

# Drugs Identified in Deceased Persons by Florida Medical Examiners



2018 Annual Report

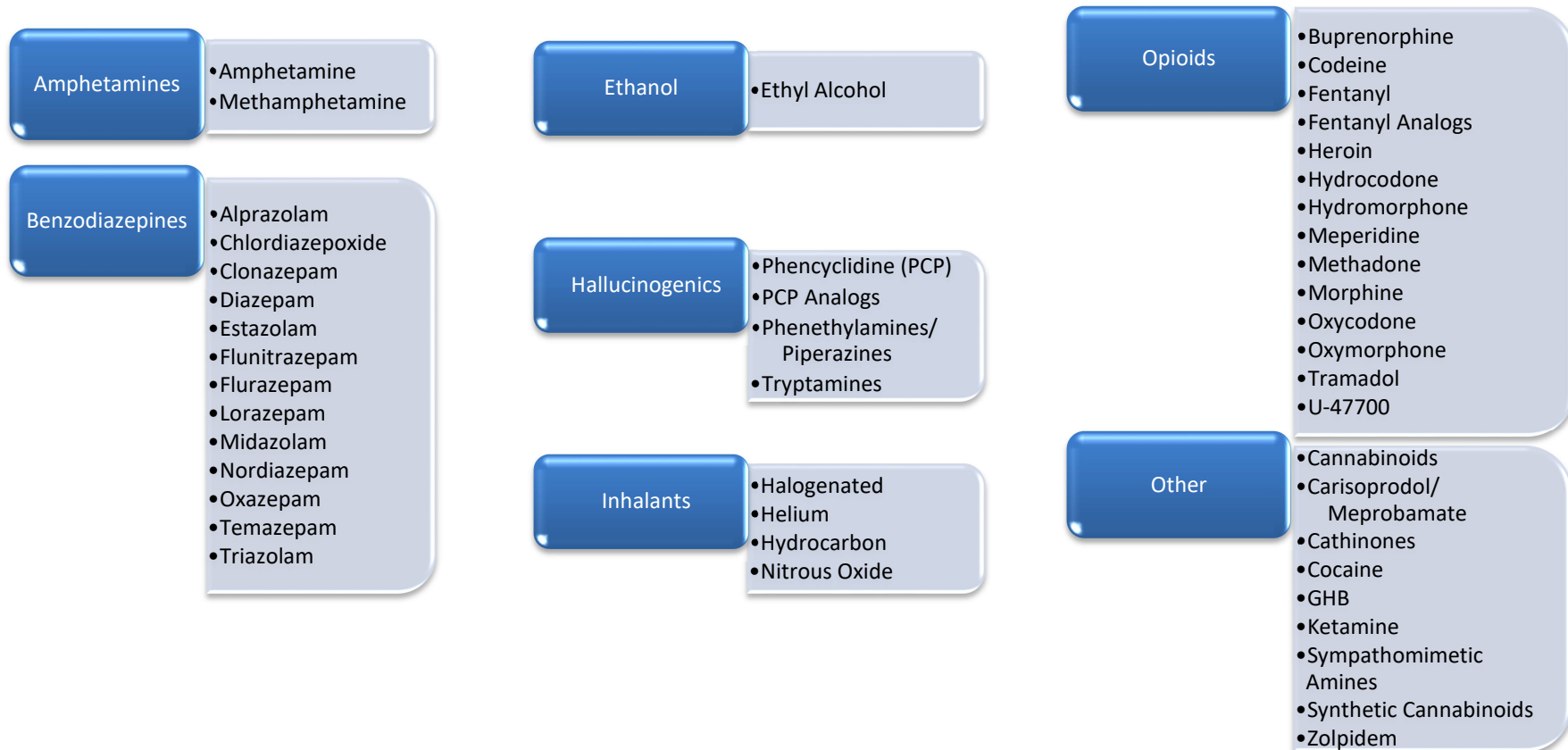
## Data Collection

The State of Florida's Bureau of Vital Statistics reported 208,123 deaths in Florida during 2018. Of the 28,227 deaths investigated by Florida's medical examiners, toxicology results determined that the drugs listed below were present at the time of death in 12,080 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 12,080 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 2017 calendar year data unless otherwise noted.

- ✓ Total drug-related deaths decreased by 3 percent (359 less).
- ✓ 5,576 opioid-related deaths were reported, which is a 10 percent decrease (602 less). The opioids were identified as either the cause of death or merely present in the decedent.
- ✓ 3,727 opioid-caused deaths were reported, which is a 13 percent decrease (553 less).
- ✓ 6,701 (3 percent less) 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.
- ✓ 3,693 (9 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, fentanyl analogs and U-47700) 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 a prescription drug that is also produced illicitly, and currently many fentanyl occurrences represent the ingestion of illicit fentanyl rather than pharmaceutically manufactured fentanyl.
- ✓ The most frequently occurring drugs found in decedents were ethyl alcohol (5,140), benzodiazepines (4,624, including 1,654 alprazolam occurrences), cocaine (2,856), fentanyl (2,703), cannabinoids (2,590), morphine (1,863), oxycodone (1,181), amphetamine (1,103), methamphetamine (1,056), and fentanyl analogs (1,052). 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 fentanyl (2,348), cocaine (1,644), benzodiazepines (1,136, including 664 alprazolam deaths), morphine (1,102), fentanyl analogs (874), ethyl alcohol (866), and heroin (806). Fentanyl (87 percent), heroin (86 percent), fentanyl analogs (83 percent), morphine (59 percent), methamphetamine (59 percent), cocaine (58 percent), and methadone (57 percent) were listed as causing death in more than 50 percent of the deaths in which these drugs were found.
- ✓ Occurrences of heroin decreased by 11 percent (117 less) and deaths caused by heroin decreased by 15 percent (138 less).
- ✓ Occurrences of fentanyl increased by 29.5 percent (615 more) and deaths caused by fentanyl increased by 35 percent (605 more).
- ✓ Occurrences of fentanyl analogs decreased by 38 percent (633 less) and deaths caused by fentanyl analogs decreased by 45 percent (714 less).
- ✓ Occurrences of methadone decreased by 4.5 percent (19 less) and deaths caused by methadone decreased by 8 percent (19 less).
- ✓ Occurrences of hydrocodone decreased by 19 percent (139 less) and deaths caused by hydrocodone decreased by 26 percent (58 less).

## Highlights (continued)

- ✓ Occurrences of oxycodone decreased by 8 percent (101 less) and deaths caused by oxycodone decreased by 12 percent (75 less).
- ✓ Occurrences of buprenorphine increased by 9 percent (14 more) and deaths caused by buprenorphine decreased by 8 percent (3 less).
- ✓ Occurrences of cocaine decreased by 9 percent (273 less) and deaths caused by cocaine decreased by 18 percent (368 less).
- ✓ Alprazolam (Xanax), nordiazepam and diazepam (Valium) dominate the category of benzodiazepines. Occurrences of alprazolam decreased by 12 percent, nordiazepam decreased by 13 percent, and diazepam decreased by 11 percent. Alprazolam, nordiazepam, and diazepam 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 23 percent (198 more) and deaths caused by methamphetamine increased by 33 percent (155 more). Occurrences of amphetamine increased by 29 percent (249 more) and deaths caused by amphetamine increased by 37 percent (95 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 33 percent (60 more) and deaths caused by cathinones increased by 52 percent (52 more). The majority of the cathinones reported were N-Ethylpentylone.
- ✓ Occurrences of synthetic cannabinoids increased by 25 percent (19 more) and deaths caused by synthetic cannabinoids increased by 25 percent (17 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 U-47700 is now included in the Drugs Identified in Deceased Persons Report. A total of 35 occurrences were reported.
- ✓ Reporting of mitragynine was not specifically requested by the Commission in 2018; however, many districts voluntarily reported deaths with mitragynine. A total of 85 occurrences of mitragynine were reported for January – December 2018. Due to reporting deadlines, reporting of mitragynine by all districts will begin with the 2020 Drugs Identified in Deceased Persons reports.

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# Coverage Map

## Florida Medical Examiner Districts

### District 1

Escambia  
Okaloosa  
Santa Rosa  
Walton

### District 2

Franklin  
Gadsden  
Jefferson  
Leon  
Liberty  
Taylor  
Wakulla

### District 3 \*Covered by

Columbia \*4  
Dixie \*8  
Hamilton \*4  
Lafayette \*2  
Madison \*2  
Suwannee \*2

### District 4

Clay  
Duval  
Nassau

### District 5

Citrus  
Hernando  
Lake  
Marion  
Sumter

### District 6

Pasco  
Pinellas

### District 7

Volusia

### District 8

Alachua  
Baker  
Bradford  
Gilchrist  
Levy  
Union

### District 9

Orange

### District 10

Hardee  
Highlands  
Polk

### District 11

Miami-Dade

### District 12

DeSoto  
Manatee  
Sarasota

### District 13

Hillsborough

### District 14

Bay  
Calhoun  
Gulf  
Holmes  
Jackson  
Washington

### District 15

Palm Beach

### District 16

Monroe

### District 17

Broward

### District 18

Brevard

### District 19

Indian River  
Martin  
Okeechobee  
St. Lucie

### District 20

Collier

### District 21

Glades  
Hendry  
Lee

### District 22

Charlotte

### District 23

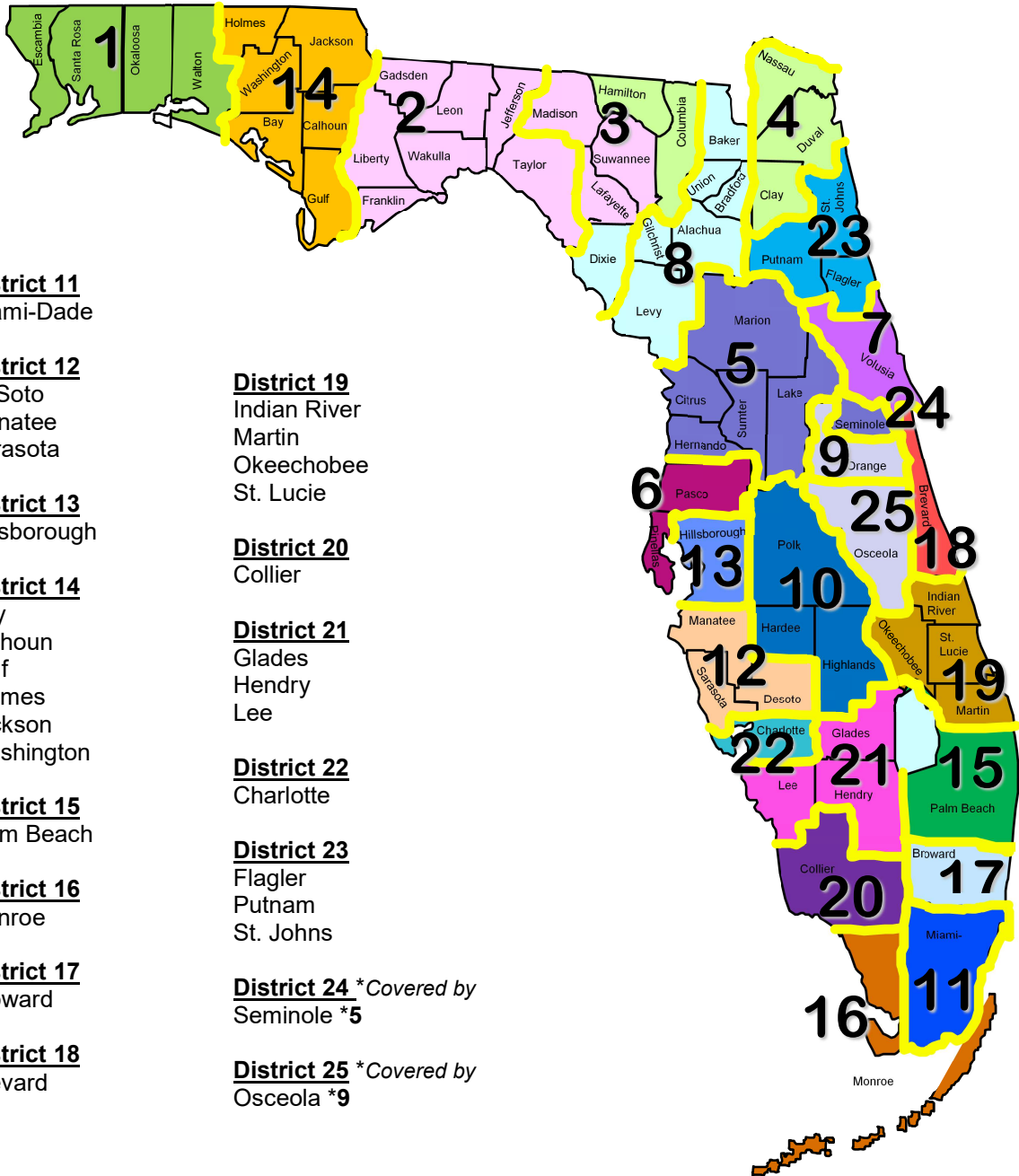
Flagler  
Putnam  
St. Johns

### District 24 \*Covered by

Seminole \*5

### District 25 \*Covered by

Osceola \*9



## Summary of Drug Occurrences in Decedents 2018

	DRUG PRESENT IN BODY	CAUSE	PRESENT	TOTAL OCCURRENCES
Amphetamines	Amphetamine	351	752	1,103
	Methamphetamine	619	437	1,056
Benzodiazepines	Alprazolam	664	990	1,654
	Chlordiazepoxide	14	74	88
	Clonazepam	95	423	518
	Diazepam	142	399	541
	Estazolam	3	6	9
	Flunitrazepam	1	3	4
	Flurazepam	2	0	2
	Lorazepam	30	243	273
	Midazolam	2	192	194
	Nordiazepam	83	473	556
	Oxazepam	26	324	350
	Temazepam	72	355	427
	Triazolam	2	6	8
Ethanol		866	4,274	5,140
Hallucinogenics	Phencyclidine (PCP)	0	0	0
	PCP Analogs	3	0	3
	Phenethylamines/Piperazines	19	27	46
	Tryptamines	6	0	6

