< 18	18-25	26-34	35-50	>50
8	0	0	2	3	3
5	0	0	1	3	1
1	0	0	0	0	1
32	0	1	5	8	18
13	0	0	1	4	8
25	0	0	2	6	17
10	0	0	3	0	7
3	1	0	0	1	1
7	0	0	0	4	3
10	0	0	0	3	7
10	0	2	3	2	3
9	0	0	1	3	5
15	0	1	2	0	12
9	0	0	1	2	6
14	0	1	2	4	7
2	0	0	0	1	1
13	0	0	3	2	8
15	0	0	2	5	8
5	0	0	1	2	2
1	0	0	0	0	1
10	0	0	2	3	5
1	0	0	0	0	1
2	0	0	0	0	2
6	0	2	1	1	2
0	0	0	0	0	0
226	1	7	32	57	129

Hydrocodone Present at Death					
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
35	0	2	8	7	18
8	0	0	0	3	5
6	0	0	0	3	3
60	0	3	11	28	18
28	0	0	1	6	21
38	0	3	6	6	23
16	0	1	4	3	8
13	0	0	1	5	7
44	0	2	3	9	30
29	0	0	4	3	22
19	0	0	1	8	10
31	0	0	1	7	23
22	0	0	1	5	16
23	0	1	3	4	15
18	0	2	3	6	7
6	0	0	0	3	3
17	1	0	0	6	10
23	0	1	3	5	14
22	0	0	1	3	18
7	0	0	0	0	7
11	0	0	0	1	10
11	0	0	2	2	7
7	0	0	0	3	4
4	0	0	1	1	2
8	0	0	0	4	4
506	1	15	54	131	305



Methadone Deaths

January - December 2017

	Medical Examiner District		
and Area of Florida			
District	Area of Florida		
1	Pensacola		
2	Tallahassee		
3	Live Oak		
4	Jacksonville		
5	Leesburg		
6	St. Petersburg		
7	Daytona Beach		
8	Gainesville		
9	Orlando		
10	Lakeland		
11	Miami		
12	Sarasota		
13	Tampa		
14	Panama City		
15	West Palm Beach		
16	Florida Keys		
17	Ft. Lauderdale		
18	Melbourne		
19	Ft. Pierce		
20	Naples		
21	Ft. Myers		
22	Port Charlotte		
23	St. Augustine		
24	Sanford		
25	Kissimmee		
Statewide Totals			

Total Deaths with Methadone			
Total	Cause	Present	
17	8	9	
5	4	1	
7	6	1	
43	29	14	
39	23	16	
44	36	8	
13	7	6	
11	6	5	
16	5	11	
11	6	5	
15	6	9	
30	10	20	
31	19	12	
5	2	3	
29	20	9	
2	1	1	
18	13	5	
24	18	6	
11	4	7	
9	4	5	
20	13	7	
1	0	1	
8	2	6	
5		3	
6	3	3	
420	247	173	

Deaths with Methadone Only			
Total	Cause	Present	
3	0	3	
0	0	0	
1	1	0	
6	2	4	
7	5	2	
1	1	0	
2	0	2	
3	1	2	
1	0	1	
1	0	1	
1	0	1	
5	2	3	
4	2	2	
0	0	0	
2	1	1	
1	0	1	
2	0	2	
2	2	0	
1	0	1	
0	0	0	
3	2	1	
0	0	0	
1	0	1	
0	0	0	
3	2	1	
50	21	29	

Deaths with Methadone in Combination with Other Drugs		
Total	Cause	Present
14	8	6
5	4	1
6	5	1
37	27	10
32	18	14
43	35	
	7	8 4
11		
8	5 5	3
15		10
10	6	4
14	6	8
25	8	17
27	17	10
5	2	3
27	19	8
1	1	0
16	13	3
22	16	6
10	4	6
9	4	5
17	11	6
1	0	1
7	2	5
5	2	3
3	1	2
370	226	144

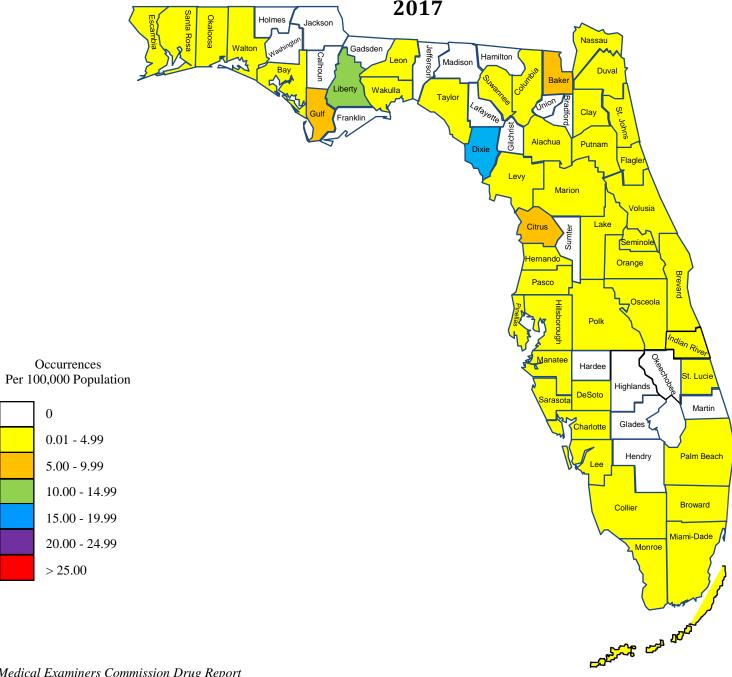
Methadone Deaths by Age January – December 2017

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	17
2	Tallahassee	5
3	Live Oak	7
4	Jacksonville	43
5	Leesburg	39
6	St. Petersburg	44
7	Daytona Beach	13
8	Gainesville	11
9	Orlando	16
10	Lakeland	11
11	Miami	15
12	Sarasota	30
13	Tampa	31
14	Panama City	5
15	West Palm Beach	29
16	Florida Keys	2
17	Ft. Lauderdale	18
18	Melbourne	24
19	Ft. Pierce	11
20	Naples	9
21	Ft. Myers	20
22	Port Charlotte	1
23	St. Augustine	8
24	Sanford	5
25	Kissimmee	6
Statewide Totals 420		

	Methadone Caused Death				
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
8	0	0	2	2	4
4	0	0	2	2	0
6	0	1	1	3	1
29	1	1	9	9	9
23	0	3	2	10	8
36	0	1	5	13	17
7	0	0	0	4	3
6	0	0	0	5	1
5	0	0	0	3	2
6	0	0	0	3	3
6	0	0	2	3	1
10	0	0	1	6	3
19	0	2	3	7	7
2	0	0	0	2	0
20	0	1	5	5	9
1	0	0	0	1	0
13	0	0	0	3	10
18	1	3	6	3	5
4	0	1	0	0	3
4	0	0	0	2	2
13	0	0	6	4	3
0	0	0	0	0	0
2	0	0	1	1	0
2	0	0	1	1	0
3	0	0	1	0	2
247	2	13	47	92	93

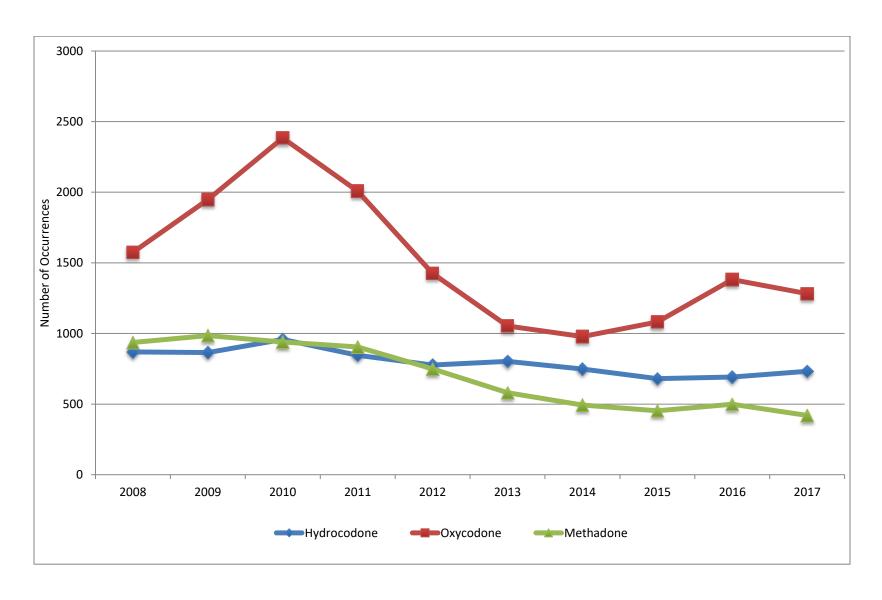
	Methadone Present at Death				
	Age of Decedent				
Total	<18	18-25	26-34	35-50	>50
9	0	0	3	3	3
1	0	0	0	1	0
1	0	0	0	0	1
14	2	0	2	5	5
16	0	2	2	7	5
8	0	0	1	2	5
6	0	0	1	2	3
5	0	0	4	0	1
11	0	2	0	4	5
5	0	0	0	3	2
9	0	2	1	3	3
20	1	0	4	8	7
12	0	0	3	3	6
3	0	0	1	1	1
9	0	0	3	2	4
1	0	0	0	1	0
5	1	0	0	1	3
6	0	0	1	3	2
7	0	0	1	2	4
5	0	0	1	1	3
7	0	0	1	1	5
1	0	0	0	0	1
6	0	0	2	1	3
3	0	0	2	1	0
3	0	0	0	2	1
173	4	6	33	57	73

Methadone Deaths by County 2017

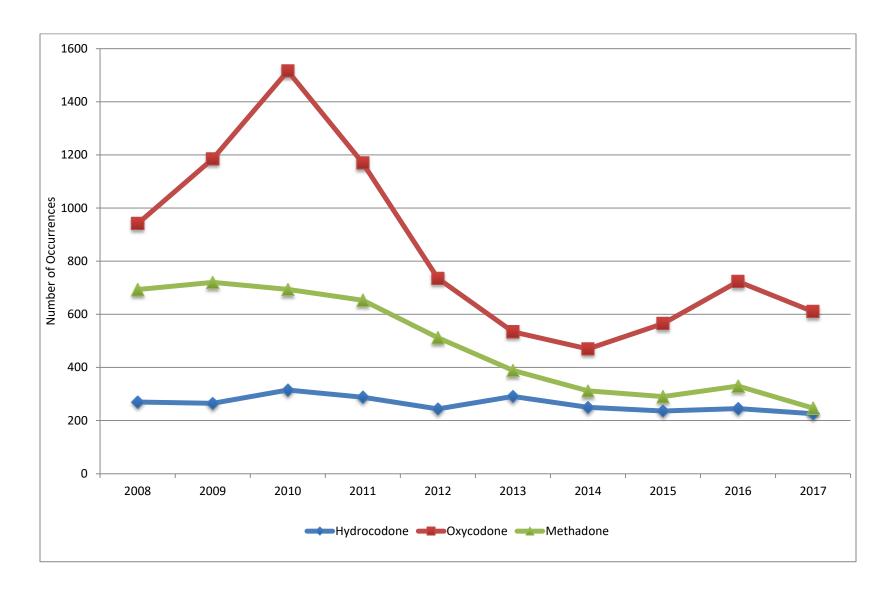


Historical Overview of Hydrocodone, Oxycodone, and Methadone Occurrences

(Present and Cause) 2008 to 2017



Historical Overview of Deaths Caused by Hydrocodone, Oxycodone, and Methadone 2008 to 2017