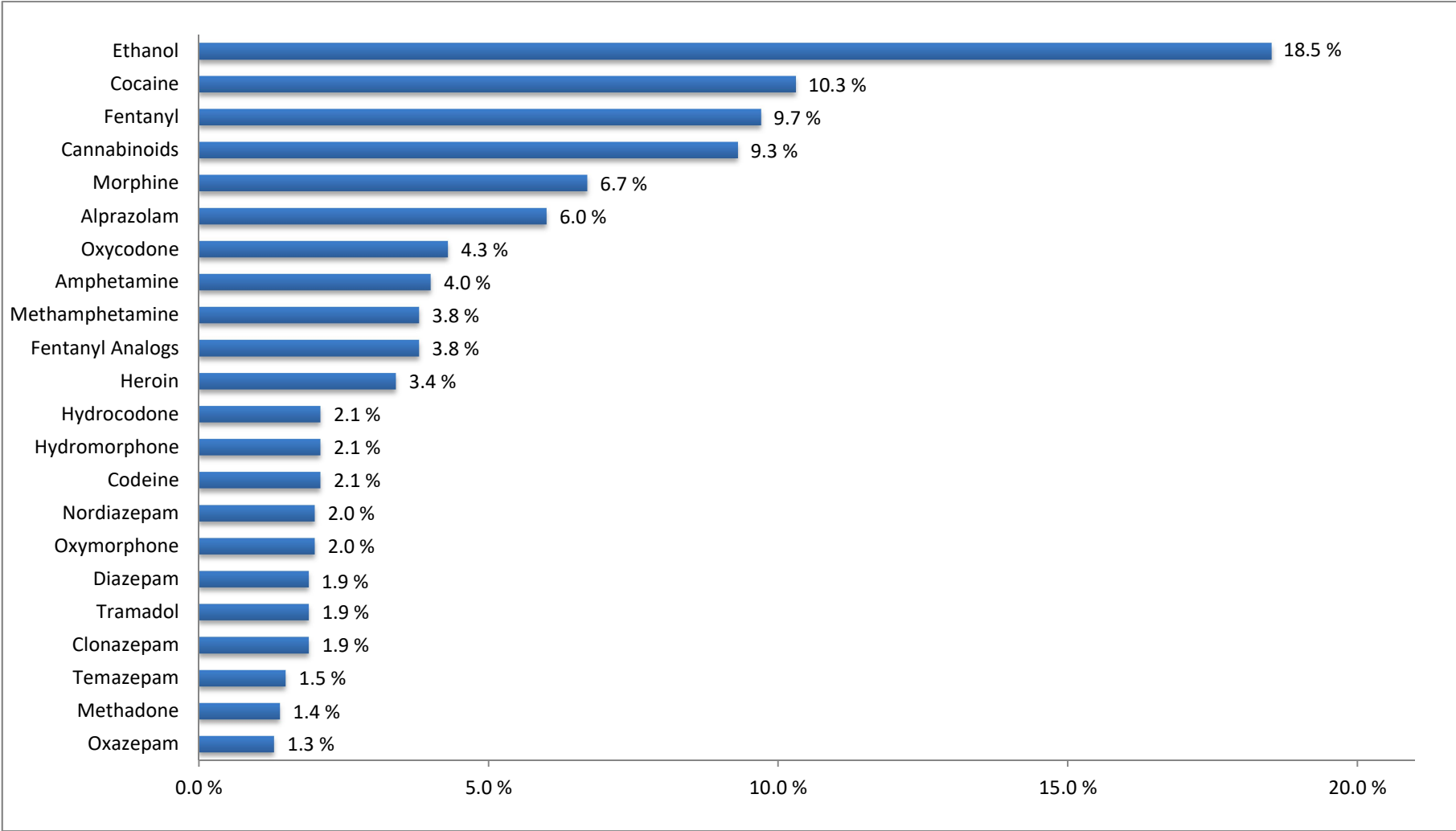


## Summary of Drug Occurrences in Decedents (continued)

	DRUG PRESENT IN BODY	CAUSE	PRESENT	TOTAL OCCURRENCES
Inhalants	Halogenated	41	3	44
	Helium	6	0	6
	Hydrocarbon	2	2	4
	Nitrous Oxide	0	0	0
Opioids	Buprenorphine	35	140	175
	Codeine	85	489	574
	Fentanyl	2,348	355	2,703
	Fentanyl Analogs	874	178	1,052
	Heroin	806	134	940
	Hydrocodone	168	425	593
	Hydromorphone	193	389	582
	Meperidine	6	4	10
	Methadone	228	173	401
	Morphine	1,102	761	1,863
	Oxycodone	535	646	1,181
	Oxymorphone	115	428	543
	Tramadol	137	404	541
	U-47700	31	4	35
Other	Cannabinoids	15	2,575	2,590
	Carisoprodol/Meprobamate	11	68	79
	Cathinones	152	91	243
	Cocaine	1,644	1,212	2,856
	GHB	1	2	3
	Ketamine	8	120	128
	Sympathomimetic Amines	4	37	41
	Synthetic Cannabinoids	86	9	95
Zolpidem	48	133	181	

*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 Decedents<sup>1</sup> January – December 2018



<sup>1</sup>Drugs 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 2017 to 2018

DRUG PRESENT IN BODY		2017	2018	PERCENTAGE CHANGE
<b>Amphetamines</b>	Amphetamine	854	1,103	29.2%
	Methamphetamine	858	1,056	23.1%
<b>Benzodiazepines</b>	Alprazolam	1,889	1,654	-12.4%
	Chlordiazepoxide	97	88	-9.3%
	Clonazepam	543	518	-4.6%
	Diazepam	607	541	-10.9%
	Estazolam	4	9	*
	Flunitrazepam	1	4	*
	Flurazepam	6	2	*
	Lorazepam	302	273	-9.6%
	Midazolam	181	194	7.2%
	Nordiazepam	638	556	-12.9%
	Oxazepam	335	350	4.5%
	Temazepam	457	427	-6.6%
	Triazolam	4	8	*
<b>Ethanol</b>		5,258	5,140	-2.2%
<b>Hallucinogenics</b>	Phencyclidine (PCP)	3	0	*
	PCP Analogs	2	3	*
	Phenethylamines/Piperazines	36	46	27.8%
	Tryptamines	4	6	*

*\*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)

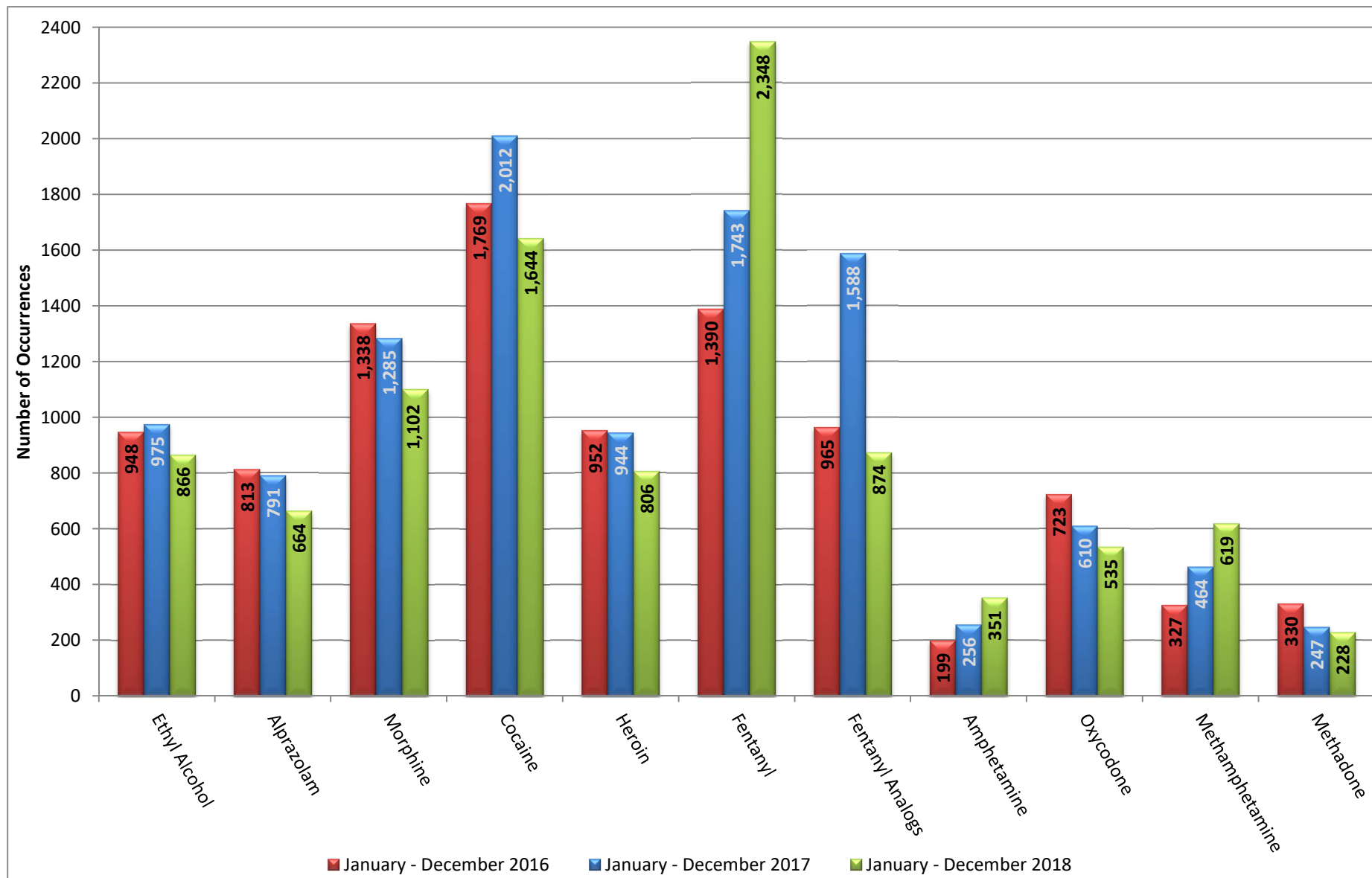
DRUG PRESENT IN BODY		2017	2018	PERCENTAGE CHANGE
<b>Inhalants</b>	Halogenated	54	44	-18.5%
	Helium	12	6	*
	Hydrocarbon	2	4	*
	Nitrous Oxide	0	0	*
<b>Opioids</b>	Buprenorphine	161	175	8.7%
	Codeine	562	574	2.1%
	Fentanyl	2,088	2,703	29.5%
	Fentanyl Analogs	1,685	1,052	-37.6%
	Heroin	1,057	940	-11.1%
	Hydrocodone	732	593	-19.0%
	Hydromorphone	589	582	-1.2%
	Meperidine	20	10	*
	Methadone	420	401	-4.5%
	Morphine	1,992	1,863	-6.5%
	Oxycodone	1,282	1,181	-7.9%
	Oxymorphone	526	543	3.2%
	Tramadol	483	541	12.0%
	U-47700	N/A	35	N/A
<b>Other</b>	Cannabinoids	2,367	2,590	9.4%
	Carisoprodol/Meprobamate	109	79	-27.5%
	Cathinones	183	243	32.8%
	Cocaine	3,129	2,856	-8.7%
	GHB	6	3	*
	Ketamine	114	128	12.3%
	Sympathomimetic Amines	29	41	41.4%
	Synthetic Cannabinoids	76	95	25.0%
	Zolpidem	215	181	-15.8%

\*Due to the small number of occurrences, percent changes were not calculated.

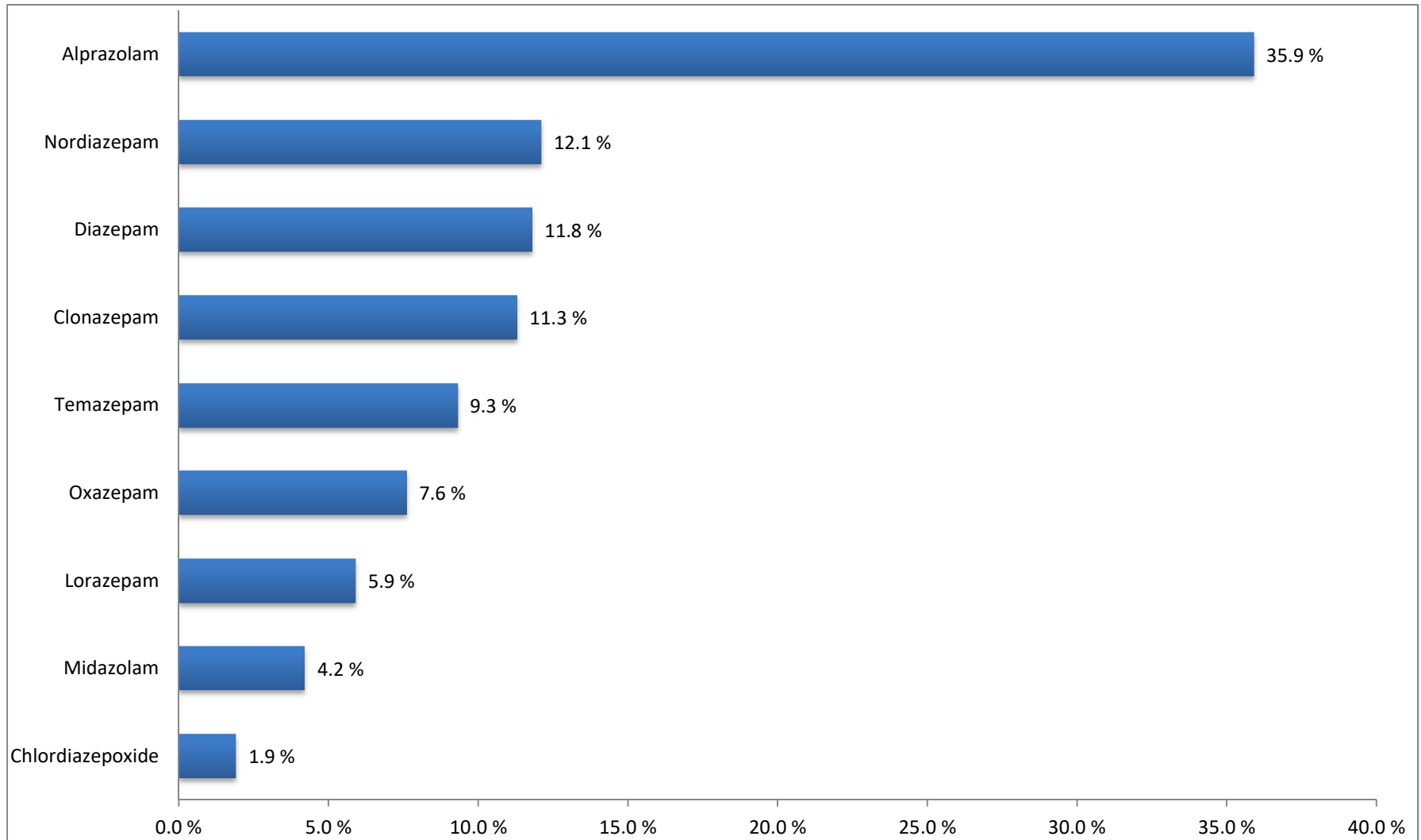
N/A – Drug was not officially tracked during the previous reporting year.

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 Caused Deaths 2016 to 2018



## Frequency of Occurrence of Benzodiazepines January – December 2018



*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 2018

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
<b>Statewide Totals</b>	

Total Deaths with Alprazolam		
Total	Cause	Present
43	27	16
21	8	13
17	7	10
105	40	65
68	14	54
152	79	73
50	24	26
16	5	11
103	34	69
58	24	34
173	74	99
63	31	32
105	52	53
41	9	32
232	65	167
5	3	2
116	86	30
49	19	30
48	9	39
24	5	19
67	18	49
14	1	13
16	6	10
38	16	22
30	8	22
<b>1,654</b>	<b>664</b>	<b>990</b>

Deaths with Alprazolam Only		
Total	Cause	Present
1	1	0
0	0	0
3	0	3
3	1	2
7	0	7
12	1	11
2	0	2
2	0	2
11	1	10
6	0	6
10	1	9
2	0	2
13	0	13
7	1	6
7	0	7
0	0	0
6	0	6
4	0	4
5	2	3
3	0	3
5	0	5
5	0	5
0	0	0
0	0	0
7	1	6
<b>121</b>	<b>9</b>	<b>112</b>

Deaths with Alprazolam in Combination with Other Drugs		
Total	Cause	Present
42	26	16
21	8	13
14	7	7
102	39	63
61	14	47
140	78	62
48	24	24
14	5	9
92	33	59
52	24	28
163	73	90
61	31	30
92	52	40
34	8	26
225	65	160
5	3	2
110	86	24
45	19	26
43	7	36
21	5	16
62	18	44
9	1	8
16	6	10
38	16	22
23	7	16
<b>1,533</b>	<b>655</b>	<b>878</b>

## Alprazolam Deaths by Age

January – December 2018

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	43
2	Tallahassee	21
3	Live Oak	17
4	Jacksonville	105
5	Leesburg	68
6	St. Petersburg	152
7	Daytona Beach	50
8	Gainesville	16
9	Orlando	103
10	Lakeland	58
11	Miami	173
12	Sarasota	63
13	Tampa	105
14	Panama City	41
15	West Palm Beach	232
16	Florida Keys	5
17	Ft. Lauderdale	116
18	Melbourne	49
19	Ft. Pierce	48
20	Naples	24
21	Ft. Myers	67
22	Port Charlotte	14
23	St. Augustine	16
24	Sanford	38
25	Kissimmee	30
<b>Statewide Totals</b>		<b>1,654</b>

Alprazolam Caused Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
27	1	8	6	5	7	
8	0	1	2	3	2	
7	0	0	0	3	4	
40	0	3	10	20	7	
14	0	1	1	4	8	
79	0	3	15	24	37	
24	0	2	9	7	6	
5	0	1	0	2	2	
34	0	8	10	12	4	
24	0	4	6	6	8	
74	0	10	19	25	20	
31	0	2	3	11	15	
52	0	4	11	22	15	
9	0	1	2	4	2	
65	0	6	13	27	19	
3	0	0	0	1	2	
86	2	11	22	26	25	
19	0	1	3	8	7	
9	0	0	0	1	8	
5	0	0	3	1	1	
18	0	4	0	6	8	
1	0	0	0	0	1	
6	0	1	2	1	2	
16	0	4	2	7	3	
8	0	1	1	2	4	
<b>664</b>	<b>3</b>	<b>76</b>	<b>140</b>	<b>228</b>	<b>217</b>	

Alprazolam Present at Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
16	0	2	1	6	7	
13	0	1	4	3	5	
10	0	1	2	2	5	
65	0	4	15	20	26	
54	0	5	13	11	25	
73	0	7	6	28	32	
26	0	4	4	6	12	
11	1	1	1	5	3	
69	0	6	13	21	29	
34	1	4	5	8	16	
99	1	16	18	20	44	
32	0	1	8	8	15	
53	0	6	1	16	30	
32	0	2	5	8	17	
167	0	18	49	54	46	
2	0	0	1	0	1	
30	1	1	5	11	12	
30	0	0	8	7	15	
39	0	2	9	9	19	
19	0	1	0	6	12	
49	0	5	8	18	18	
13	0	1	3	4	5	
10	0	1	3	4	2	
22	0	4	6	7	5	
22	0	1	4	11	6	
<b>990</b>	<b>4</b>	<b>94</b>	<b>192</b>	<b>293</b>	<b>407</b>	





## Diazepam Deaths

January – December 2018

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
<b>Statewide Totals</b>	

Total Deaths with Diazepam		
Total	Cause	Present
21	10	11
2	0	2
6	1	5
37	5	32
36	4	32
64	27	37
26	3	23
7	2	5
33	8	25
11	4	7
53	8	45
21	4	17
22	9	13
7	3	4
35	10	25
2	1	1
31	22	9
31	9	22
32	0	32
17	1	16
18	5	13
5	1	4
6	1	5
12	4	8
6	0	6
<b>541</b>	<b>142</b>	<b>399</b>

Deaths with Diazepam Only		
Total	Cause	Present
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
1	0	1
1	0	1
2	0	2
0	0	0
7	0	7
1	0	1
1	0	1
0	0	0
0	0	0
0	0	0
1	0	1
0	0	0
0	0	0
2	0	2
1	0	1
0	0	0
1	0	1
0	0	0
0	0	0
<b>18</b>	<b>0</b>	<b>18</b>

Deaths with Diazepam in Combination with Other Drugs		
Total	Cause	Present
21	10	11
2	0	2
6	1	5
37	5	32
36	4	32
64	27	37
25	3	22
6	2	4
31	8	23
11	4	7
46	8	38
20	4	16
21	9	12
7	3	4
35	10	25
2	1	1
31	22	9
30	9	21
32	0	32
15	1	14
17	5	12
5	1	4
5	1	4
12	4	8
6	0	6
<b>523</b>	<b>142</b>	<b>381</b>

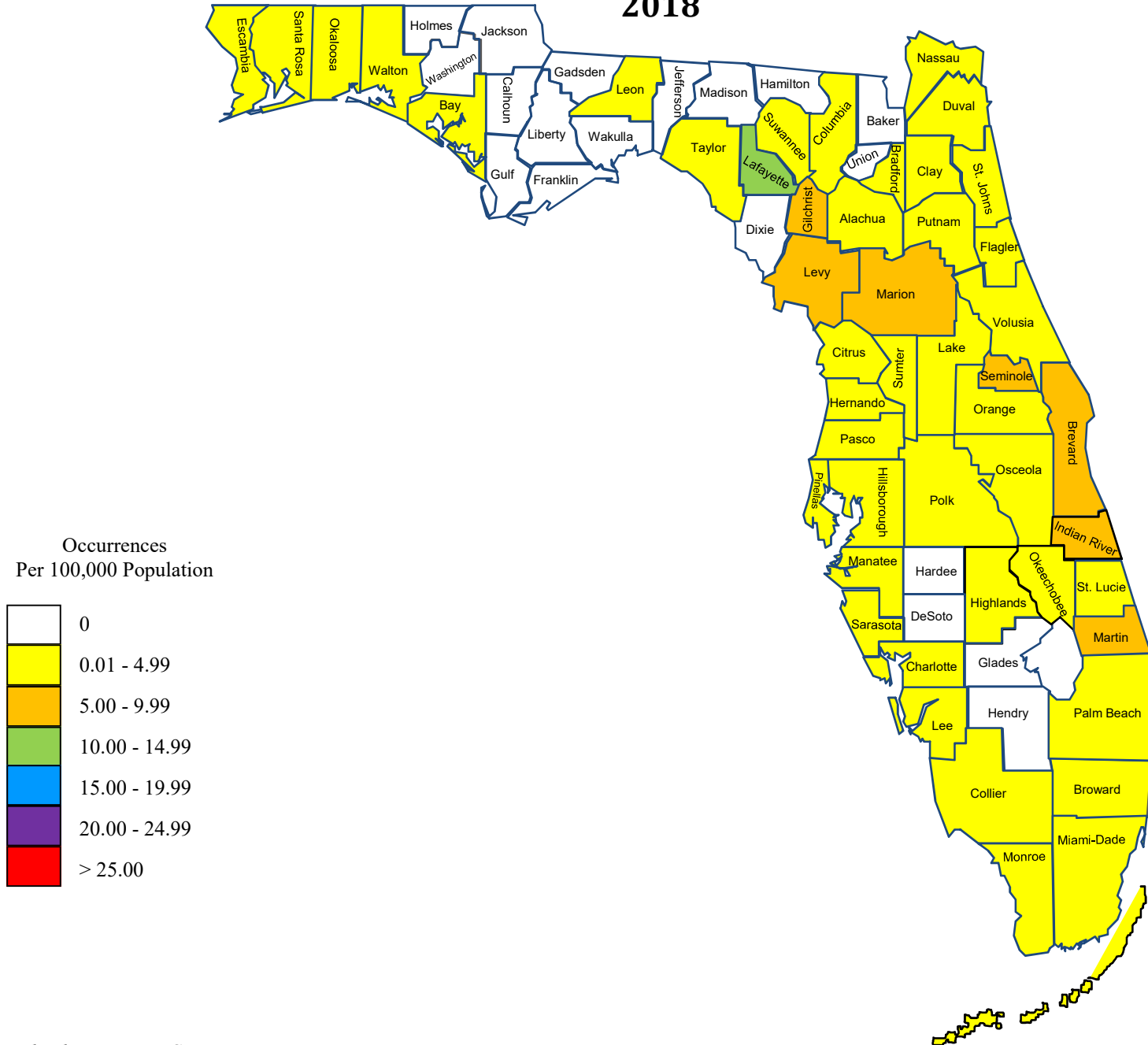
## Diazepam Deaths by Age January – December 2018

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	21
2	Tallahassee	2
3	Live Oak	6
4	Jacksonville	37
5	Leesburg	36
6	St. Petersburg	64
7	Daytona Beach	26
8	Gainesville	7
9	Orlando	33
10	Lakeland	11
11	Miami	53
12	Sarasota	21
13	Tampa	22
14	Panama City	7
15	West Palm Beach	35
16	Florida Keys	2
17	Ft. Lauderdale	31
18	Melbourne	31
19	Ft. Pierce	32
20	Naples	17
21	Ft. Myers	18
22	Port Charlotte	5
23	St. Augustine	6
24	Sanford	12
25	Kissimmee	6
<b>Statewide Totals</b>		<b>541</b>