Morphine Deaths January – December 2017

Medical Examiner District		
and Area of Florida		
District	Area of Florida	
1	Pensacola	
2	Tallahassee	
3	Live Oak	
4	Jacksonville	
5	Leesburg	
6	St. Petersburg	
7	Daytona Beach	
8	Gainesville	
9	Orlando	
10	Lakeland	
11	Miami	
12	Sarasota	
13	Tampa	
14	Panama City	
15	West Palm Beach	
16	Florida Keys	
17	Ft. Lauderdale	
18	Melbourne	
19	Ft. Pierce	
20	Naples	
21	Ft. Myers	
22	Port Charlotte	
23	St. Augustine	
24	Sanford	
25	Kissimmee	
Statewide Totals		

Total Deaths with Morphine			
Total	Cause	Present	
46	26	20	
18	2	16	
7	5	2	
173	140	33	
91	56	35	
123	71	52	
63	46	17	
21	10	11	
160	83	77	
58	24	34	
176	133	43	
83	25	58	
132	92	40	
19	8	11	
259	191	68	
9	4	5	
173	117	56	
74	46	28	
44	24	20	
32	21	11	
96	80	16	
19	4	15	
18	5	13	
55	43	12	
43	29	14	
1,992	1,285	707	

Deaths with Morphine Only		
Total	Cause	Present
2	0	2
4	0	4
1	1	0
3	1	2
3	2	1
5	3	2
3	0	3
4	2	2
11	0	11
3	0	3
3	0	3
4	2	3 2
9	1	8
0	0	0
6	3	3
1	1	0
15	7	8
2	0	2
4	3	1
0	0	0
5	2	3
3	0	3
0	0	0
2	0	2
3	0	3
96	28	68

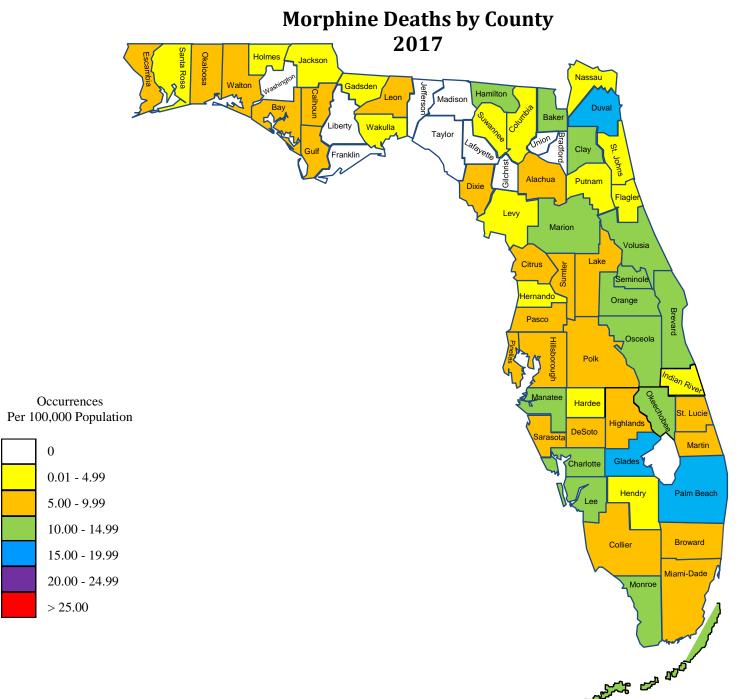
Deaths with Morphine in Combination with Other Drugs		
Total	Cause	Present
44	26	18
14	2	12
6	4	2
170	139	31
88	54	34
118	68	50
60	46	14
17	8	9
149	83	66
55	24	31
173	133	40
79	23	56
123	91	32
19	8	11
253	188	65
8	3	5
158	110	48
72	46	26
40	21	19
32	21	11
91	78	13
16	4	12
18	5	13
53	43	10
40	29	11
1,896	1,257	639

Morphine Deaths by Age January – December 2017

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	46
2	Tallahassee	18
3	Live Oak	7
4	Jacksonville	173
5	Leesburg	91
6	St. Petersburg	123
7	Daytona Beach	63
8	Gainesville	21
9	Orlando	160
10	Lakeland	58
11	Miami	176
12	Sarasota	83
13	Tampa	132
14	Panama City	19
15	West Palm Beach	259
16	Florida Keys	9
17	Ft. Lauderdale	173
18	Melbourne	74
19	Ft. Pierce	44
20	Naples	32
21	Ft. Myers	96
22	Port Charlotte	19
23	St. Augustine	18
24	Sanford	55
25	Kissimmee	43
Statewide Totals 1,992		

	Morphine Caused Death				
	Age of Decedent				
Total	<18	18-25	26-34	35-50	>50
26	0	2	10	13	1
2	0	0	0	2	0
5	0	0	1	0	4
140	0	12	46	49	33
56	1	4	15	12	24
71	0	1	19	23	28
46	0	1	16	20	9
10	0	0	1	3	6
83	0	5	18	39	21
24	0	1	3	9	11
133	2	16	32	49	34
25	0	2	5	8	10
92	1	4	18	33	36
8	0	1	1	3	3
191	0	22	62	52	55
4	0	1	0	2	1
117	0	9	33	45	30
46	1	3	14	15	13
24	0	3	4	3	14
21	0	2	5	8	6
80	0	9	25	25	21
4	0	0	2	1	1
5	0	1	0	1	3
43	0	3	14	15	11
29	0	5	9	11	4
1,285	5	107	353	441	379

Morphine Present at Death					
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
20	0	1	6	5	8
16	1	1	1	1	12
2	1	0	0	1	0
33	1	0	6	8	18
35	0	3	6	16	10
52	0	6	7	19	20
17	0	2	4	5	6
11	0	0	1	6	4
77	2	0	6	16	53
34	1	2	7	6	18
43	0	1	12	7	23
58	1	4	8	22	23
40	0	3	5	16	16
11	0	1	4	2	4
68	0	15	14	21	18
5	0	0	1	2	2
56	2	4	19	18	13
28	0	1	7	7	13
20	0	0	4	5	11
11	0	1	2	3	5
16	0	0	4	4	8
15	0	0	0	3	12
13	0	1	5	4	3
12	0	0	3	4	5
14	0	1	1	5	7
707	9	47	133	206	312



Fentanyl Deaths

January – December 2017

Medical Examiner District		
and Area of Florida		
District	Area of Florida	
1	Pensacola	
2	Tallahassee	
3	Live Oak	
4	Jacksonville	
5	Leesburg	
6	St. Petersburg	
7	Daytona Beach	
8	Gainesville	
9	Orlando	
10	Lakeland	
11	Miami	
12	Sarasota	
13	Tampa	
14	Panama City	
15	West Palm Beach	
16	Florida Keys	
17	Ft. Lauderdale	
18	Melbourne	
19	Ft. Pierce	
20	Naples	
21	Ft. Myers	
22	Port Charlotte	
23	St. Augustine	
24	Sanford	
25	Kissimmee	
Statewide Totals		

Total Deaths with Fentanyl			
·			
Total	Cause	Present	
25	24	1	
3	2	1	
3	1	2	
370	302	68	
66	54	12	
85	67	18	
59	49	10	
11	7	4	
171	127	44	
19	17	2	
195	169	26	
63	46	17	
61	55	6	
13	9	4	
285	244	41	
6	5	1	
244	223	21	
99	83	16	
56	36	20	
16	13	3	
118	109	9	
12	8	4	
22	18	4	
39	36	3	
47	39	8	
2,088	1,743	345	

Deaths with Fentanyl Only			
Total	Cause	Present	
1	1	0	
1	1	0	
1	0	1	
22	19	3	
5	0	5	
9	8	1	
2	2	0	
3	1	2 5	
13	8		
1	1	0	
5	1	4	
6	5	1	
5	4	1	
1	0	1	
26	25	1	
0	0	0	
26	25	1	
7	4	3	
7	4	3	
0	0	0	
10	9	1	
0	0	0	
2	0	2	
5	5	0	
5	3	2	
163	126	37	

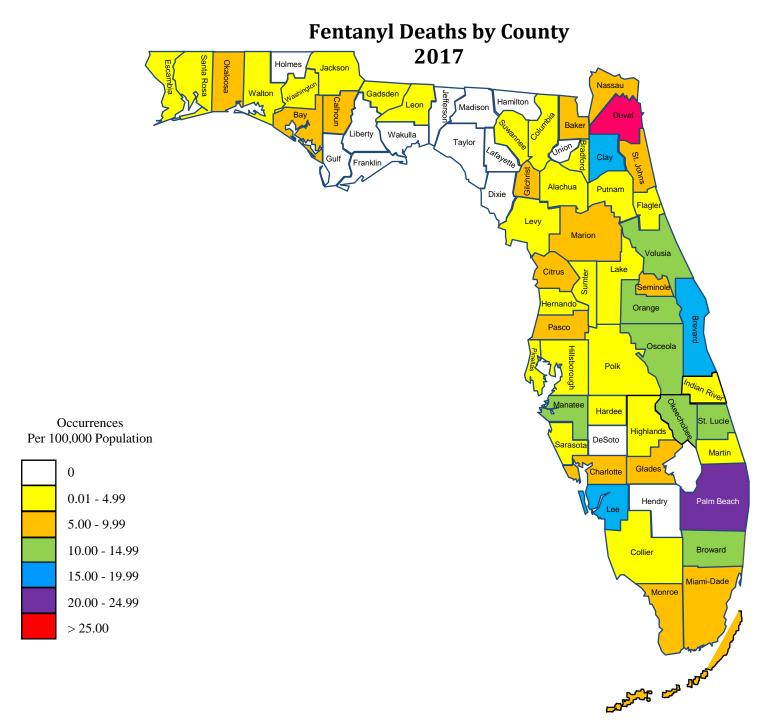
Deaths with Fentanyl in				
Combination with Other Drugs				
Total	Cause	Present		
24	23	1		
2	1	1		
2	1	1		
348	283	65		
61	54	7		
76	59	17		
57	47	10		
8	6	2		
158	119	39		
18	16	2		
190	168	22		
57	41	16		
56	51	5		
12	9	3		
259	219	40		
6	5	1		
218	198	20		
92	79	13		
49	32	17		
16	13	3		
108	100	8		
12	8	4		
20	18	2		
34	31	3		
42	36	6		
1,925	1,617	308		