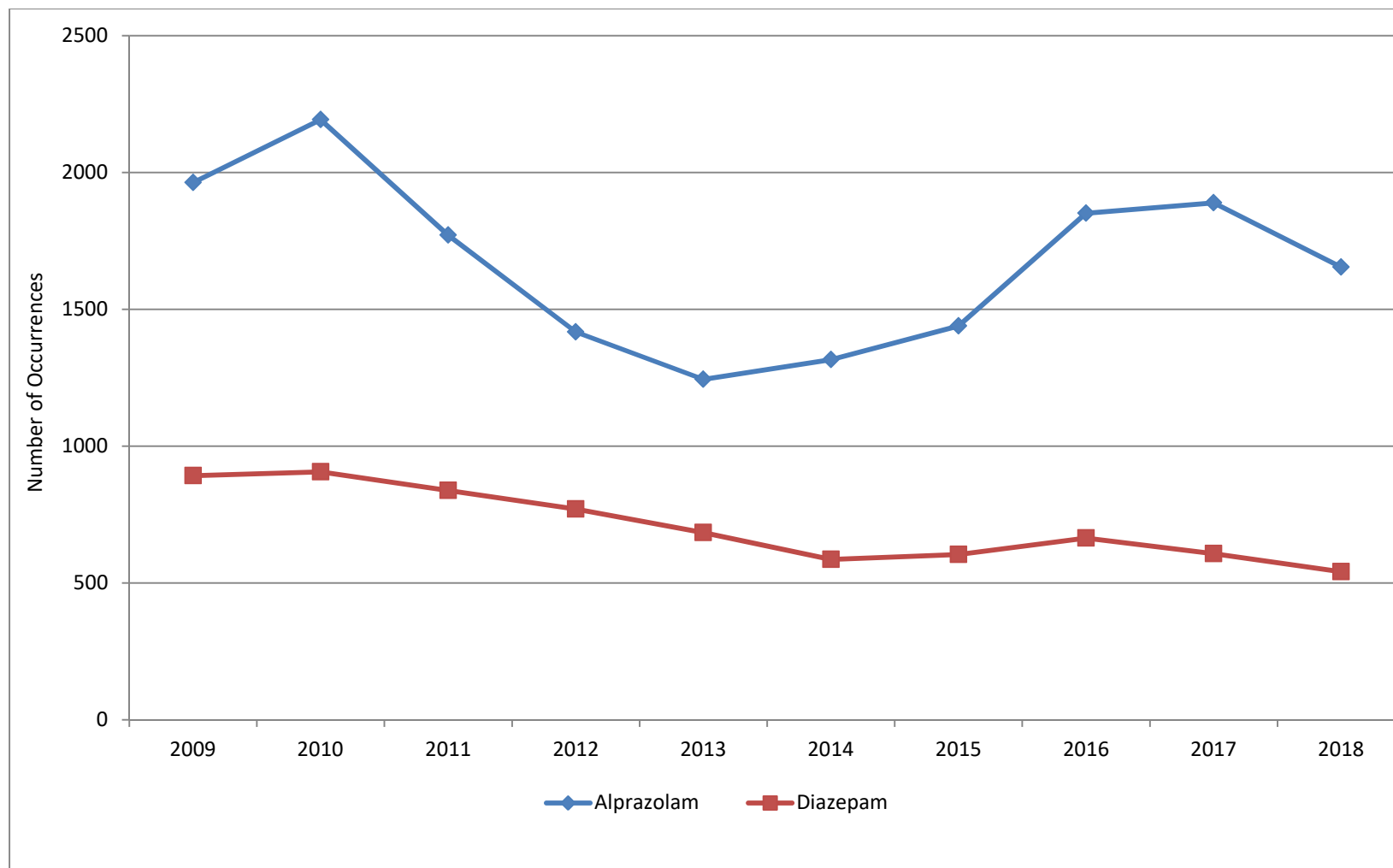
Diazepam Caused Death						
<i>Age of Decedent</i>						
Total	< 18	18-25	26-34	35-50	>50	
10	0	2	2	1	5	
0	0	0	0	0	0	
1	0	0	0	1	0	
5	0	0	0	3	2	
4	0	0	1	2	1	
27	0	1	1	10	15	
3	0	0	0	2	1	
2	0	0	0	1	1	
8	0	1	1	3	3	
4	0	0	1	2	1	
8	1	0	0	2	5	
4	0	0	0	1	3	
9	0	0	4	3	2	
3	0	0	0	2	1	
10	0	0	1	4	5	
1	0	0	0	0	1	
22	0	3	4	6	9	
9	0	1	1	0	7	
0	0	0	0	0	0	
1	0	0	1	0	0	
5	0	0	1	3	1	
1	0	0	0	1	0	
1	0	0	0	0	1	
4	0	1	1	1	1	
0	0	0	0	0	0	
<b>142</b>	<b>1</b>	<b>9</b>	<b>19</b>	<b>48</b>	<b>65</b>	

Diazepam Present at Death						
<i>Age of Decedent</i>						
Total	<18	18-25	26-34	35-50	>50	
11	0	1	1	2	7	
2	0	0	0	1	1	
5	0	0	0	2	3	
32	0	1	4	10	17	
32	1	0	3	11	17	
37	0	0	4	12	21	
23	0	0	3	3	17	
5	0	0	0	2	3	
25	1	3	1	4	16	
7	0	1	0	3	3	
45	0	1	4	10	30	
17	0	1	0	4	12	
13	0	0	1	3	9	
4	0	0	0	2	2	
25	0	1	3	7	14	
1	0	0	0	0	1	
9	0	0	2	3	4	
22	0	0	1	7	14	
32	0	0	1	9	22	
16	0	0	2	3	11	
13	0	1	1	2	9	
4	0	0	0	0	4	
5	0	0	1	1	3	
8	0	0	2	2	4	
6	1	0	0	1	4	
<b>399</b>	<b>3</b>	<b>10</b>	<b>34</b>	<b>104</b>	<b>248</b>	

# Diazepam Deaths by County 2018



## Historical Overview of Alprazolam and Diazepam Occurrences (Present and Cause) 2009 to 2018



## Oxycodone Deaths

January – December 2018

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
<b>Statewide Totals</b>	

Total Deaths with Oxycodone		
Total	Cause	Present
26	16	10
16	3	13
18	6	12
102	39	63
68	35	33
134	76	58
26	10	16
19	6	13
50	17	33
47	33	14
95	39	56
41	27	14
81	32	49
23	5	18
123	41	82
5	5	0
58	30	28
93	47	46
46	24	22
20	7	13
33	15	18
14	0	14
16	6	10
13	8	5
14	8	6
<b>1,181</b>	<b>535</b>	<b>646</b>

Deaths with Oxycodone Only		
Total	Cause	Present
2	2	0
2	0	2
1	0	1
5	0	5
6	2	4
13	4	9
0	0	0
2	0	2
9	1	8
8	4	4
1	0	1
8	3	5
8	1	7
0	0	0
5	1	4
1	1	0
10	2	8
12	2	10
8	1	7
0	0	0
4	0	4
0	0	0
0	0	0
0	0	0
1	1	0
<b>106</b>	<b>25</b>	<b>81</b>

Deaths with Oxycodone in Combination with Other Drugs		
Total	Cause	Present
24	14	10
14	3	11
17	6	11
97	39	58
62	33	29
121	72	49
26	10	16
17	6	11
41	16	25
39	29	10
94	39	55
33	24	9
73	31	42
23	5	18
118	40	78
4	4	0
48	28	20
81	45	36
38	23	15
20	7	13
29	15	14
14	0	14
16	6	10
13	8	5
13	7	6
<b>1,075</b>	<b>510</b>	<b>565</b>

## Oxycodone Deaths by Age

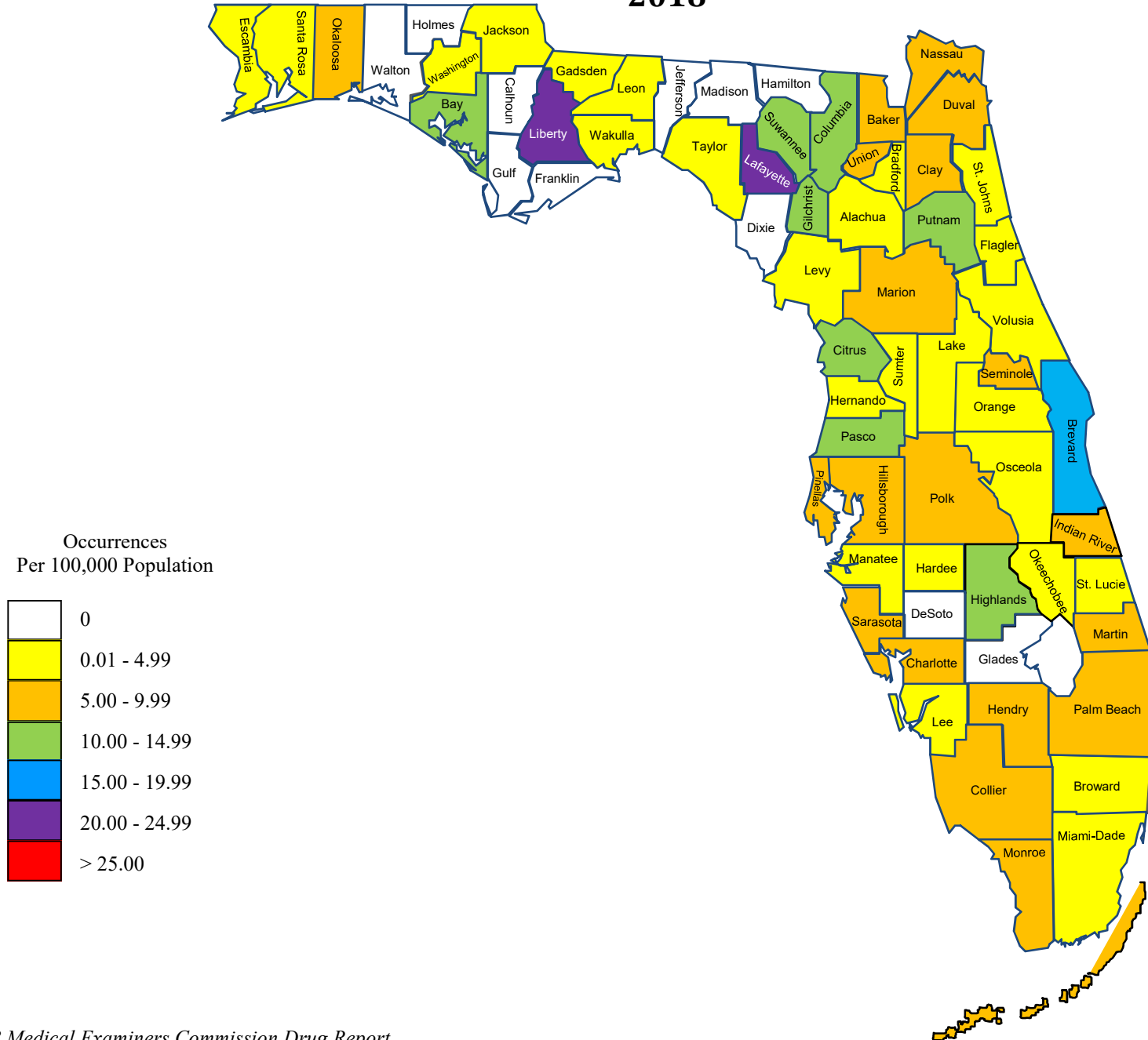
January – December 2018

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	26
2	Tallahassee	16
3	Live Oak	18
4	Jacksonville	102
5	Leesburg	68
6	St. Petersburg	134
7	Daytona Beach	26
8	Gainesville	19
9	Orlando	50
10	Lakeland	47
11	Miami	95
12	Sarasota	41
13	Tampa	81
14	Panama City	23
15	West Palm Beach	123
16	Florida Keys	5
17	Ft. Lauderdale	58
18	Melbourne	93
19	Ft. Pierce	46
20	Naples	20
21	Ft. Myers	33
22	Port Charlotte	14
23	St. Augustine	16
24	Sanford	13
25	Kissimmee	14
<b>Statewide Totals</b>		<b>1,181</b>

Oxycodone Caused Death						
Age of Decedent						
Total	< 18	18-25	26-34	35-50	>50	
16	0	1	1	2	12	
3	0	0	0	2	1	
6	0	0	1	2	3	
39	0	3	4	17	15	
35	0	2	5	15	13	
76	0	0	12	19	45	
10	0	0	3	3	4	
6	0	0	0	4	2	
17	0	1	3	8	5	
33	0	2	3	12	16	
39	1	6	6	13	13	
27	0	2	3	7	15	
32	0	0	8	13	11	
5	0	0	0	1	4	
41	0	2	2	18	19	
5	0	0	0	2	3	
30	0	1	5	9	15	
47	0	1	4	20	22	
24	0	0	1	8	15	
7	0	0	0	3	4	
15	0	0	1	6	8	
0	0	0	0	0	0	
6	1	0	1	1	3	
8	0	0	1	3	4	
8	0	0	0	6	2	
<b>535</b>	<b>2</b>	<b>21</b>	<b>64</b>	<b>194</b>	<b>254</b>	

Oxycodone Present at Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
10	0	2	1	3	4	
13	1	0	2	3	7	
12	0	0	1	3	8	
63	1	3	8	21	30	
33	0	0	4	11	18	
58	0	5	5	17	31	
16	0	0	1	4	11	
13	0	3	1	0	9	
33	0	3	5	5	20	
14	0	0	2	2	10	
56	0	2	13	14	27	
14	0	0	1	1	12	
49	0	3	5	7	34	
18	0	2	3	5	8	
82	0	8	13	30	31	
0	0	0	0	0	0	
28	0	2	2	10	14	
46	0	6	4	13	23	
22	0	0	4	6	12	
13	0	0	1	3	9	
18	0	0	3	6	9	
14	0	1	1	2	10	
10	0	0	1	4	5	
5	0	1	1	2	1	
6	0	0	0	2	4	
<b>646</b>	<b>2</b>	<b>41</b>	<b>82</b>	<b>174</b>	<b>347</b>	

# Oxycodone Deaths by County 2018





## Hydrocodone Deaths

January – December 2018

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
<b>Statewide Totals</b>	

Total Deaths with Hydrocodone		
Total	Cause	Present
36	10	26
14	2	12
10	1	9
72	23	49
39	7	32
46	19	27
25	9	16
11	4	7
44	9	35
34	13	21
15	7	8
18	4	14
31	12	19
38	7	31
34	5	29
0	0	0
16	7	9
24	8	16
22	3	19
10	2	8
16	7	9
6	0	6
12	4	8
9	3	6
11	2	9
<b>593</b>	<b>168</b>	<b>425</b>

Deaths with Hydrocodone Only		
Total	Cause	Present
8	1	7
0	0	0
2	0	2
13	0	13
4	0	4
4	0	4
5	0	5
3	1	2
16	0	16
7	3	4
0	0	0
3	0	3
4	0	4
6	2	4
1	0	1
0	0	0
1	0	1
4	0	4
10	0	10
1	0	1
1	0	1
1	0	1
2	0	2
2	0	2
4	0	4
<b>102</b>	<b>7</b>	<b>95</b>