Fentanyl Deaths by Age January – December 2017

Medical Examiner District and Area of Florida			
District	Area of Florida	Total	
1	Pensacola	25	
2	Tallahassee	3	
3	Live Oak	3	
4	Jacksonville	370	
5	Leesburg	66	
6	St. Petersburg	85	
7	Daytona Beach	59	
8	Gainesville	11	
9	Orlando	171	
10	Lakeland	19	
11	Miami	195	
12	Sarasota	63	
13	Tampa	61	
14	Panama City	13	
15	West Palm Beach	285	
16	Florida Keys	6	
17	Ft. Lauderdale	244	
18	Melbourne	99	
19	Ft. Pierce	56	
20	Naples	16	
21	Ft. Myers	118	
22	Port Charlotte	12	
23	St. Augustine	22	
24	Sanford	39	
25	47		
Statewide Totals 2,088			

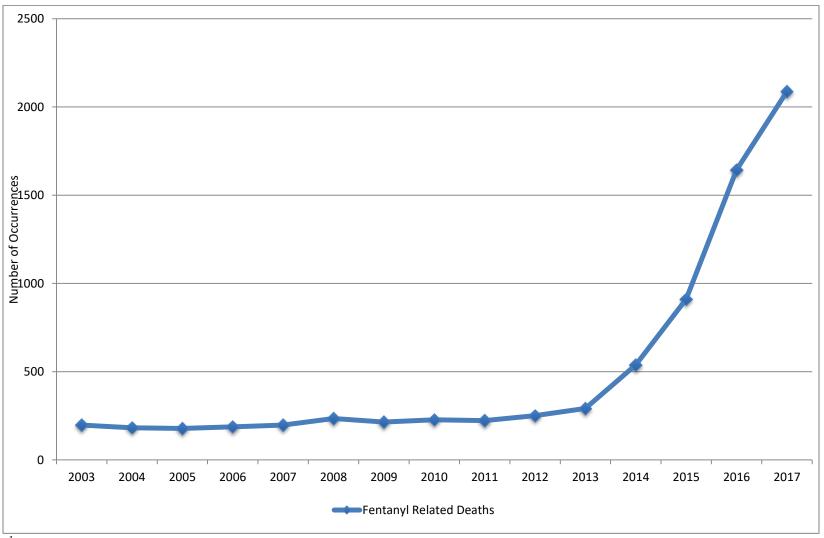
	Fentanyl Caused Death				
	Age of Decedent				
Total	<18	18-25	26-34	35-50	>50
24	0	2	10	10	2
2	0	0	1	0	1
1	0	0	1	0	0
302	1	27	98	114	62
54	0	4	16	23	11
67	0	6	25	24	12
49	0	3	16	24	6
7	0	0	2	4	1
127	0	8	32	59	28
17	0	1	3	8	5
169	1	26	44	53	45
46	0	5	14	19	8
55	0	1	9	29	16
9	0	2	2	4	1
244	0	33	79	73	59
5	0	0	2	3	0
223	1	29	64	96	33
83	2	3	34	35	9
36	0	2	14	11	9
13	0	2	3	5	3
109	0	9	36	39	25
8	0	0	1	3	4
18	0	2	5	5	6
36	0	3	12	14	7
39	0	4	7	24	4
1,743	5	172	530	679	357

	Fentanyl Present at Death				
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
1	0	0	0	1	0
1	0	0	0	1	0
2	0	1	0	0	1
68	3	7	24	20	14
12	0	2	2	2	6
18	0	3	4	7	4
10	0	1	3	5	1
4	0	0	1	1	2
44	2	2	5	12	23
2	0	0	0	1	1
26	2	2	5	5	12
17	0	1	7	6	3
6	1	1	0	1	3
4	1	0	1	0	2
41	0	9	8	14	10
1	0	0	0	0	1
21	0	3	4	8	6
16	0	0	4	4	8
20	1	3	2	5	9
3	0	0	0	1	2
9	0	0	2	4	3
4	0	0	0	1	3
4	0	0	1	0	3
3	0	0	0	1	2
8	0	1	2	2	3
345	10	36	75	102	122



Historical Overview of Fentanyl Occurrences¹

(Present and Cause) 2003 to 2017



¹Prior to 2016, the number of fentanyl occurrences indicated includes occurrences of fentanyl analogs. Starting in 2016, fentanyl analogs were tracked separately.

Prescription Drugs in Medical Examiner Deaths

2016 versus 2017

Medical Examiner District and Area of Florida				
District	Area of Florida			
1	Pensacola			
2	Tallahassee			
3	Live Oak			
4	Jacksonville			
5	Leesburg			
6	St. Petersburg			
7	Daytona Beach			
8	Gainesville			
9	Orlando			
10	Lakeland			
11	Miami			
12	Sarasota			
13	Tampa			
14	Panama City			
15	West Palm Beach			
16	Florida Keys			
17	Ft. Lauderdale			
18	Melbourne			
19	Ft. Pierce			
20	Naples			
21	Ft. Myers			
22	Port Charlotte			
23	St. Augustine			
24	Sanford			
25	Kissimmee			

Statewide Totals

These tables are based on prescription drugs tracked by the Medical Examiners Commission and reported by Florida Medical Examiners. Do not add across columns.

Total Prescription Drug Deaths in ME Deaths (Present and Cause)				
2016	2017	Percent Change		
173	182	5.2%		
82	64	-22.0%		
49	51	4.1%		
619	706	14.1%		
398	351	-11.8%		
550	521	-5.3%		
181	212	17.1%		
100	105	5.0%		
412	475	15.3%		
190	208	9.5%		
641	629	-1.9%		
285	296	3.9%		
381	369	-3.1%		
102	105	2.9%		
694	710	2.3%		
40	48	20.0%		
523	570	9.0%		
301	353	17.3%		
262	226	-13.7%		
95	97	2.1%		
209	287	37.3%		
87	60	-31.0%		
84	90	7.1%		
100	97	-3.0%		
100	120	20.0%		

These individuals died with one or more prescription drugs in their system. The drugs were identified as either the cause of death or merely present in the decedent and also may have been mixed with illicit drugs and/or alcohol.

6,932

4.1%

6,658

Accidental Deaths with Prescription Drugs (Present and Cause)				
2016	2017	Percent		
107	00	Change		
107	98	-8.4%		
43	32	-25.6%		
30	29	-3.3%		
483	520	7.7%		
269	225	-16.4%		
357	351	-1.7%		
102	142	39.2%		
53	57	7.5%		
254	315	24.0%		
109	117	7.3%		
390	393	0.8%		
195	186	-4.6%		
209	211	1.0%		
55	55	0.0%		
562	566	0.7%		
26	28	7.7%		
423	477	12.8%		
173	211	22.0%		
166	131	-21.1%		
57	45	-21.1%		
138	218	58.0%		
38	35	-7.9%		
49	48	-2.0%		
61	77	26.2%		
54	77	42.6%		
4,403	4,644	5.5%		

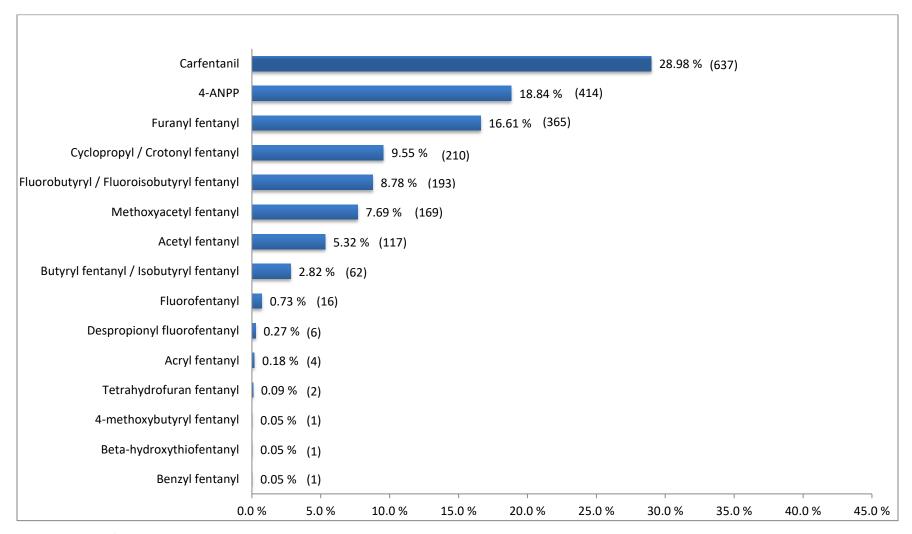
The manner of death for these decedents was reported as accidental. These individuals died with one or more prescription drugs in their system. The drugs were identified as either the cause of death or merely present in the decedent and also may have been mixed with illicit drugs and/or alcohol.

Accidental Deaths Caused by Prescription Drugs				
2016	2017	Percent		
2010	2017	Change		
82	70	-14.6%		
23	17	-26.1%		
14	19	35.7%		
404	419	3.7%		
186	147	-21.0%		
291	256	-12.0%		
64	105	64.1%		
28	37	32.1%		
183	208	13.7%		
63	51	-19.0%		
263	262	-0.4%		
136	114	-16.2%		
153	161	5.2%		
38	22	-42.1%		
481	421	-12.5%		
21	15	-28.6%		
330	403	22.1%		
112	164	46.4%		
87	83	-4.6%		
44	35	-20.5%		
96	179	86.5%		
13	14	7.7%		
34	28	-17.6%		
52	66	26.9%		
36	62	72.2%		
3,234	3,358	3.8%		

The manner of death for these decedents was reported as accidental. These individuals died with at least one prescription drug in their system that was identified as causing or contributing to the death. These drugs may also have been mixed with illicit drugs and/or alcohol.

Frequency of Occurrence of Fentanyl Analogs

January - December 2017



Note: Fluorobutyryl / Fluoroisobutyryl fentanyl includes the analytes para-fluoroisobutyryl fentanyl, para-fluorobutyryl fentanyl, fluoroisobutyryl fentanyl, and fluorobutyryl fentanyl. Fluorofentanyl includes the analytes fluorofentanyl, ortho-fluorofentanyl, and para-fluorofentanyl. Despropionyl fluorofentanyl includes the analytes despropionyl fluorofentanyl, despropionyl ortho-fluorofentanyl, and despropionyl para-fluorofentanyl. Percentages may not sum to 100 percent because of rounding.

Fentanyl Analog Deaths

January – December 2017

Medical Examiner District			
and a	Area of Florida		
District	Area of Florida		
1	Pensacola		
2	Tallahassee		
3	Live Oak		
4	Jacksonville		
5	Leesburg		
6	St. Petersburg		
7	Daytona Beach		
8	Gainesville		
9	Orlando		
10	Lakeland		
11	Miami		
12	Sarasota		
13	Tampa		
14	Panama City		
15	West Palm Beach		
16	Florida Keys		
17	Ft. Lauderdale		
18	Melbourne		
19	Ft. Pierce		
20	Naples		
21	Ft. Myers		
22	Port Charlotte		
23	St. Augustine		
24	Sanford		
25 Kissimmee			
Statewide Totals			

Total Deaths with					
Fentanyl Analogs Total Cause Present					
22	22	0			
4	3	1			
4	3	1			
176	163	13			
83	77	6			
110	104	6			
30	28	2			
16	13	3			
75	69	6			
23	23	0			
193	185	8			
133	131	2			
16	151	1			
6	6	0			
344					
	336	8			
3	3	0			
241	235	6			
65	59	6			
40	38	2			
6	4	2			
60	36	24			
0	0	0			
7	7	0			
23	23	0			
5	5	0			
1,685	1,588	97			

Deaths with				
Fentanyl Analogs Only				
Total	Cause	Present		
2	2	0		
0	0	0		
0	0	0		
5	5	0		
6	6	0		
11	11	0		
2	1	1		
1	1	0		
4	4	0		
2	2	0		
7	7	0		
10	10	0		
3	2	1		
0	0	0		
44	44	0		
0	0	0		
24	24	0		
1	1	0		
7	7	0		
0	0	0		
3	3	0		
0	0	0		
0	0	0		
2	2	0		
1	1	0		
135	133	2		

Deaths with Fentanyl Analogs in Combination with Other Drugs				
Total	Cause	Present		
20	20	0		
4	3	1		
4	3	1		
171	158	13		
77	71	6		
99	93	6		
28	27	1		
15	12	3		
71	65	6		
21	21	0		
186	178	8		
123	121	2		
13	13	0		
6	6	0		
300	292	8		
3	3	0		
217	211	6		
64	58	6		
33	31	2		
6	4	2		
57	33	24		
0	0	0		
7	7	0		
21	21	0		
4	4	0		
1,550	1,455	95		

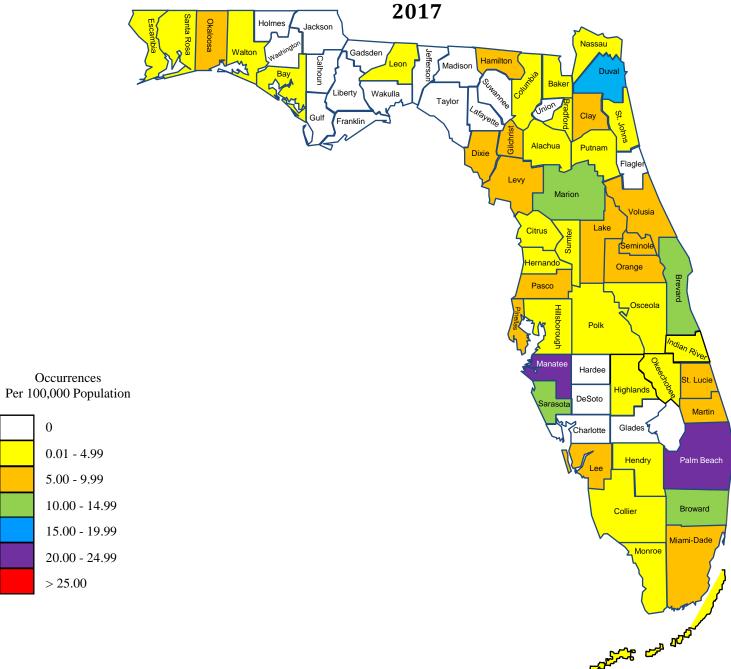
Fentanyl Analog Deaths by Age January – December 2017

Medical Examiner District and Area of Florida			
District	Area of Florida	Total	
1	Pensacola	22	
2	Tallahassee	4	
3	Live Oak	4	
4	Jacksonville	176	
5	Leesburg	83	
6	St. Petersburg	110	
7	Daytona Beach	30	
8	Gainesville	16	
9	Orlando	75	
10	Lakeland	23	
11	Miami	193	
12	Sarasota	133	
13	Tampa	16	
14	Panama City	6	
15	West Palm Beach	344	
16	Florida Keys	3	
17	Ft. Lauderdale	241	
18	Melbourne	65	
19	Ft. Pierce	40	
20	Naples	6	
21	Ft. Myers	60	
22	Port Charlotte	0	
23	St. Augustine	7	
24	Sanford	23	
25	Kissimmee	5	
Statewide Totals 1,685			

	Fentanyl Analogs Caused Death						
Age of Decedent							
Total	<18	18-25	26-34	35-50	>50		
22	0	8	6	6	2		
3	0	0	1	1	1		
3	0	0	1	0	2		
163	0	14	54	64	31		
77	0	11	29	29	8		
104	0	15	30	44	15		
28	0	2	7	18	1		
13	0	0	3	7	3		
69	0	7	21	24	17		
23	0	1	8	9	5		
185	1	25	49	63	47		
131	1	16	40	51	23		
15	1	2	3	5	4		
6	0	1	2	1	2		
336	0	62	122	111	41		
3	0	0	1	2	0		
235	1	24	76	90	44		
59	1	4	25	19	10		
38	0	2	19	10	7		
4	0	0	1	2	1		
36	0	3	15	11	7		
0	0	0	0	0	0		
7	0	2	2	2	1		
23	0	3	11	7	2		
5	0	0	1	3	1		
1,588	5	202	527	579	275		

Fentanyl Analogs Present at Death							
Age of Decedent							
Total	<18	18-25	26-34	35-50	>50		
0	0	0	0	0	0		
1	0	0	0	1	0		
1	0	0	0	1	0		
13	0	2	3	6	2		
6	0	0	3	1	2		
6	0	1	1	2	2		
2	0	0	0	2	0		
3	0	0	1	2	0		
6	0	0	2	3	1		
0	0	0	0	0	0		
8	0	1	2	1	4		
2	0	0	1	0	1		
1	0	0	0	0	1		
0	0	0	0	0	0		
8	0	0	4	2	2		
0	0	0	0	0	0		
6	0	2	3	1	0		
6	0	0	2	3	1		
2	0	0	0	1	1		
2	0	0	0	1	1		
24	0	2	9	9	4		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
0	0	0	0	0	0		
97	0	8	31	36	22		

Fentanyl Analog Deaths by County



Cocaine Deaths

January – December 2017

Medical Examiner District					
and Area of Florida					
District	Area of Florida				
1	Pensacola				
2	Tallahassee				
3	Live Oak				
4	Jacksonville				
5	Leesburg				
6	St. Petersburg				
7	Daytona Beach				
8	Gainesville				
9	Orlando				
10	Lakeland				
11	Miami				
12	Sarasota				
13	Tampa				
14	Panama City				
15	West Palm Beach				
16	Florida Keys				
17	Ft. Lauderdale				
18	Melbourne				
19	Ft. Pierce				
20	Naples				
21	Ft. Myers				
22	Port Charlotte				
23	St. Augustine				
24	Sanford				
25	Kissimmee				
Statewide Totals					

Total Deaths with Cocaine					
Total	Cause	Present			
58	33	25			
15	11	4			
4	2	2			
359	238	121			
109	72	37			
187	113	74			
88	39	49			
43	24	19			
234	161	73			
70	51	19			
401	256	145			
132	96	36			
109	54	55			
15	5	10			
417	279	138			
20	7	13			
321	245	76			
128	97	31			
88	46	42			
32	19	13			
152	95	57			
13	3	10			
39	9	30			
41	26	15			
54	31	23			
3,129	2,012	1,117			

Deaths	Deaths with Cocaine Only				
Total	Cause	Present			
16	11	5			
6	4	2			
0	0	0			
38	23	15			
15	11	4			
27	17	10			
11	8	3			
10	5	5			
33	16	17			
18	15	3			
40	16	24			
17	11	6			
23	6	17			
2	0	2			
45	29	16			
5	2	3			
42	28	14			
13	6	7			
10	7	3			
5	4	1			
15	10	5			
1	1	0			
3	0	3			
7	5	2			
5	2	3			
407	237	170			

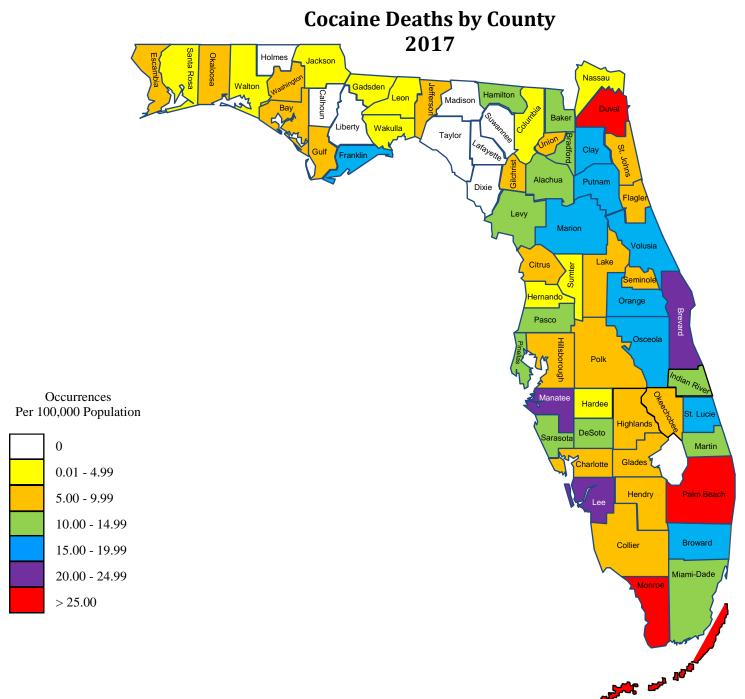
Deaths with Cocaine in Combination with Other Drugs				
Total	Cause	Present		
42	22	20		
9	7	2		
4	2	2		
321	215	106		
94	61	33		
160	96	64		
77	31	46		
33	19	14		
201	145	56		
52	36	16		
361	240	121		
115	85	30		
86	48	38		
13	5	8		
372	250	122		
15	5	10		
279	217	62		
115	91	24		
78	39	39		
27	15	12		
137	85	52		
12	2	10		
36	9	27		
34	21	13		
49	29	20		
2,722	1,775	947		