Deaths with Hydrocodone in Combination with Other Drugs		
Total	Cause	Present
28	9	19
14	2	12
8	1	7
59	23	36
35	7	28
42	19	23
20	9	11
8	3	5
28	9	19
27	10	17
15	7	8
15	4	11
27	12	15
32	5	27
33	5	28
0	0	0
15	7	8
20	8	12
12	3	9
9	2	7
15	7	8
5	0	5
10	4	6
7	3	4
7	2	5
<b>491</b>	<b>161</b>	<b>330</b>

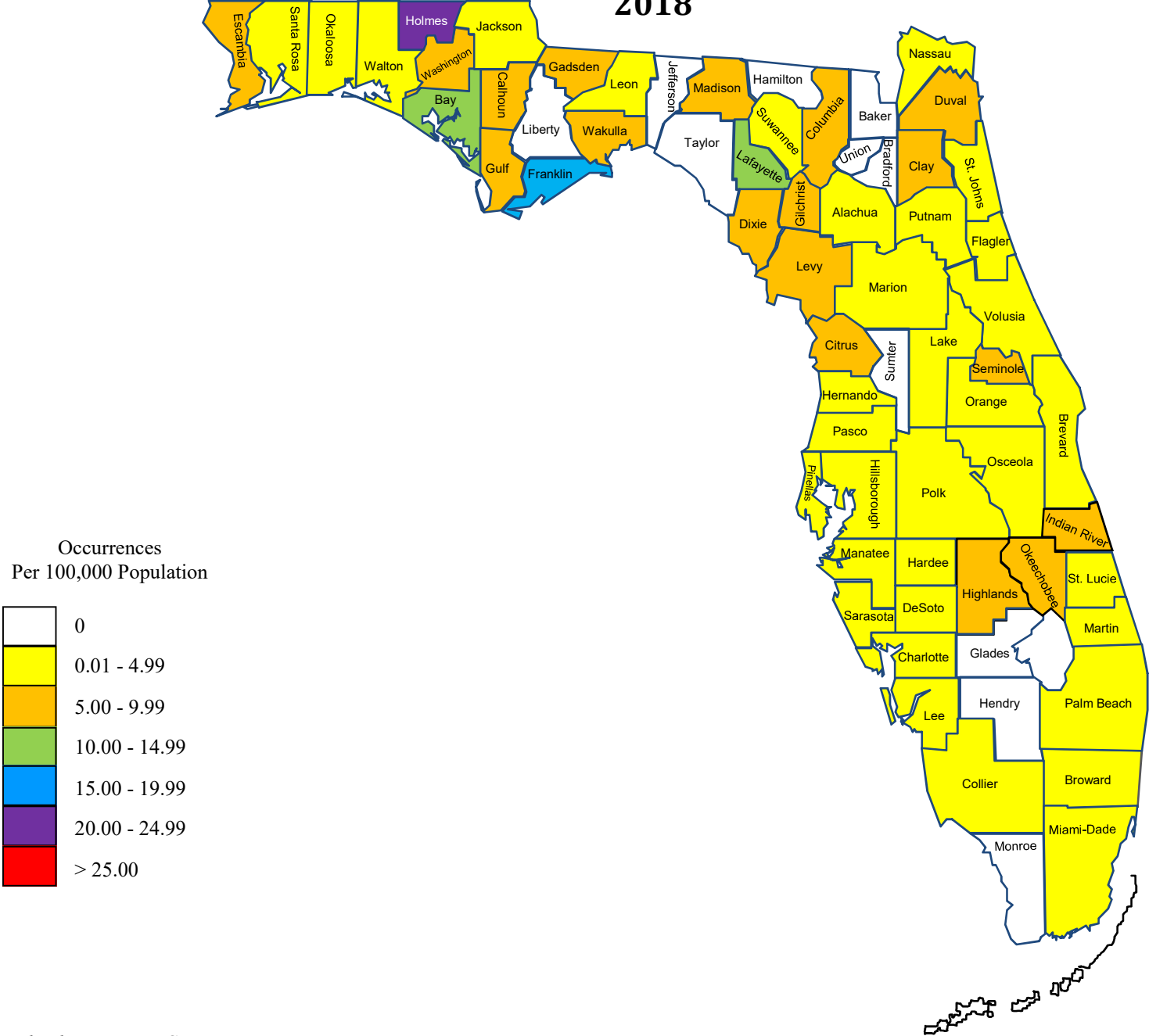
## Hydrocodone Deaths by Age January – December 2018

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	36
2	Tallahassee	14
3	Live Oak	10
4	Jacksonville	72
5	Leesburg	39
6	St. Petersburg	46
7	Daytona Beach	25
8	Gainesville	11
9	Orlando	44
10	Lakeland	34
11	Miami	15
12	Sarasota	18
13	Tampa	31
14	Panama City	38
15	West Palm Beach	34
16	Florida Keys	0
17	Ft. Lauderdale	16
18	Melbourne	24
19	Ft. Pierce	22
20	Naples	10
21	Ft. Myers	16
22	Port Charlotte	6
23	St. Augustine	12
24	Sanford	9
25	Kissimmee	11
<b>Statewide Totals</b>		<b>593</b>

Hydrocodone Caused Death					
Age of Decedent					
Total	< 18	18-25	26-34	35-50	>50
10	0	0	4	2	4
2	0	1	0	1	0
1	0	0	0	1	0
23	0	2	5	7	9
7	0	1	0	2	4
19	0	2	1	4	12
9	0	0	0	2	7
4	0	0	0	3	1
9	0	0	0	3	6
13	0	0	3	3	7
7	0	0	1	2	4
4	0	0	0	1	3
12	0	0	2	3	7
7	0	0	1	4	2
5	0	0	0	3	2
0	0	0	0	0	0
7	1	1	1	3	1
8	0	0	1	4	3
3	0	0	0	0	3
2	0	0	0	0	2
7	0	0	2	3	2
0	0	0	0	0	0
4	0	0	1	0	3
3	0	0	0	2	1
2	0	0	1	1	0
<b>168</b>	<b>1</b>	<b>7</b>	<b>23</b>	<b>54</b>	<b>83</b>

Hydrocodone Present at Death					
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
26	0	0	0	14	12
12	0	1	2	2	7
9	0	0	0	2	7
49	1	1	5	19	23
32	1	0	1	5	25
27	0	0	3	6	18
16	0	1	2	3	10
7	1	0	2	1	3
35	0	1	2	8	24
21	0	1	2	4	14
8	0	1	1	3	3
14	0	0	0	3	11
19	0	1	0	1	17
31	0	1	3	3	24
29	0	1	4	8	16
0	0	0	0	0	0
9	0	1	1	3	4
16	0	1	2	2	11
19	0	0	0	2	17
8	0	0	0	2	6
9	0	0	1	2	6
6	0	0	0	1	5
8	0	1	0	2	5
6	0	0	1	3	2
9	0	0	0	2	7
<b>425</b>	<b>3</b>	<b>12</b>	<b>32</b>	<b>101</b>	<b>277</b>

# Hydrocodone Deaths by County 2018



## Methadone Deaths

January – December 2018

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
<b>Statewide Totals</b>	

Total Deaths with Methadone		
Total	Cause	Present
15	8	7
6	3	3
6	3	3
38	21	17
28	18	10
61	43	18
17	9	8
11	5	6
24	13	11
9	5	4
15	8	7
24	16	8
28	17	11
5	1	4
19	9	10
0	0	0
13	8	5
30	17	13
13	6	7
5	3	2
8	4	4
4	0	4
9	5	4
4	2	2
9	4	5
<b>401</b>	<b>228</b>	<b>173</b>

Deaths with Methadone Only		
Total	Cause	Present
2	0	2
0	0	0
1	1	0
4	2	2
6	3	3
12	8	4
3	2	1
0	0	0
4	3	1
2	0	2
1	0	1
3	1	2
6	1	5
1	0	1
0	0	0
0	0	0
3	1	2
4	0	4
2	1	1
0	0	0
0	0	0
0	0	0
3	1	2
1	0	1
2	1	1
<b>60</b>	<b>25</b>	<b>35</b>

Deaths with Methadone in Combination with Other Drugs		
Total	Cause	Present
13	8	5
6	3	3
5	2	3
34	19	15
22	15	7
49	35	14
14	7	7
11	5	6
20	10	10
7	5	2
14	8	6
21	15	6
22	16	6
4	1	3
19	9	10
0	0	0
10	7	3
26	17	9
11	5	6
5	3	2
8	4	4
4	0	4
6	4	2
3	2	1
7	3	4
<b>341</b>	<b>203</b>	<b>138</b>

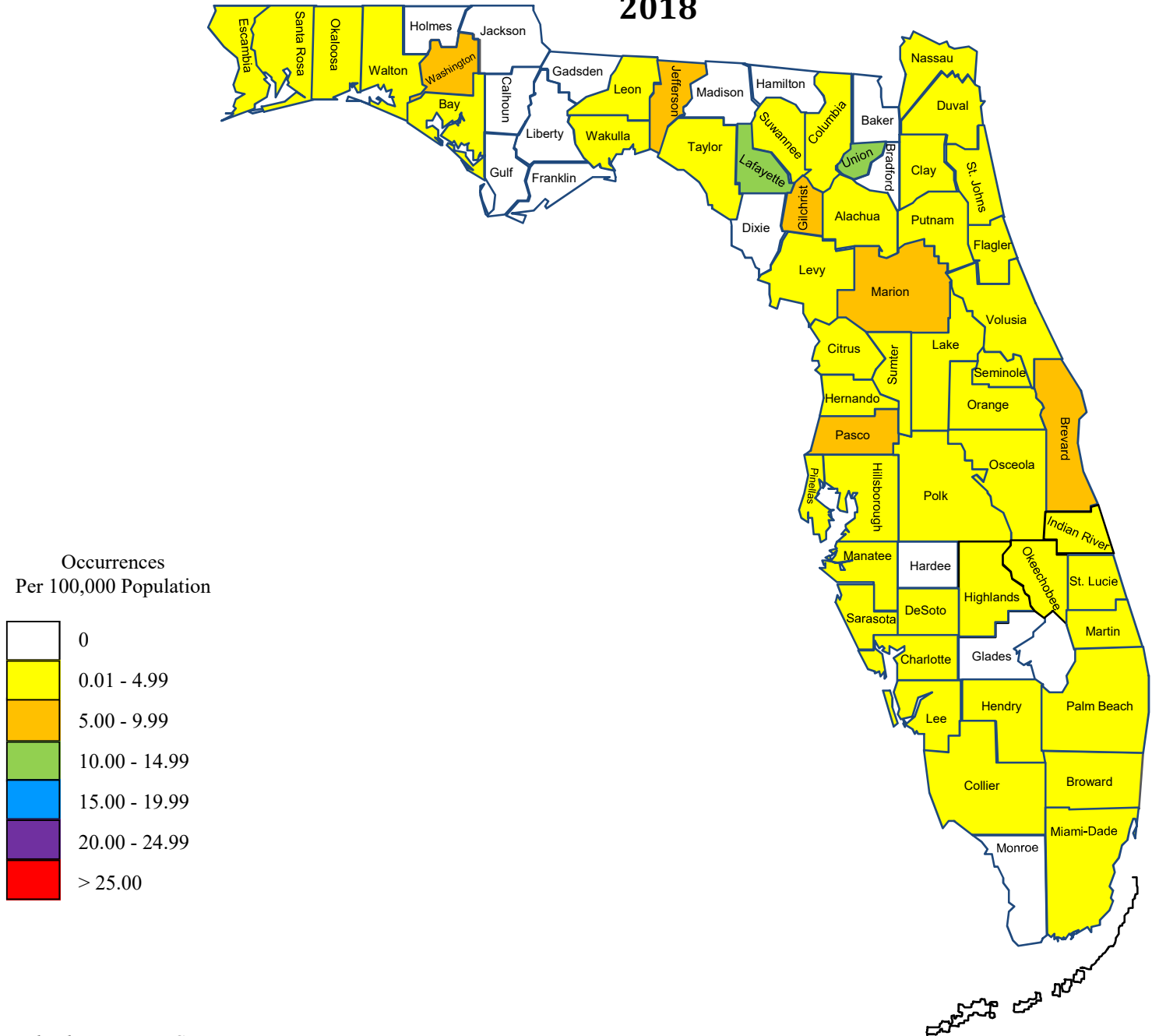
## Methadone Deaths by Age January – December 2018

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	15
2	Tallahassee	6
3	Live Oak	6
4	Jacksonville	38
5	Leesburg	28
6	St. Petersburg	61
7	Daytona Beach	17
8	Gainesville	11
9	Orlando	24
10	Lakeland	9
11	Miami	15
12	Sarasota	24
13	Tampa	28
14	Panama City	5
15	West Palm Beach	19
16	Florida Keys	0
17	Ft. Lauderdale	13
18	Melbourne	30
19	Ft. Pierce	13
20	Naples	5
21	Ft. Myers	8
22	Port Charlotte	4
23	St. Augustine	9
24	Sanford	4
25	Kissimmee	9
<b>Statewide Totals</b>		<b>401</b>