Cocaine Deaths by Age January – December 2017

Medical Examiner District and Area of Florida				
District	Area of Florida	Total		
1	Pensacola	58		
2	Tallahassee	15		
3	Live Oak	4		
4	Jacksonville	359		
5	Leesburg	109		
6	St. Petersburg	187		
7	Daytona Beach	88		
8	Gainesville	43		
9	Orlando	234		
10	Lakeland	70		
11	Miami	401		
12	Sarasota	132		
13	Tampa	109		
14	Panama City	15		
15	West Palm Beach	417		
16	Florida Keys	20		
17	Ft. Lauderdale	321		
18	Melbourne	128		
19	Ft. Pierce	88		
20	Naples	32		
21	Ft. Myers	152		
22	Port Charlotte	13		
23	St. Augustine	39		
24	Sanford	41		
25	Kissimmee	54		
Stat	ewide Totals	3,129		

Cocaine Caused Death							
Age of Decedent							
Total	<18	18-25	26-34	35-50	>50		
33	0	3	4	12	14		
11	0	0	1	4	6		
2	0	0	1	0	1		
238	3	17	68	79	71		
72	0	4	19	25	24		
113	1	5	23	43	41		
39	0	1	8	19	11		
24	0	2	3	12	7		
161	0	12	43	67	39		
51	0	6	5	16	24		
256	2	30	43	80	101		
96	1	7	23	41	24		
54	0	2	7	20	25		
5	0	1	0	2	2		
279	0	31	77	106	65		
7	0	0	1	3	3		
245	0	31	59	91	64		
97	2	5	27	36	27		
46	0	1	14	13	18		
19	0	3	3	8	5		
95	0	5	33	36	21		
3	0	0	0	2	1		
9	0	2	4	0	3		
26	0	0	12	5	9		
31	0	3	9	17	2		
2,012	9	171	487	737	608		

	Cocaine Present at Death						
Age of Decedent							
Total	<18	18-25	26-34	35-50	>50		
25	0	2	8	11	4		
4	0	0	0	2	2		
2	0	1	0	1	0		
121	0	8	44	34	35		
37	1	3	11	10	12		
74	0	13	16	26	19		
49	0	3	13	21	12		
19	0	3	3	7	6		
73	3	8	12	28	22		
19	0	1	5	8	5		
145	1	19	32	45	48		
36	0	3	9	17	7		
55	1	6	9	22	17		
10	0	3	2	3	2		
138	2	21	34	48	33		
13	0	0	6	4	3		
76	1	11	16	32	16		
31	2	3	8	10	8		
42	0	4	11	9	18		
13	0	3	6	3	1		
57	0	10	17	14	16		
10	0	0	4	2	4		
30	0	3	7	12	8		
15	0	4	2	8	1		
23	0	4	7	8	4		
1,117	11	136	282	385	303		



Cocaine Related Deaths by Medical Examiner District

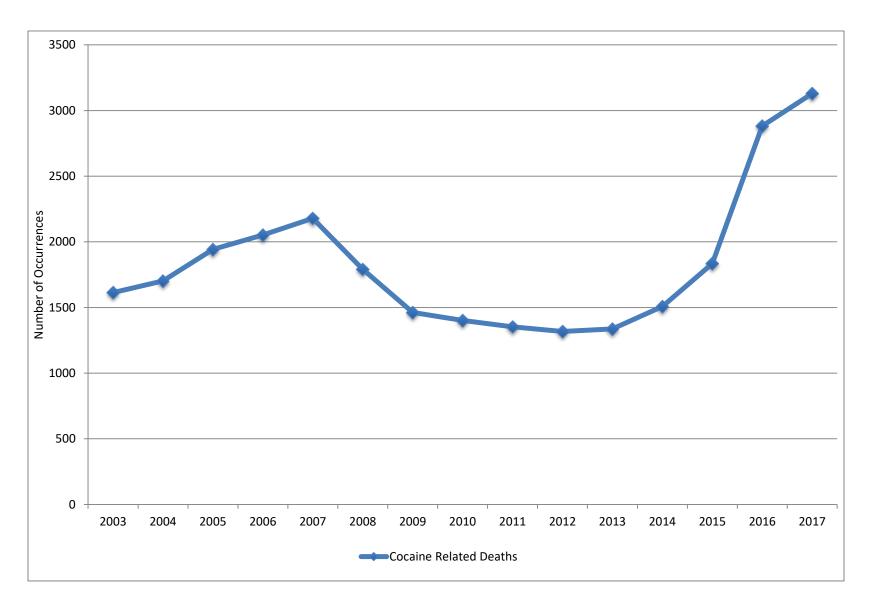
(Present and Cause) 2003 to 2017

District	Area of Florida	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	Pensacola	46	59	69	78	76	56	33	36	34	34	31	56	80	57	58
2	Tallahassee	43	38	58	51	40	27	30	25	36	25	23	20	18	32	15
3	Live Oak	13	22	19	16	10	13	16	9	8	13	10	6	5	10	4
4	Jacksonville	184	205	195	246	248	165	125	115	113	119	119	107	146	266	359
5	Leesburg	56	69	60	21	45	67	56	52	48	46	57	62	54	128	109
6	St. Petersburg	116	150	138	185	173	154	139	134	112	125	100	98	101	157	187
7	Daytona Beach	42	43	77	64	84	51	58	44	43	36	37	34	37	51	88
8	Gainesville	45	43	48	47	42	32	39	39	34	30	29	30	31	41	43
9	Orlando	124	136	165	178	190	179	145	128	124	120	137	181	203	230	234
10	Lakeland	43	46	75	53	41	40	35	42	29	27	37	33	33	53	70
11	Miami	189	160	162	182	281	201	155	198	184	198	226	234	289	439	401
12	Sarasota	83	69	83	106	105	75	59	57	54	60	60	84	134	147	132
13	Tampa	81	108	115	130	158	146	54	83	96	59	74	65	84	108	109
14	Panama City	31	22	24	32	31	17	20	9	9	10	11	13	15	5	15
15	West Palm Beach	147	151	197	191	168	143	126	106	91	87	105	143	173	405	417
16	Florida Keys	11	10	18	16	27	15	14	11	7	13	4	6	13	20	20
17	Ft. Lauderdale	138	120	136	150	157	146	135	127	115	129	102	99	152	328	321
18	Melbourne	66	62	84	80	62	68	59	49	38	52	53	60	86	103	128
19	Ft. Pierce	33	43	58	45	46	47	35	20	40	24	34	50	49	71	88
20	Naples	15	21	24	34	29	15	21	13	23	16	10	29	23	40	32
21	Ft. Myers	68	84	78	96	79	67	48	53	73	56	51	63	71	99	152
22	Port Charlotte	3	10	14	14	19	14	9	5	7	9	2	10	12	9	13
23	St. Augustine	24	20	24	17	33	27	19	23	15	11	11	1	9	23	39
24	Sanford	13	11	22	20	35	26	32	24	20	19	14	24	16	37	41
25	Kissimmee														23	54
Sta	tewide Total	1,614	1,702	1,943	2,052	2,179	1,791	1,462	1,402	1,353	1,318	1,337	1,508	1,834	2,882	3,129

Prior to 2016, District 9 included Orange and Osceola counties. Both counties enacted Home Rule authority in 2016 and District 9 was split into two districts, with Orange County staying District 9 and Osceola County becoming District 25.

Historical Overview of Cocaine Occurrences

(Present and Cause) 2003 to 2017



Heroin Deaths

January - December 2017

Medical Examiner District and Area of Florida				
District	Area of Florida			
1	Pensacola			
2	Tallahassee			
3	Live Oak			
4	Jacksonville			
5	Leesburg			
6	St. Petersburg			
7	Daytona Beach			
8	Gainesville			
9	Orlando			
10	Lakeland			
11	Miami			
12	Sarasota			
13	Tampa			
14	Panama City			
15	West Palm Beach			
16	Florida Keys			
17	Ft. Lauderdale			
18	Melbourne			
19	Ft. Pierce			
20	Naples			
21	Ft. Myers			
22	Port Charlotte			
23	St. Augustine			
24	Sanford			
25	Kissimmee			
Statewide Totals				

Total Deaths with Heroin					
Total	Cause	Present			
30	24	6			
2	1	1			
2	2	0			
98	93	5			
34	33	1			
22	20	2			
37	30	7			
4	4	0			
59	56	3			
10	10	0			
97	95	2			
22	15	2 7 7			
75	68	7			
4	4	0			
215	177	38			
4	2	2			
186	163	23			
25	23	2 2 1			
13	11	2			
15	14	1			
34	34	0			
1	1	0			
14	12	2			
33	33	0			
21	19	2			
1.057	944	113			

Deaths with Heroin Only					
Total	Cause	Present			
0	0	0			
0	0	0			
0	0	0			
1	1	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0			
3	3	0			
0	0	0			
4	4	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0			
0	0	0			
1	1	0			
0	0	0			
0	0	0			
9	9	0			

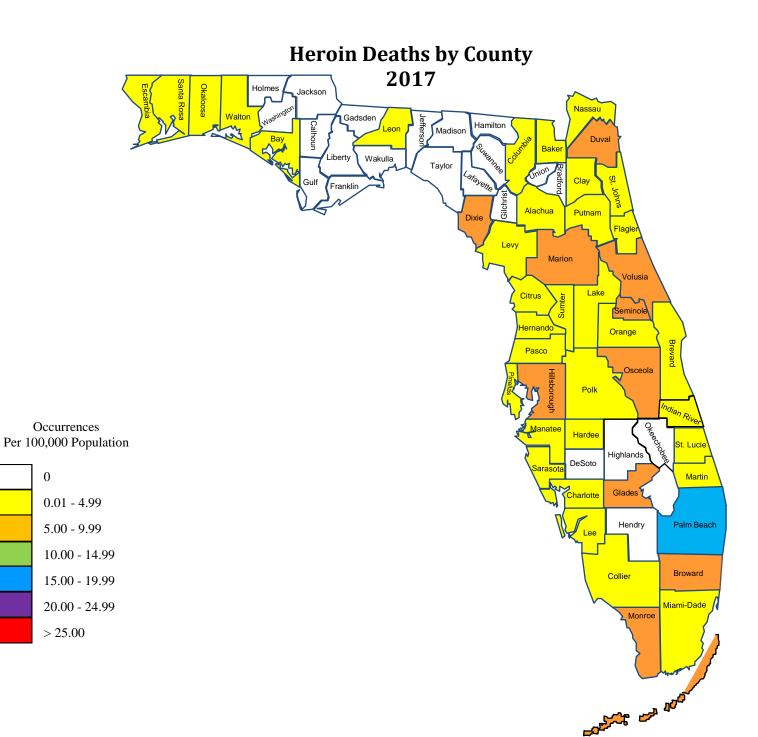
Deaths with Heroin in Combination with Other Drugs				
Total	Cause	Present		
30	24	6		
2	1	1		
2	2	0		
97	92	5		
34	33	1		
22	20	2 7		
37	30	7		
4	4	0		
59	56	3		
10	10	0		
97	95	2		
22	15	7		
75	68	7		
4	4	0		
212	174	38		
4	2	2		
182	159	23		
25	23	2		
13	11	2		
15	14	1		
34	34	0		
1	1	0		
13	11	2		
33	33	0		
21	19	2		
1,048	935	113		

Heroin Deaths by Age January – December 2017

Medical Examiner District and Area of Florida				
District	Area of Florida	Total		
1	Pensacola	30		
2	Tallahassee	2		
3	Live Oak	2		
4	Jacksonville	98		
5	Leesburg	34		
6	St. Petersburg	22		
7	Daytona Beach	37		
8	Gainesville	4		
9	Orlando	59		
10	Lakeland	10		
11	Miami	97		
12	Sarasota	22		
13	Tampa	75		
14	Panama City	4		
15	West Palm Beach	215		
16	Florida Keys	4		
17	Ft. Lauderdale	186		
18	Melbourne	25		
19	Ft. Pierce	13		
20	Naples	15		
21	Ft. Myers	34		
22	Port Charlotte	1		
23	St. Augustine	14		
24	Sanford	33		
25	Kissimmee	21		
Stat	ewide Totals	1,057		

Heroin Caused Death								
Age of Decedent								
Total	<18	18-25	26-34	35-50	>50			
24	0	2	10	11	1			
1	0	0	1	0	0			
2	0	0	0	0	2			
93	0	9	36	31	17			
33	0	1	15	10	7			
20	0	2	10	8	0			
30	0	1	13	13	3			
4	0	0	1	1	2			
56	0	5	14	25	12			
10	0	2	2	5	1			
95	1	14	22	33	25			
15	1	0	4	9	1			
68	1	3	16	29	19			
4	0	1	2	1	0			
177	0	22	62	46	47			
2	0	0	0	2	0			
163	0	28	44	61	30			
23	1	0	8	9	5			
11	0	2	4	2	3			
14	0	1	4	6	3			
34	0	6	12	7	9			
1	0	0	1	0	0			
12	0	1	3	5	3			
33	0	2	12	13	6			
19	0	2	8	9	0			
944	4	104	304	336	196			

Heroin Present at Death								
Age of Decedent								
Total	<18	18-25	26-34	35-50	>50			
6	0	1	2	1	2			
1	0	0	0	1	0			
0	0	0	0	0	0			
5	0	0	3	0	2			
1	0	0	0	1	0			
2	0	0	1	1	0			
7	0	1	2	2	2			
0	0	0	0	0	0			
3	0	0	0	0	3			
0	0	0	0	0	0			
2	0	0	1	0	1			
7	0	1	2	2	2			
7	0	0	2	3	2			
0	0	0	0	0	0			
38	0	11	10	14	3			
2	0	0	0	1	1			
23	0	2	12	8	1			
2	0	0	0	1	1			
2	0	0	0	1	1			
1	0	0	1	0	0			
0	0	0	0	0	0			
0	0	0	0	0	0			
2	0	0	1	0	1			
0	0	0	0	0	0			
2	0	0	0	1	1			
113	0	16	37	37	23			



0

Heroin Related Deaths by Medical Examiner District

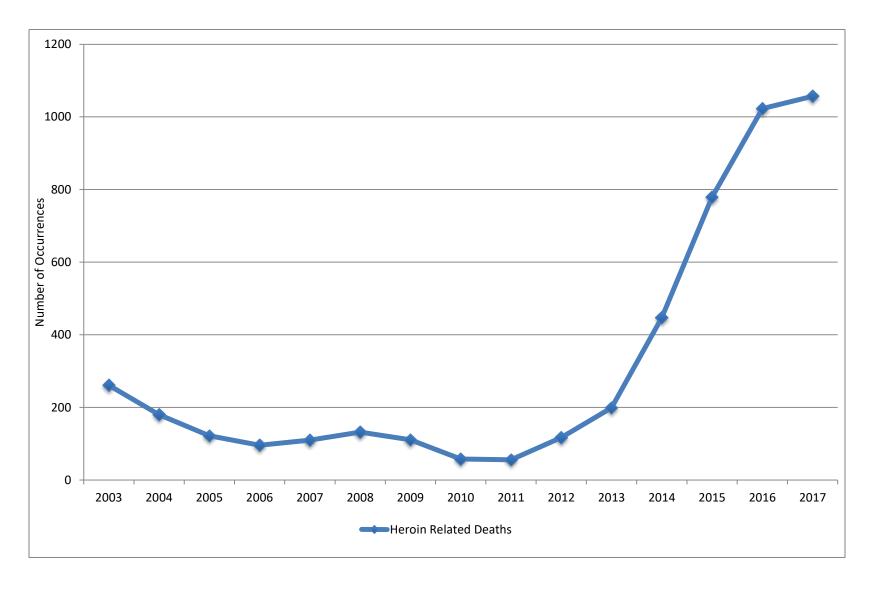
(Present and Cause) 2003 to 2017

District	Area of Florida	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1	Pensacola	0	0	0	1	0	1	2	0	0	1	3	12	28	34	30
2	Tallahassee	1	0	0	0	0	0	0	0	1	0	1	2	0	1	2
3	Live Oak	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
4	Jacksonville	7	5	5	4	8	3	4	1	3	14	15	16	45	81	98
5	Leesburg	2	1	0	0	0	5	1	0	1	3	2	16	8	40	34
6	St. Petersburg	23	14	13	7	12	5	9	3	1	1	4	7	14	18	22
7	Daytona Beach	6	4	2	1	2	0	3	1	0	1	3	4	20	21	37
8	Gainesville	0	0	0	0	0	0	0	0	0	2	1	2	3	2	4
9	Orlando	38	22	15	7	16	16	24	10	18	26	41	83	108	68	59
10	Lakeland	0	3	2	2	0	0	2	1	0	1	4	7	10	11	10
11	Miami	32	18	22	20	26	38	30	26	15	33	40	60	92	139	97
12	Sarasota	20	15	9	14	4	19	4	2	2	8	19	55	68	32	22
13	Tampa	19	14	6	7	11	5	2	1	2	2	3	22	35	52	75
14	Panama City	0	0	0	0	1	0	0	1	0	0	2	2	4	8	4
15	West Palm Beach	28	29	19	8	10	7	7	4	6	6	20	51	165	205	215
16	Florida Keys	0	1	0	1	0	1	1	0	0	1	1	0	1	7	4
17	Ft. Lauderdale	49	35	17	13	4	17	8	5	3	9	11	28	80	180	186
18	Melbourne	10	3	2	1	1	1	2	0	0	0	2	7	12	21	25
19	Ft. Pierce	3	3	1	3	3	3	1	1	1	2	3	7	8	7	13
20	Naples	3	4	1	4	1	1	0	0	0	0	2	14	11	15	15
21	Ft. Myers	13	4	1	2	4	7	9	0	1	4	12	30	43	30	34
22	Port Charlotte	0	1	3	1	0	0	1	0	0	1	1	3	2	3	1
23	St. Augustine	0	0	0	0	0	0	0	1	0	1	1	1	2	6	14
24	Sanford	7	4	4	0	7	3	1	1	2	1	7	18	19	27	33
25	Kissimmee														15	21
State	wide Totals	261	180	122	96	110	132	111	58	56	117	199	447	779	1,023	1,057

Prior to 2016, District 9 included Orange and Osceola counties. Both counties enacted Home Rule authority in 2016 and District 9 was split into two districts, with Orange County staying District 9 and Osceola County becoming District 25.

Historical Overview of Heroin Occurrences

(Present and Cause) 2003 to 2017



Methamphetamine Deaths

January – December 2017

	Medical Examiner District and Area of Florida			
District	Area of Florida			
1	Pensacola			
2	Tallahassee			
3	Live Oak			
4	Jacksonville			
5	Leesburg			
6	St. Petersburg			
7	Daytona Beach			
8	Gainesville			
9	Orlando			
10	Lakeland			
11	Miami			
12	Sarasota			
13	Tampa			
14	Panama City			
15	West Palm Beach			
16	Florida Keys			
17	Ft. Lauderdale			
18	Melbourne			
19	Ft. Pierce			
20	Naples			
21	Ft. Myers			
22	Port Charlotte			
23	St. Augustine			
24	Sanford			
25	Kissimmee			
Sta	Statewide Totals			

Total Deaths with Methamphetamine									
	Total Cause Present								
60	32	28							
16	4	12							
6	2	4							
93	37	56							
101	57	44							
62	40	22							
29	13	16							
9	5	4							
38	19	19							
68	50	18							
31	18	13							
48	35	13							
63	29	34							
40	18	22							
29	11	18							
3	3	0							
19	17	2							
49	31	18							
9	1	8							
9	4	5							
34	20	14							
8	3	5							
12	4	8							
11	4	7							
11	7	4							
858	464	394							

Deaths with						
Methamphetamine Only						
Total	Cause	Present				
4	3	1				
0	0	0				
0	0	0				
0	0	0				
9	4	5				
4	0	4				
0	0	0				
0	0	0				
1	1	0				
5	4	1				
1	0	1				
2	2	0				
12	2	10				
1	1	0				
0	0	0				
0	0	0				
1	1	0				
1	1	0				
0	0	0				
0	0	0				
0	0	0				
0	0	0				
0	0	0				
0	0	0				
2	1	1				
43 20 23						

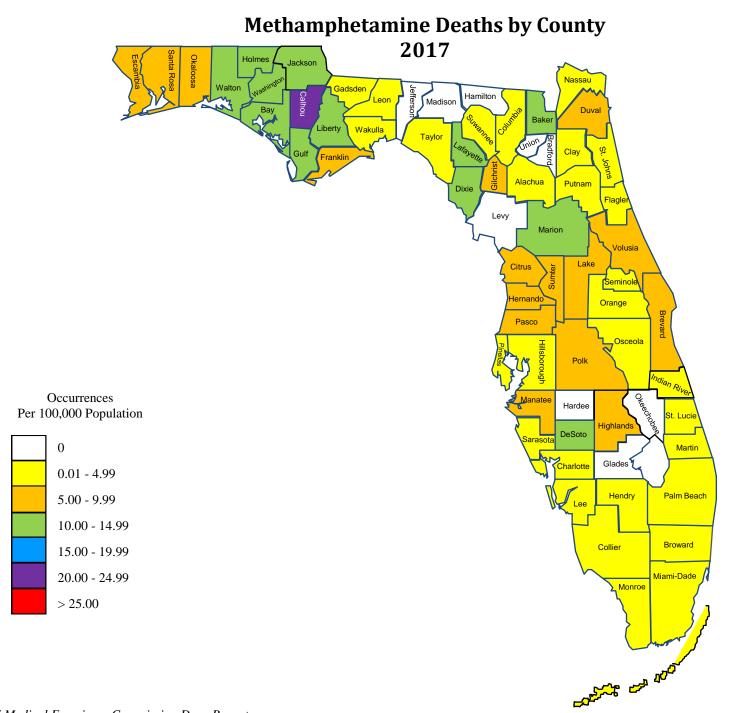
Deaths with Methamphetamine in Combination with Other Drugs					
Total	Cause	Present			
56	29	27			
16	4	12			
6	2	4			
93	37	56			
92	53	39			
58	40	18			
29	13	16			
9	5	4			
37	18	19			
63	46	17			
30	18	12			
46	33	13			
51	27	24			
39	17	22			
29	11	18			
3	3	0			
18	16	2			
48	30	18			
9	1	8			
9	4	5			
34	20	14			
8	3	5			
12	4	8			
11	4	7			
9	6	3			
815	444	371			