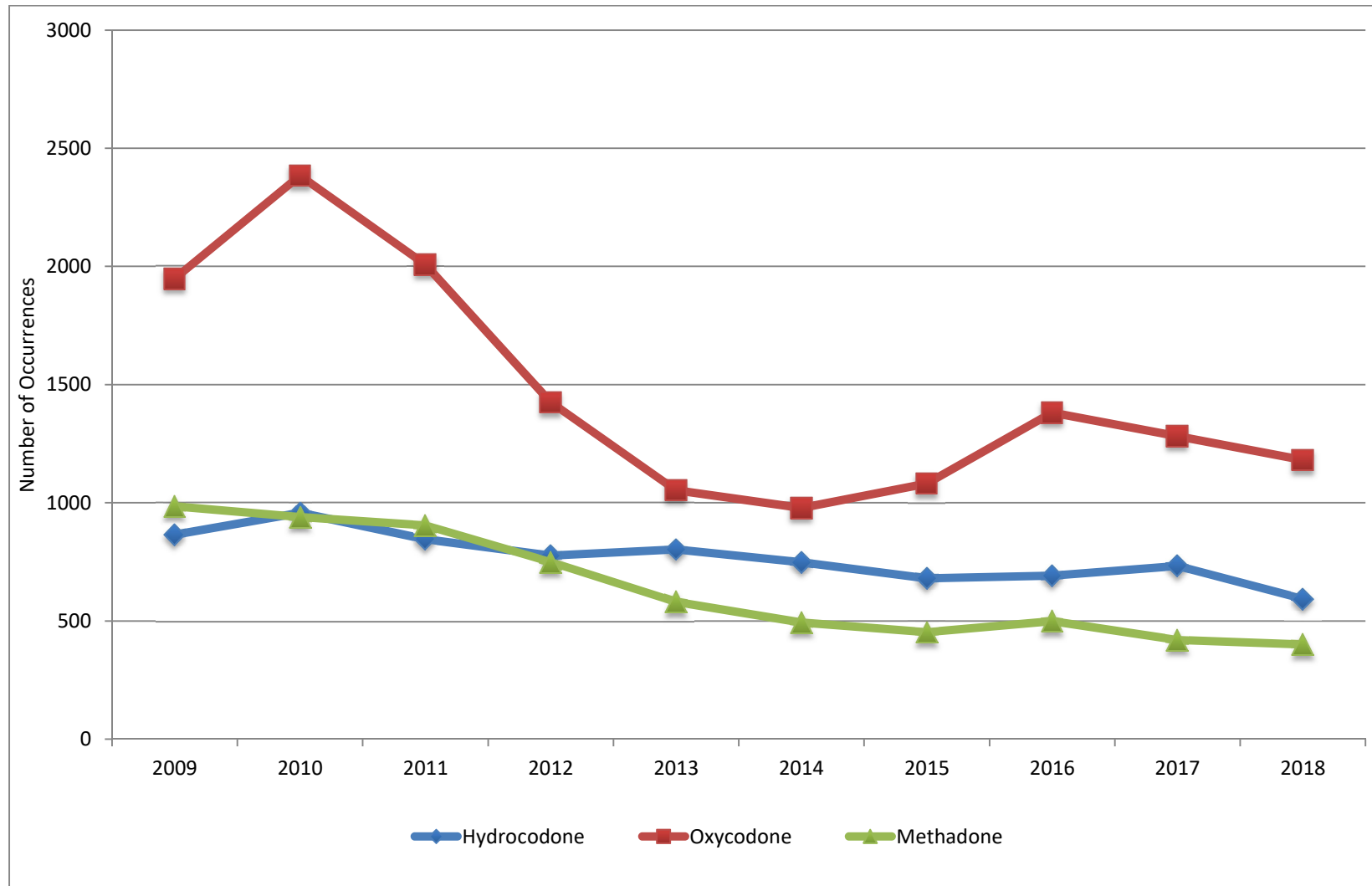
Methadone Caused Death					
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
8	0	1	1	2	4
3	0	0	1	1	1
3	0	0	0	2	1
21	0	0	4	8	9
18	0	0	6	7	5
43	0	3	5	20	15
9	0	0	1	3	5
5	0	1	0	2	2
13	1	0	2	5	5
5	0	0	0	3	2
8	0	1	3	3	1
16	0	1	3	7	5
17	0	0	1	6	10
1	0	0	0	1	0
9	0	0	3	4	2
0	0	0	0	0	0
8	0	0	0	2	6
17	0	1	4	7	5
6	0	0	1	1	4
3	0	0	0	2	1
4	0	0	1	2	1
0	0	0	0	0	0
5	0	0	1	1	3
2	0	1	0	1	0
4	0	0	0	3	1
<b>228</b>	<b>1</b>	<b>9</b>	<b>37</b>	<b>93</b>	<b>88</b>

Methadone Present at Death					
Age of Decedent					
Total	<18	18-25	26-34	35-50	>50
7	0	0	0	2	5
3	0	0	0	2	1
3	0	0	0	0	3
17	1	0	4	4	8
10	0	0	5	0	5
18	0	0	4	10	4
8	0	0	0	4	4
6	0	0	1	1	4
11	0	0	0	4	7
4	0	0	0	1	3
7	0	0	0	3	4
8	0	0	4	0	4
11	0	0	0	3	8
4	0	0	0	2	2
10	0	0	3	3	4
0	0	0	0	0	0
5	0	0	0	2	3
13	0	1	1	2	9
7	0	0	2	1	4
2	0	0	0	2	0
4	0	0	1	0	3
4	0	0	2	0	2
4	0	0	0	2	2
2	0	0	1	1	0
5	0	0	1	4	0
<b>173</b>	<b>1</b>	<b>1</b>	<b>29</b>	<b>53</b>	<b>89</b>

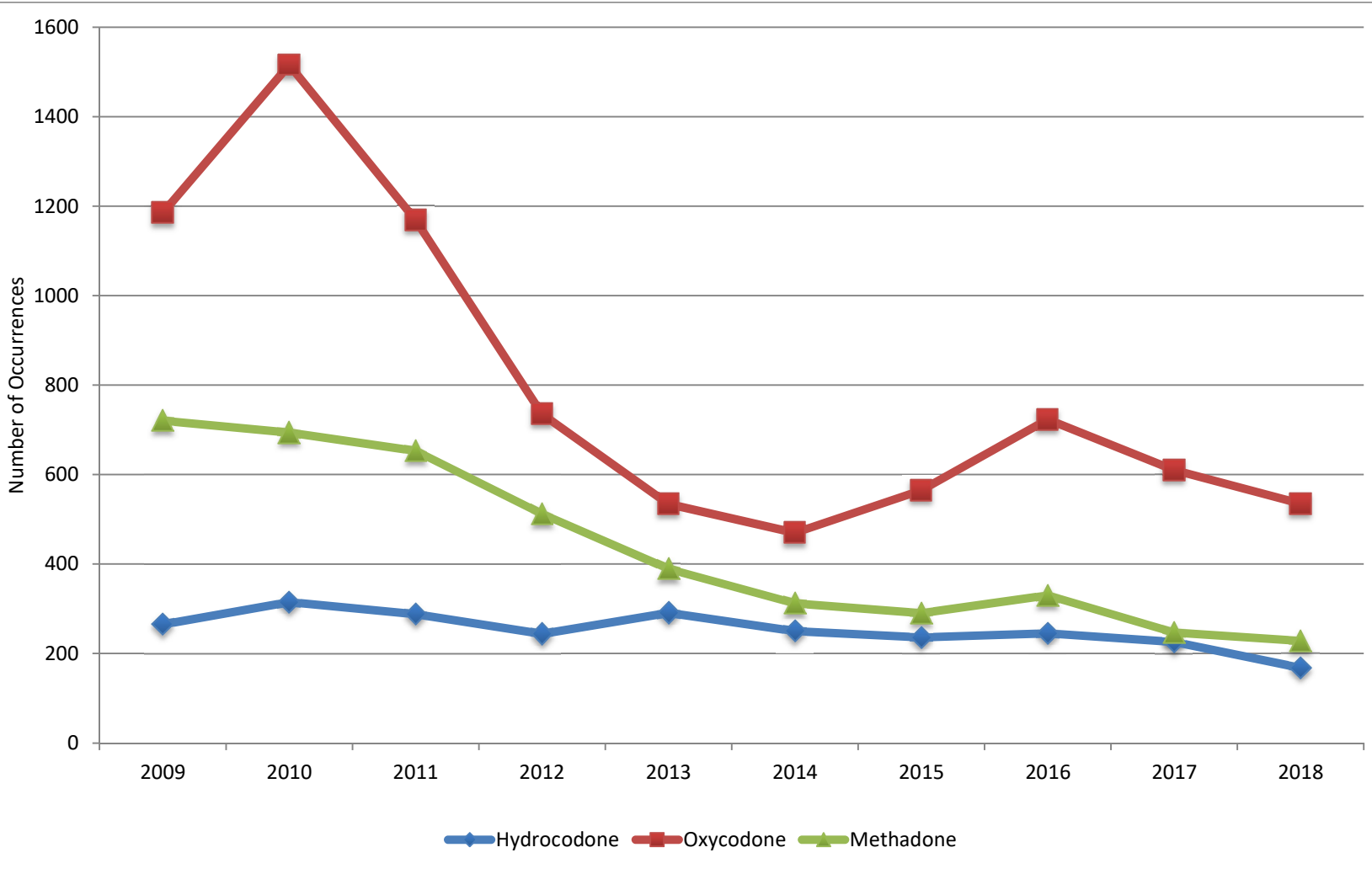
# Methadone Deaths by County 2018



# Historical Overview of Hydrocodone, Oxycodone, and Methadone Occurrences (Present and Cause) 2009 to 2018



# Historical Overview of Deaths Caused by Hydrocodone, Oxycodone, and Methadone 2009 to 2018





## Morphine Deaths

January – December 2018

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
<b>Statewide Totals</b>	

Total Deaths with Morphine		
Total	Cause	Present
84	57	27
16	1	15
8	5	3
128	102	26
101	51	50
175	123	52
83	66	17
19	4	15
149	77	72
52	17	35
126	82	44
56	19	37
152	123	29
20	3	17
251	99	152
4	3	1
113	71	42
66	34	32
39	17	22
37	25	12
70	54	16
18	5	13
13	5	8
39	32	7
44	27	17
<b>1,863</b>	<b>1,102</b>	<b>761</b>

Deaths with Morphine Only		
Total	Cause	Present
12	2	10
3	0	3
2	1	1
5	0	5
7	1	6
4	2	2
3	0	3
8	1	7
15	1	14
8	1	7
3	1	2
9	3	6
7	3	4
2	0	2
6	2	4
2	1	1
3	2	1
3	0	3
4	0	4
0	0	0
4	0	4
2	0	2
0	0	0
1	0	1
7	1	6
<b>120</b>	<b>22</b>	<b>98</b>

Deaths with Morphine in Combination with Other Drugs		
Total	Cause	Present
72	55	17
13	1	12
6	4	2
123	102	21
94	50	44
171	121	50
80	66	14
11	3	8
134	76	58
44	16	28
123	81	42
47	16	31
145	120	25
18	3	15
245	97	148
2	2	0
110	69	41
63	34	29
35	17	18
37	25	12
66	54	12
16	5	11
13	5	8
38	32	6
37	26	11
<b>1,743</b>	<b>1,080</b>	<b>663</b>

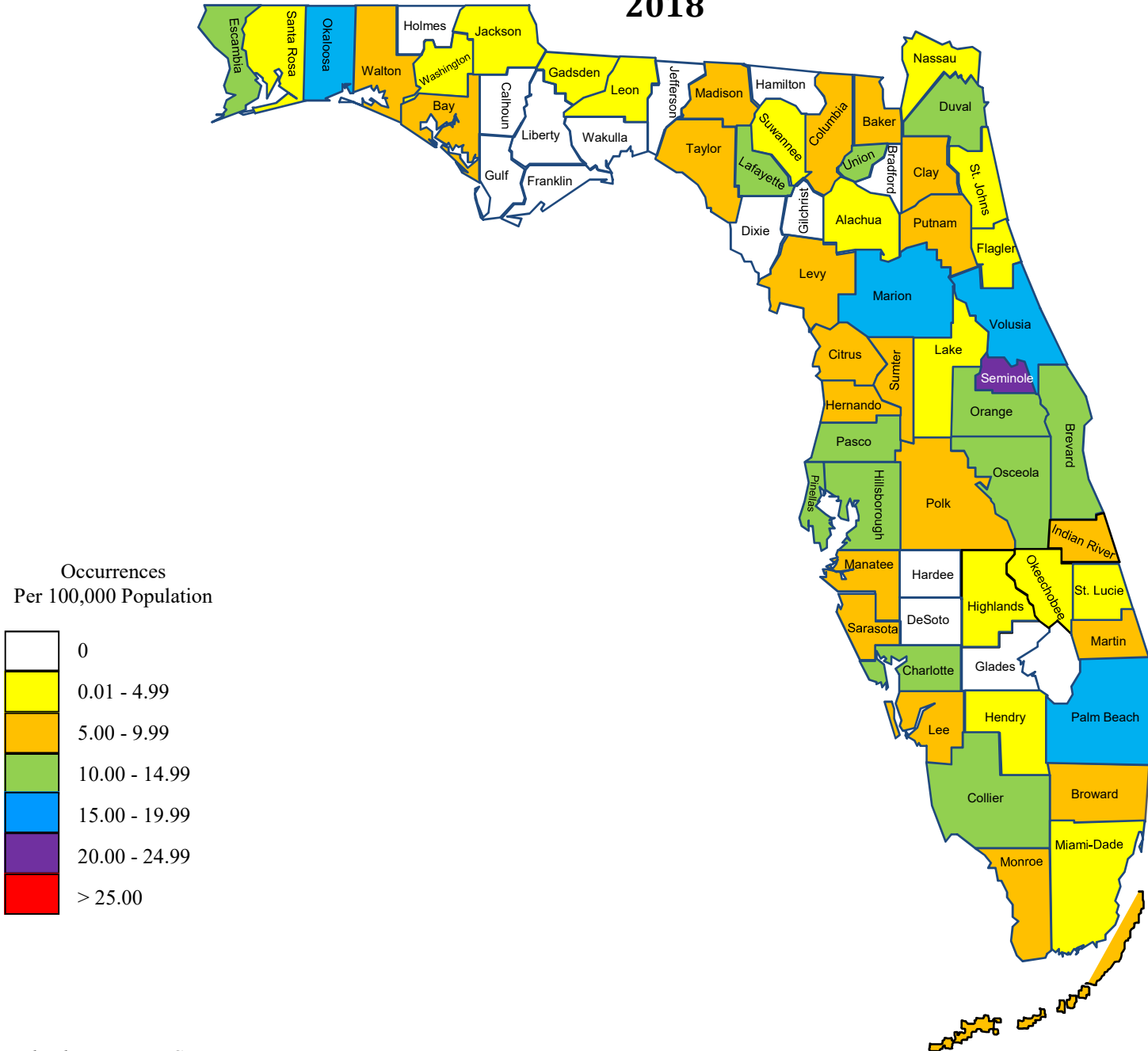
## Morphine Deaths by Age January – December 2018