Methamphetamine Deaths by Age January – December 2017

Medical Examiner District and Area of Florida				
District	Area of Florida	Total		
1	Pensacola	60		
2	Tallahassee	16		
3	Live Oak	6		
4	Jacksonville	93		
5	Leesburg	101		
6	St. Petersburg	62		
7	Daytona Beach	29		
8	Gainesville	9		
9	Orlando	38		
10	Lakeland	68		
11	Miami	31		
12	Sarasota	48		
13	Tampa	63		
14	Panama City	40		
15	West Palm Beach	29		
16	Florida Keys	3		
17	Ft. Lauderdale	19		
18	Melbourne	49		
19	Ft. Pierce	9		
20	Naples	9		
21	Ft. Myers	34		
22	Port Charlotte	8		
23	St. Augustine	12		
24	Sanford	11		
25	Kissimmee	11		
Stat	ewide Totals	858		

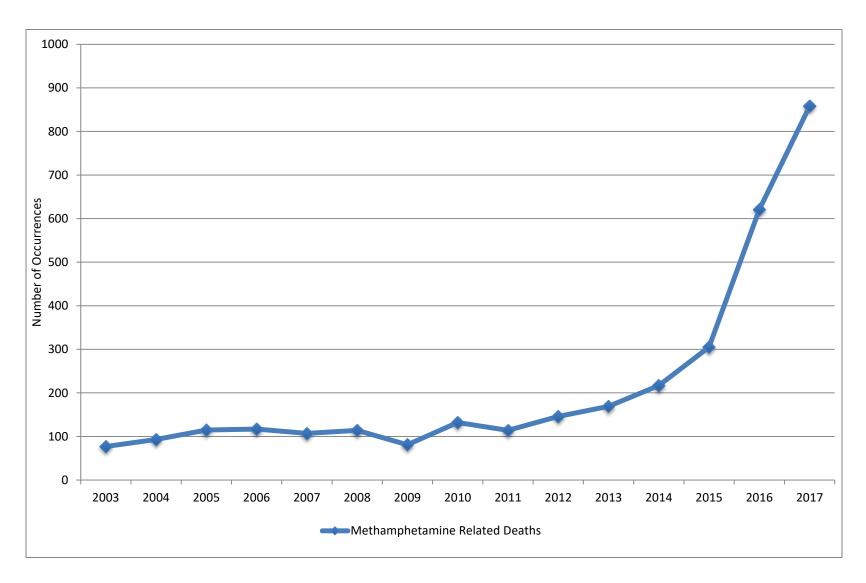
	Methamphetamine Caused Death							
	Age of Decedent							
Total	<18	18-25	26-34	35-50	>50			
32	0	1	14	10	7			
4	0	0	1	2	1			
2	0	1	0	1	0			
37	0	3	14	12	8			
57	1	4	12	21	19			
40	0	5	10	16	9			
13	0	0	4	8	1			
5	0	0	1	3	1			
19	0	2	7	4	6			
50	2	3	9	15	21			
18	0	0	7	6	5			
35	0	5	11	14	5			
29	0	3	4	12	10			
18	0	2	3	11	2			
11	0	1	5	4	1			
3	0	0	1	1	1			
17	0	3	7	2	5			
31	0	3	11	14	3			
1	0	0	1	0	0			
4	0	0	2	2	0			
20	0	1	7	10	2			
3	0	0	0	2	1			
4	0	0	1	2	1			
4	0	1	0	1	2			
7	0	1	1	5	0			
464	3	39	133	178	111			

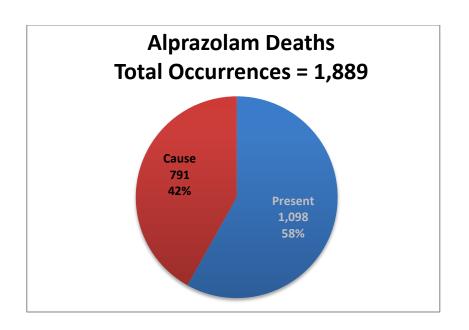
Methamphetamine Present at Death					
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
28	0	2	8	15	3
12	0	1	5	5	1
4	0	1	0	2	1
56	0	9	26	18	3
44	2	5	12	15	10
22	0	3	11	5	3
16	0	0	7	7	2
4	0	0	4	0	0
19	1	1	5	9	3
18	0	3	6	7	2
13	0	2	4	6	1
13	0	4	3	4	2
34	0	3	16	11	4
22	0	5	6	8	3
18	0	3	7	3	5
0	0	0	0	0	0
2	0	1	0	0	1
18	2	2	6	7	1
8	0	2	3	1	2
5	0	1	3	1	0
14	0	3	5	4	2
5	0	0	3	1	1
8	0	0	3	4	1
7	0	1	2	4	0
4	1	0	1	2	0
394	6	52	146	139	51

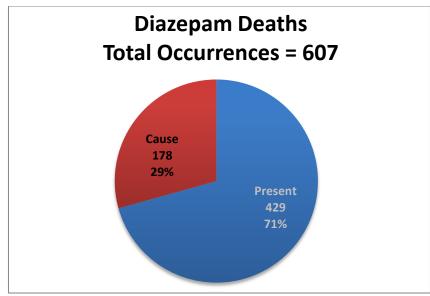


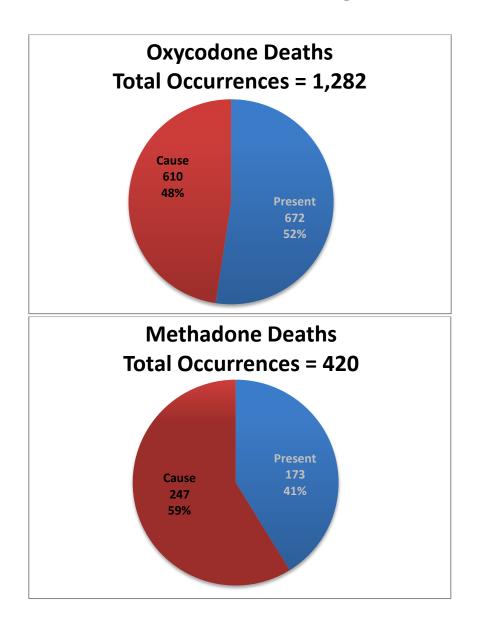
Historical Overview of Methamphetamine Occurrences

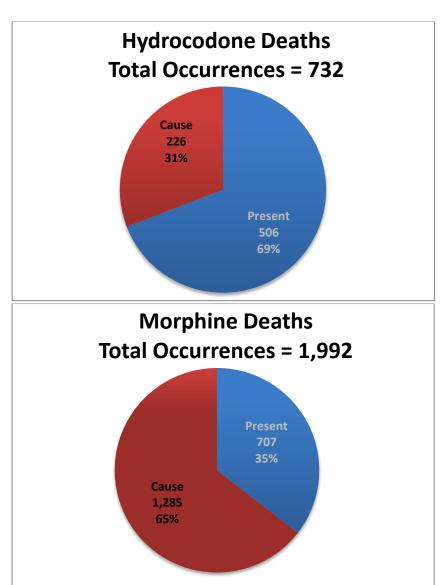
(Present and Cause) 2003 to 2017

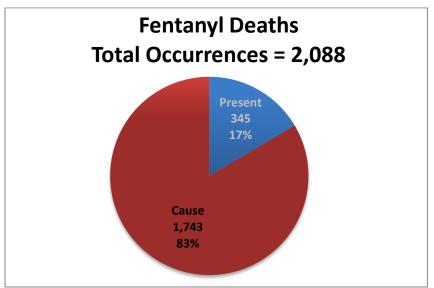


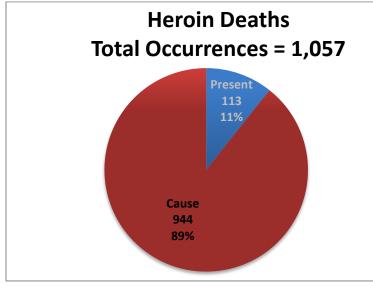


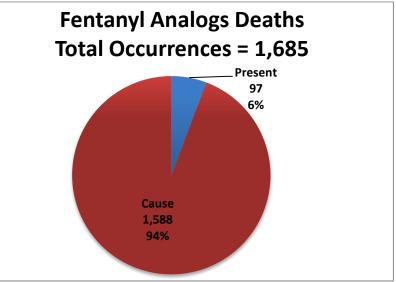


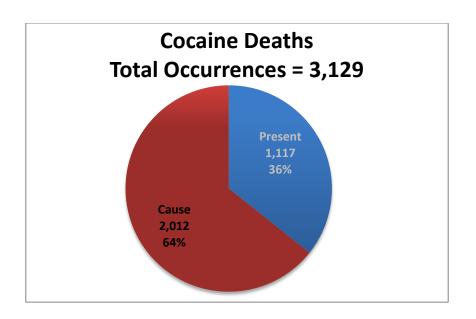


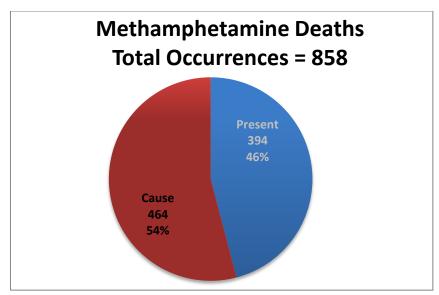


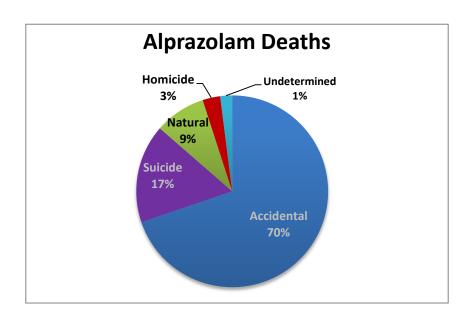


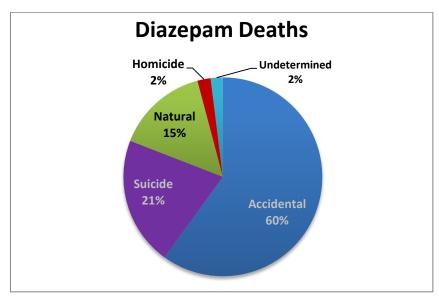


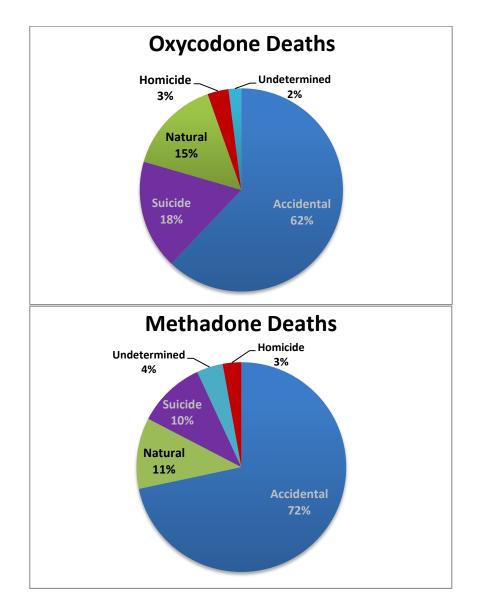


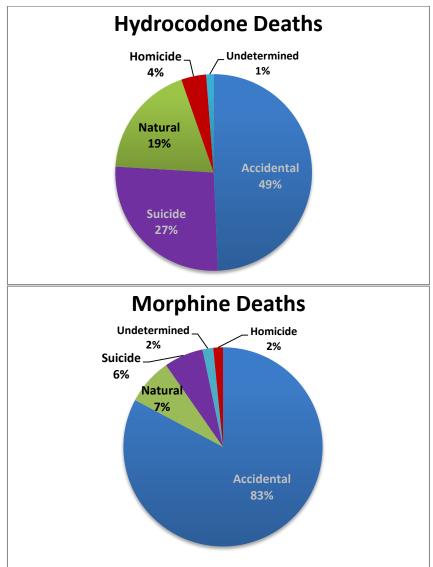




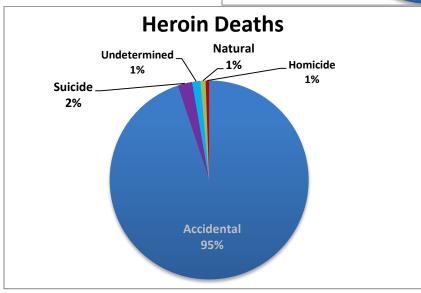


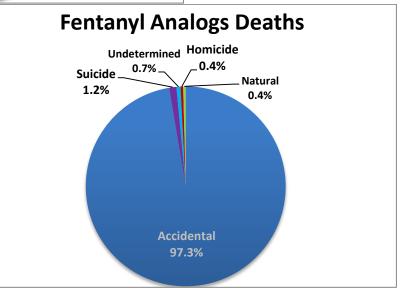


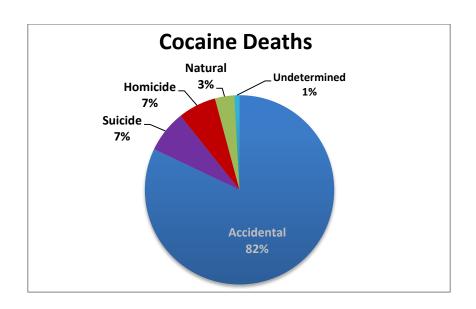


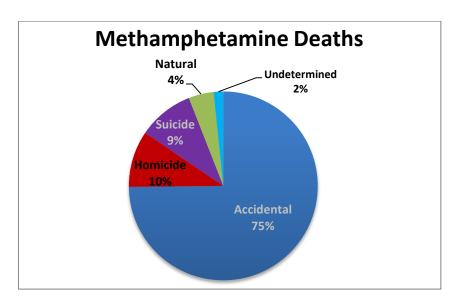












Glossary

4-ANPP (despropionyl fentanyl) – A precursor chemical used in the manufacture of illicit fentanyl. 4-ANPP is also a metabolite of illicit fentanyl and fentanyl-related analogs.

Amphetamines – A group of synthetic psychoactive drugs called central nervous system (CNS) stimulants. The collective group of amphetamines includes amphetamine, dextroamphetamine, and methamphetamine. Methamphetamine is also known as "meth," "crank," "speed," and "tina." Methamphetamine is metabolized to amphetamine, and thus, occurrences of amphetamine may represent methamphetamine ingestion rather than amphetamine ingestion.

Benzodiazepines – A family of sedative-hypnotic drugs indicated for the treatment of stress, anxiety, seizures, and alcohol withdrawal.

Benzodiazepines are often referred to as "minor tranquilizers." Xanax (alprazolam) and Valium (diazepam) are the most commonly prescribed drugs in this drug class. Many benzodiazepines are interconverted to one another, making occurrences of these drugs difficult to interpret. Exceptions include alprazolam, clonazepam, lorazepam, and midazolam.

Buprenorphine – A semi-synthetic opioid known as Buprenex, Suboxone, and Subutex indicated for the treatment of opioid addiction and moderate to severe pain.

Cannabinoids – A series of compounds found in the marijuana plant, the most psychoactive of which is THC, a strong, illicit hallucinogen. Street names for this drug are often associated with a geographic area from which it came but also include generic names like "ganja," "MJ," "ragweed," "reefer," and "grass."

Carisoprodol – Muscle relaxant indicated for the treatment of pain, muscle spasms, and limited mobility. It is often abused in conjunction with analgesics for enhanced euphoric effect. It is marketed as Soma.

Cathinones – A family of drugs containing one or more synthetic chemicals related to cathinone, an amphetamine-like stimulant found naturally in the Khat plant. They are cousins of MDMA and the amphetamine family of drugs, which includes amphetamine and methamphetamine.

Cocaine – An illicit stimulant. Powdered cocaine goes by many street names including "C," "blow," "snow," and "nose candy," while freebase cocaine is mostly commonly known as "crack."

Ethanol – Ethyl alcohol.

Glossary (Continued)

Fentanyl – Synthetic opioid analgesic supplied in transdermal patches and also available for oral, nasal, intravenous, and spinal administration. Fentanyl is also produced illicitly and currently most fentanyl occurrences represent the ingestion of illicit fentanyl rather than pharmaceutically manufactured fentanyl.

Fentanyl Analog – A synthetic opioid structurally similar to fentanyl. Many analogs of fentanyl are pharmacologically more potent than fentanyl. Carfentanil is an analog of fentanyl approved for veterinary use only.

Flunitrazepam (Rohypnol) – Commonly referred to as a "date rape" drug. It is a sedative-hypnotic drug in the benzodiazepine class. It often goes by the street name "roofies."

Gamma-Hydroxybutyric Acid (GHB) – A depressant, also known as a "date rape" drug. GHB often goes by the street name "easy lay," "scoop," "liquid X," "Georgia home boy," and "grievous bodily harm."

Hallucinogenic Phenethylamines/Piperazines – Includes such drugs as MDMA (Ecstasy, a hallucinogen), MDA (a psychedelic), MDEA (a psychedelic hallucinogenic), and piperazine derivatives. Ecstasy has multiple street names including "Molly," "E," "XTC," "love drug," and "clarity." MDMA is often also known by a large variety of embossed logos on the pills such as "Mitsubishis" and "Killer Bees."

Hallucinogenic Tryptamines – Natural tryptamines are commonly available in preparations of dried or brewed mushrooms, while tryptamine derivatives are sold in capsule, tablet, powder, or liquid forms. Street names include "Foxy-Methoxy," "alpha-O," and "5-MEO."

Halogenated Inhalants – Includes, but are not limited to, halogenated hydrocarbons, especially refrigerants such as difluoroethane, which is a component of "compressed air" electronics cleaners; these and similar halogenated substances are typically used illicitly as inhalants.

Heroin – An illicit narcotic derivative. It is a semi-synthetic product of opium. Heroin also has multiple street names including "H," "hombre," and "smack."

Hydrocarbon Inhalants – Includes toluene, benzene, components of gasoline, and other similar hydrocarbons typically used illicitly as inhalants.

Hydrocodone – A narcotic analgesic (pain killer). Vicodin and Lortab are two common drugs containing hydrocodone.

Hydromorphone – A narcotic analgesic (pain killer) used to treat moderate to severe pain. Marketed under the trade name Dilaudid, it is two to eight times more potent than morphine. Commonly used by abusers as a substitute for heroin.

Ketamine – An animal tranquilizer and a chemical relative of PCP. Street names for this drug include "special K," "vitamin K," and "cat valium."

Glossary (Continued)

Meperidine – A synthetic narcotic analgesic (pain killer) sold under the trade name Demerol. It is used for pre-anesthesia and the relief of moderate to severe pain.

Methadone – A synthetic narcotic analgesic (pain killer) commonly associated with heroin detoxification and maintenance programs and is also prescribed to treat severe pain. It has been increasingly prescribed in place of oxycodone for pain management. Dolophine is one form of methadone.

Morphine – A narcotic analgesic (pain killer) used to treat moderate to severe pain. MS (Morphine Sulfate), Kadian, and MS-Contin are the tablet forms; Roxanol is the liquid form. Heroin is metabolized to morphine, and thus, occurrences of morphine may represent heroin ingestion rather than morphine ingestion.

Nitrous Oxide (N2O) – Also known as "laughing gas," is an inhalant (gas) that produces light anesthesia and analgesia. "Whippets" are a common form of nitrous oxide.

Oxycodone – A narcotic analgesic (pain killer). OxyContin is one form of this drug and goes by the street name "OC." Percocet, Percodan, Roxicet, Tylox, and Roxicodone also contain oxycodone.

Oxymorphone – A narcotic analgesic (pain killer) that is often prescribed as Opana, Numorphan, and Numorphone.

Phencyclidine (PCP) – An illicit, dissociative anesthetic/hallucinogen. Common street names for this drug include "angel dust," "ace," "DOA," and "wack."

PCP Analog – A drug structurally related to phencyclidine.

Sympathomimetic Amines – A group of stimulants including phentermine (an appetite suppressant) and other sympathomimetic amines not tracked elsewhere in this report.

Synthetic Cannabinoids – Synthetic cannabinoids are manmade chemicals that are applied (often sprayed) onto plant material to mimic the effect of delta-9-tetrahydrocannabinol (THC), the psychoactive ingredient in the naturally grown marijuana plant (cannabis sativa). Synthetic cannabinoids, commonly known as "synthetic marijuana," "Spice," or "K2," are often sold in retail outlets as "herbal incense" or "potpourri" and are labeled "not for human consumption."

Tramadol – A synthetic narcotic analgesic sold under the trade name Ultram and Ultracet. Indications include the treatment of moderate to severe pain. It is a chemical analogue to codeine. Not currently a scheduled drug.

Glossary (Continued)

U-47700 – A synthetic opioid with a white or light-pink chalky appearance that is found in powder or tablet form. Common street names for this drug include "pink," "pinky," or "U4."

Zolpidem – A prescription medication used for the short-term treatment of insomnia; it is commonly known as Ambien.