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	84
2	Tallahassee	16
3	Live Oak	8
4	Jacksonville	128
5	Leesburg	101
6	St. Petersburg	175
7	Daytona Beach	83
8	Gainesville	19
9	Orlando	149
10	Lakeland	52
11	Miami	126
12	Sarasota	56
13	Tampa	152
14	Panama City	20
15	West Palm Beach	251
16	Florida Keys	4
17	Ft. Lauderdale	113
18	Melbourne	66
19	Ft. Pierce	39
20	Naples	37
21	Ft. Myers	70
22	Port Charlotte	18
23	St. Augustine	13
24	Sanford	39
25	Kissimmee	44
<b>Statewide Totals</b>		<b>1,863</b>

Morphine Caused Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
57	0	8	21	17	11	
1	0	0	1	0	0	
5	0	0	0	2	3	
102	1	8	23	37	33	
51	0	4	11	22	14	
123	0	3	28	50	42	
66	0	5	20	25	16	
4	0	0	1	1	2	
77	0	7	28	25	17	
17	0	2	4	6	5	
82	0	4	20	30	28	
19	0	1	1	5	12	
123	0	11	39	47	26	
3	0	0	0	1	2	
99	0	12	28	33	26	
3	0	0	1	1	1	
71	0	4	20	25	22	
34	0	0	8	16	10	
17	0	3	2	7	5	
25	0	3	3	12	7	
54	0	3	14	23	14	
5	0	1	1	2	1	
5	0	0	2	3	0	
32	0	2	13	13	4	
27	0	2	7	11	7	
<b>1,102</b>	<b>1</b>	<b>83</b>	<b>296</b>	<b>414</b>	<b>308</b>	

Morphine Present at Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
27	0	2	6	4	15	
15	0	0	2	5	8	
3	0	0	0	0	3	
26	0	3	4	10	9	
50	0	4	10	22	14	
52	0	3	13	19	17	
17	0	1	1	5	10	
15	0	1	1	3	10	
72	1	4	10	16	41	
35	0	1	6	8	20	
44	1	4	7	11	21	
37	0	1	11	11	14	
29	2	1	5	8	13	
17	1	0	6	2	8	
152	0	16	45	47	44	
1	0	0	0	0	1	
42	0	3	11	17	11	
32	0	1	2	12	17	
22	0	1	5	4	12	
12	0	0	0	7	5	
16	0	1	2	7	6	
13	0	0	1	2	10	
8	0	0	0	5	3	
7	0	1	2	2	2	
17	0	1	4	1	11	
<b>761</b>	<b>5</b>	<b>49</b>	<b>154</b>	<b>228</b>	<b>325</b>	

# Morphine Deaths by County 2018



## Fentanyl Deaths

January – December 2018

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
<b>Statewide Totals</b>	

Total Deaths with Fentanyl		
Total	Cause	Present
64	61	3
9	9	0
5	3	2
276	240	36
123	96	27
198	176	22
99	83	16
16	12	4
255	207	48
22	21	1
166	141	25
70	64	6
130	123	7
13	10	3
335	278	57
3	3	0
287	271	16
171	150	21
80	64	16
33	29	4
200	183	17
9	5	4
19	14	5
56	51	5
64	54	10
<b>2,703</b>	<b>2,348</b>	<b>355</b>

Deaths with Fentanyl Only		
Total	Cause	Present
8	7	1
0	0	0
0	0	0
15	13	2
14	9	5
7	5	2
6	3	3
2	1	1
19	13	6
1	1	0
3	2	1
3	2	1
11	11	0
0	0	0
10	7	3
0	0	0
23	22	1
13	10	3
16	9	7
0	0	0
20	16	4
1	1	0
1	1	0
2	2	0
6	5	1
<b>181</b>	<b>140</b>	<b>41</b>

Deaths with Fentanyl in Combination with Other Drugs		
Total	Cause	Present
56	54	2
9	9	0
5	3	2
261	227	34
109	87	22
191	171	20
93	80	13
14	11	3
236	194	42
21	20	1
163	139	24
67	62	5
119	112	7
13	10	3
325	271	54
3	3	0
264	249	15
158	140	18
64	55	9
33	29	4
180	167	13
8	4	4
18	13	5
54	49	5
58	49	9
<b>2,522</b>	<b>2,208</b>	<b>314</b>

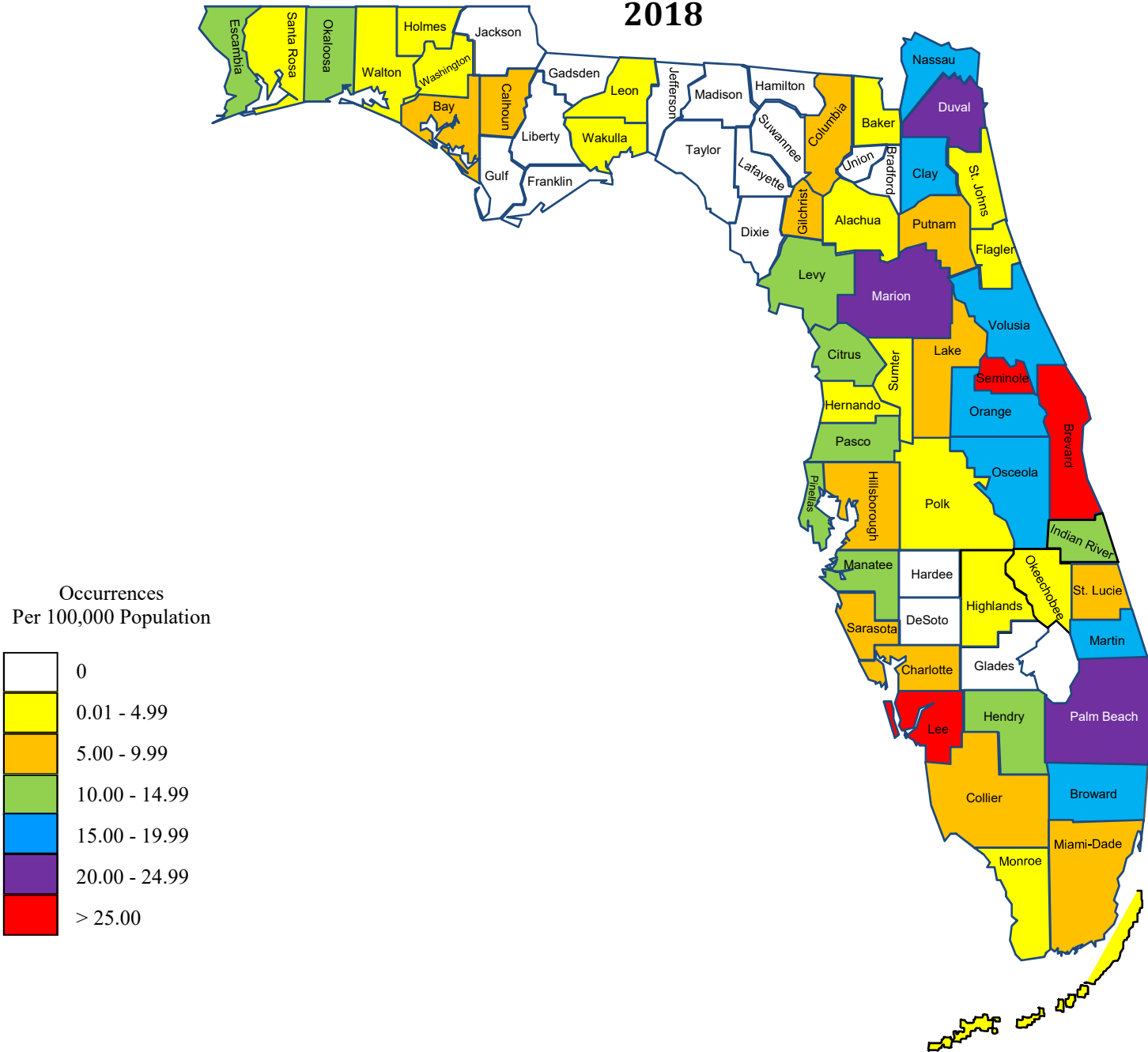
## Fentanyl Deaths by Age January – December 2018

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	64
2	Tallahassee	9
3	Live Oak	5
4	Jacksonville	276
5	Leesburg	123
6	St. Petersburg	198
7	Daytona Beach	99
8	Gainesville	16
9	Orlando	255
10	Lakeland	22
11	Miami	166
12	Sarasota	70
13	Tampa	130
14	Panama City	13
15	West Palm Beach	335
16	Florida Keys	3
17	Ft. Lauderdale	287
18	Melbourne	171
19	Ft. Pierce	80
20	Naples	33
21	Ft. Myers	200
22	Port Charlotte	9
23	St. Augustine	19
24	Sanford	56
25	Kissimmee	64
<b>Statewide Totals</b>		<b>2,703</b>

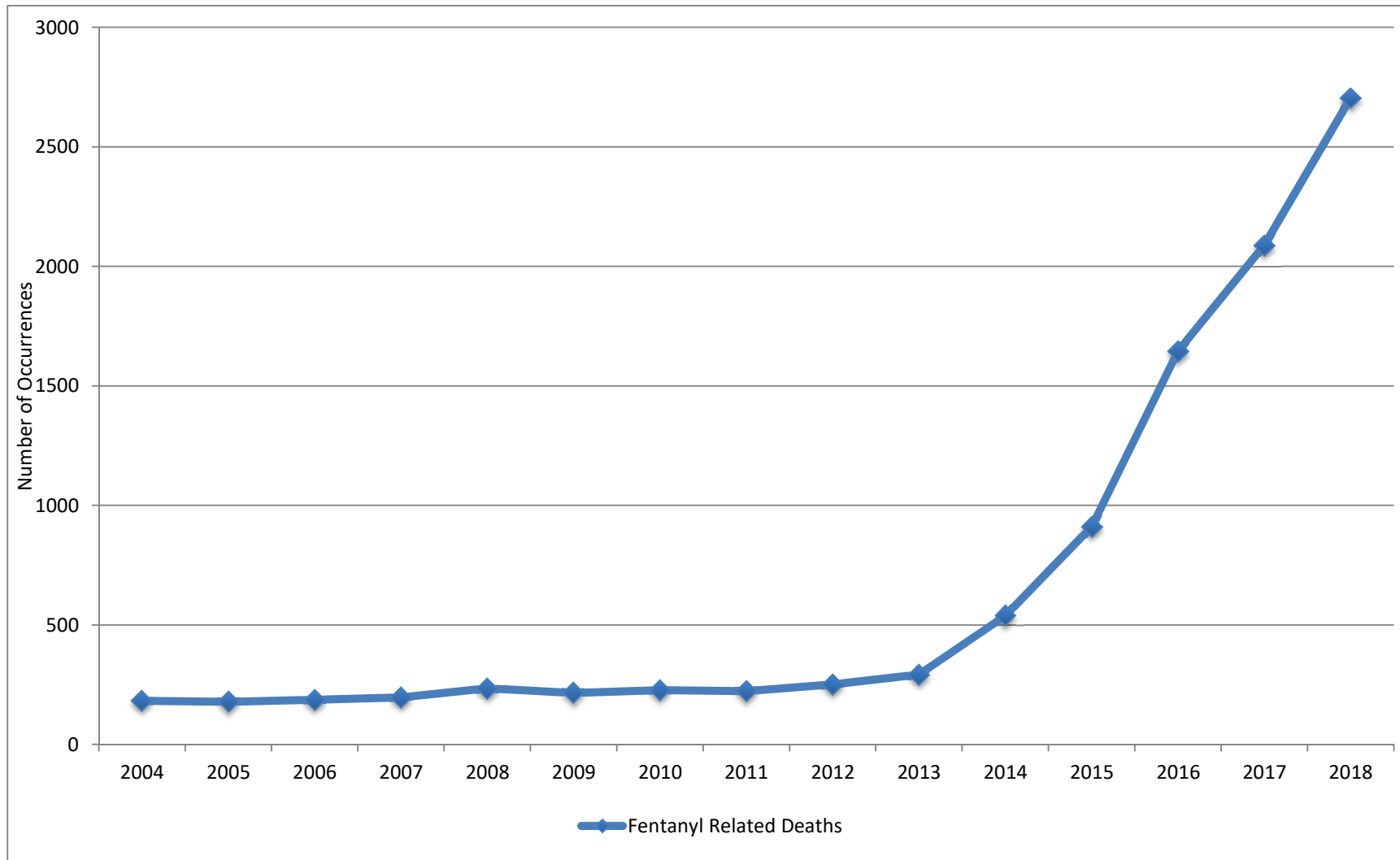
Fentanyl Caused Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
61	1	14	20	19	7	
9	0	1	3	4	1	
3	0	0	1	0	2	
240	2	25	79	89	45	
96	0	7	32	43	14	
176	0	10	47	80	39	
83	0	4	21	39	19	
12	0	0	5	5	2	
207	0	22	64	81	40	
21	1	1	6	6	7	
141	0	11	48	55	27	
64	0	6	17	25	16	
123	0	8	44	50	21	
10	0	0	2	4	4	
278	0	38	98	94	48	
3	0	0	0	1	2	
271	0	32	74	105	60	
150	0	5	35	74	36	
64	0	8	24	21	11	
29	0	2	5	18	4	
183	1	13	59	74	36	
5	0	1	0	3	1	
14	0	0	6	6	2	
51	0	3	16	26	6	
54	0	3	21	21	9	
<b>2,348</b>	<b>5</b>	<b>214</b>	<b>727</b>	<b>943</b>	<b>459</b>	

Fentanyl Present at Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
3	0	0	2	1	0	
0	0	0	0	0	0	
2	0	0	0	0	2	
36	1	2	12	14	7	
27	0	3	5	10	9	
22	0	2	4	9	7	
16	0	2	2	6	6	
4	0	0	0	0	4	
48	0	5	10	7	26	
1	0	0	0	1	0	
25	0	2	3	7	13	
6	0	1	1	2	2	
7	0	0	0	1	6	
3	0	0	1	0	2	
57	1	3	16	20	17	
0	0	0	0	0	0	
16	1	1	3	6	5	
21	0	2	2	6	11	
16	0	1	3	2	10	
4	0	0	0	3	1	
17	0	2	3	4	8	
4	0	0	0	0	4	
5	0	1	1	0	3	
5	0	2	1	1	1	
10	0	1	0	2	7	
<b>355</b>	<b>3</b>	<b>30</b>	<b>69</b>	<b>102</b>	<b>151</b>	

# Fentanyl Deaths by County 2018



# Historical Overview of Fentanyl Occurrences<sup>1</sup> (Present and Cause) 2004 to 2018



<sup>1</sup>Prior 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 2017 versus 2018

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
<b>Statewide Totals</b>	
<p><i>These tables are based on prescription drugs tracked by the Medical Examiners Commission and reported by Florida Medical Examiners. Do not add across columns.</i></p>	

Total Prescription Drug Deaths in ME Deaths (Present and Cause)		
2017	2018	Percent Change
182	212	16.5%
64	80	25.0%
51	49	-3.9%
706	552	-21.8%
351	353	0.6%
521	591	13.4%
212	233	9.9%
105	88	-16.2%
475	510	7.4%
208	187	-10.1%
629	516	-18.0%
296	217	-26.7%
369	417	13.0%
105	117	11.4%
710	659	-7.2%
48	24	-50.0%
570	464	-18.6%
353	345	-2.3%
226	248	9.7%
97	101	4.1%
287	324	12.9%
60	76	26.7%
90	87	-3.3%
97	109	12.4%
120	142	18.3%
<b>6,932</b>	<b>6,701</b>	<b>-3.3%</b>
<p><i>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.</i></p>		

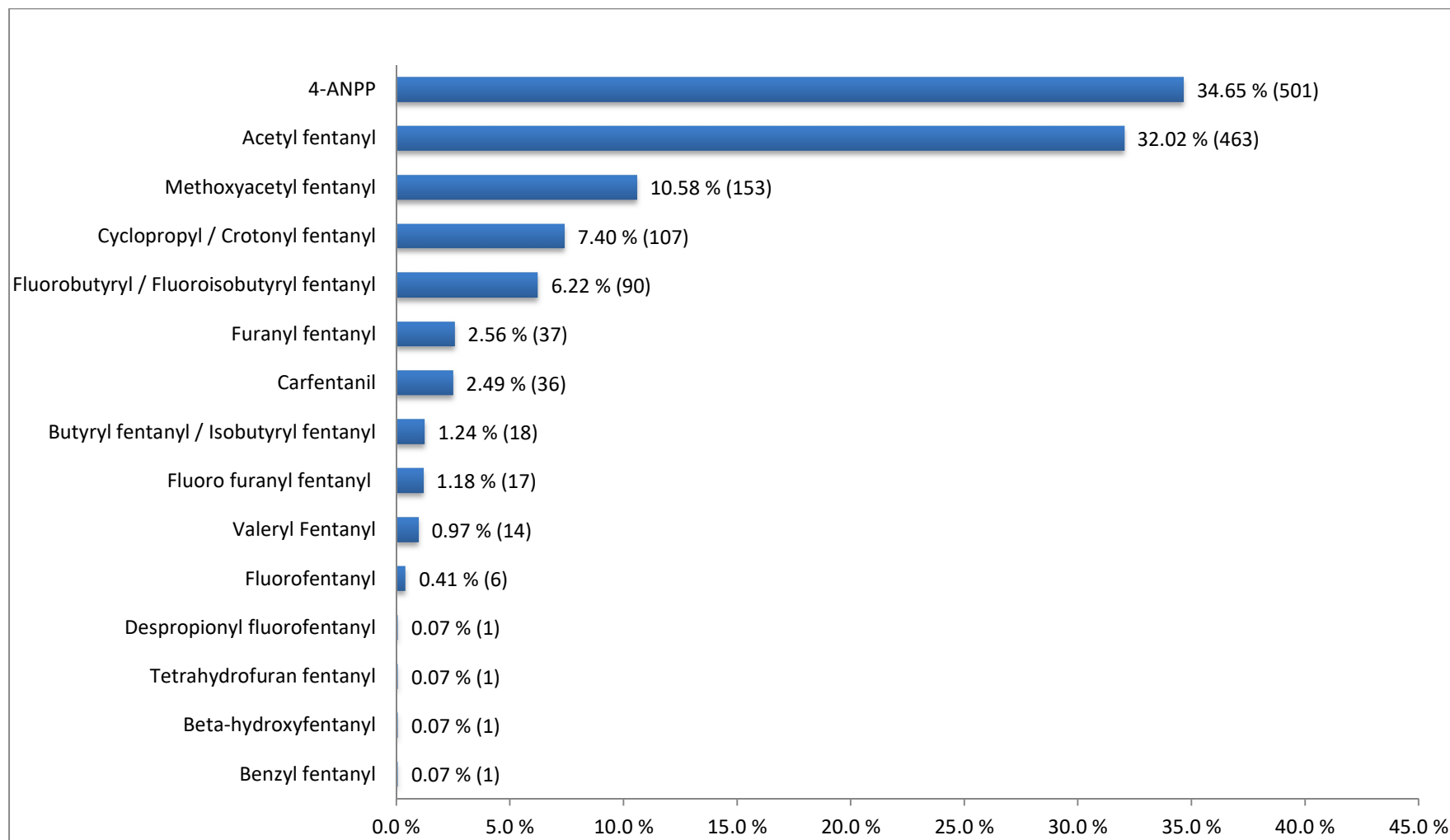
Accidental Deaths with Prescription Drugs (Present and Cause)		
2017	2018	Percent Change
98	143	45.9%
32	31	-3.1%
29	25	-13.8%
520	382	-26.5%
225	221	-1.8%
351	406	15.7%
142	174	22.5%
57	45	-21.1%
315	357	13.3%
117	116	-0.9%
393	297	-24.4%
186	133	-28.5%
211	259	22.7%
55	53	-3.6%
566	472	-16.6%
28	16	-42.9%
477	375	-21.4%
211	233	10.4%
131	150	14.5%
45	56	24.4%
218	262	20.2%
35	36	2.9%
48	45	-6.3%
77	80	3.9%
77	100	29.9%
<b>4,644</b>	<b>4,467</b>	<b>-3.8%</b>
<p><i>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.</i></p>		

Accidental Deaths Caused by Prescription Drugs		
2017	2018	Percent Change
70	109	55.7%
17	14	-17.6%
19	19	0%
419	314	-25.1%
147	155	5.4%
256	332	29.7%
105	141	34.3%
37	27	-27.0%
208	260	25.0%
51	68	33.3%
262	197	-24.8%
114	101	-11.4%
161	204	26.7%
22	21	-4.5%
421	364	-13.5%
15	10	-33.3%
403	332	-17.6%
164	201	22.6%
83	104	25.3%
35	46	31.4%
179	221	23.5%
14	11	-21.4%
28	28	0%
66	73	10.6%
62	73	17.7%
<b>3,358</b>	<b>3,425</b>	<b>2.0%</b>
<p><i>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.</i></p>		



## Frequency of Occurrence of Fentanyl Analogs

January – December 2018



*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 2018

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
<b>Statewide Totals</b>	

Total Deaths with Fentanyl Analogs		
Total	Cause	Present
15	15	0
9	2	7
0	0	0
100	91	9
48	45	3
149	143	6
32	31	1
4	3	1
99	62	37
1	1	0
128	79	49
21	17	4
9	9	0
2	2	0
167	163	4
1	1	0
110	100	10
46	41	5
25	9	16
15	9	6
36	23	13
0	0	0
6	6	0
15	15	0
14	7	7
<b>1,052</b>	<b>874</b>	<b>178</b>

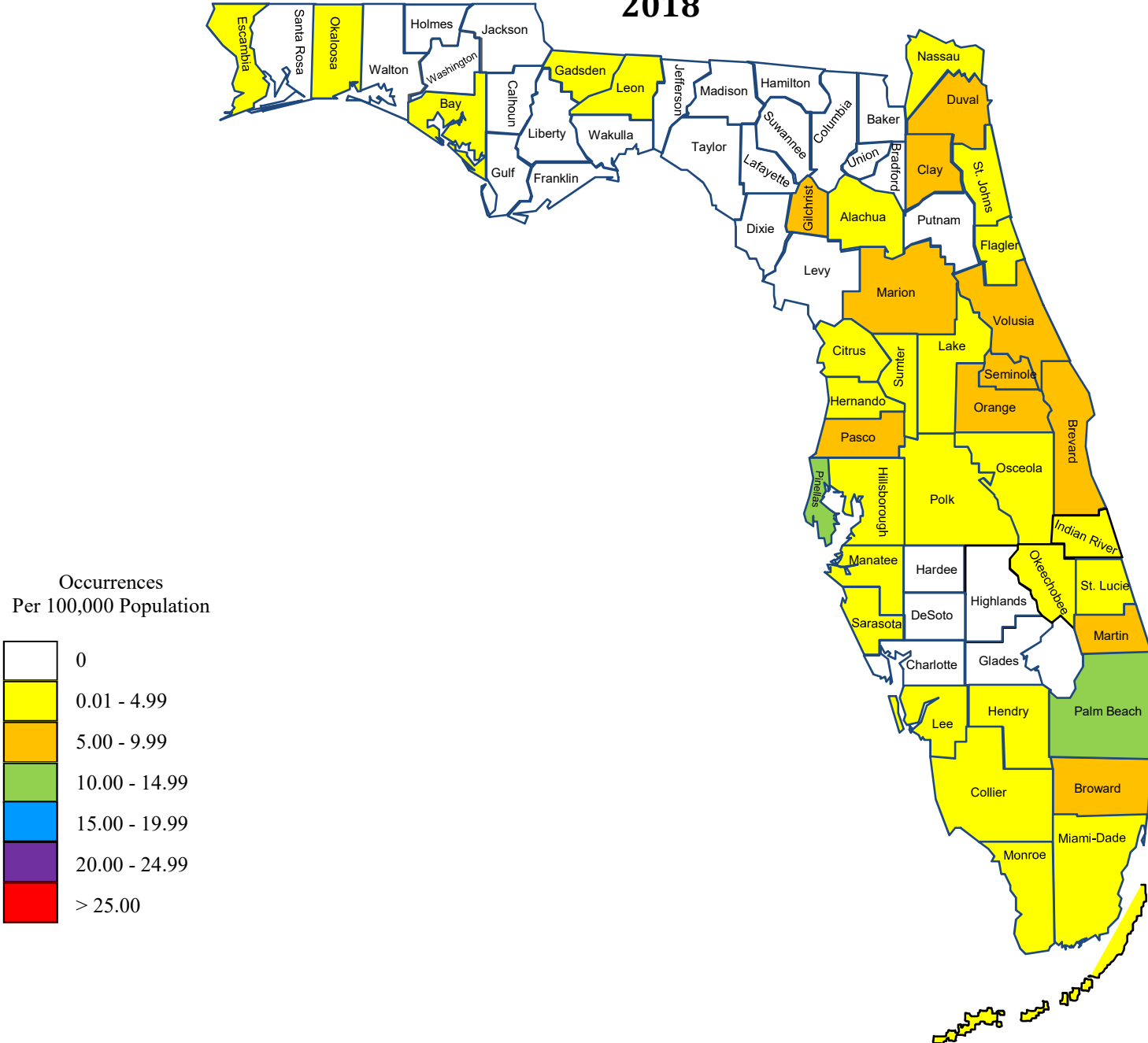
Deaths with Fentanyl Analogs Only		
Total	Cause	Present
2	2	0
1	0	1
0	0	0
1	1	0
1	1	0
11	11	0
0	0	0
0	0	0
1	1	0
0	0	0
0	0	0
1	1	0
0	0	0
1	1	0
0	0	0
1	1	0
0	0	0
2	2	0
0	0	0
1	1	0
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0
<b>23</b>	<b>22</b>	<b>1</b>

Deaths with Fentanyl Analogs in Combination with Other Drugs		
Total	Cause	Present
13	13	0
8	2	6
0	0	0
99	90	9
47	44	3
138	132	6
32	31	1
4	3	1
98	61	37
1	1	0
128	79	49
20	16	4
8	8	0
2	2	0
166	162	4
1	1	0
108	98	10
46	41	5
24	8	16
15	9	6
36	23	13
0	0	0
6	6	0
15	15	0
14	7	7
<b>1,029</b>	<b>852</b>	<b>177</b>

## Fentanyl Analog Deaths by Age January – December 2018

Medical Examiner District and Area of Florida			Fentanyl Analogs Caused Death						Fentanyl Analogs Present at Death					
District	Area of Florida	Total	Age of Decedent						Age of Decedent					
			Total	<18	18-25	26-34	35-50	>50	Total	<18	18-25	26-34	35-50	>50
1	Pensacola	15	15	0	1	8	5	1	0	0	0	0	0	0
2	Tallahassee	9	2	0	0	0	2	0	7	0	3	2	1	1
3	Live Oak	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Jacksonville	100	91	1	8	31	37	14	9	0	0	5	3	1
5	Leesburg	48	45	0	2	16	18	9	3	0	0	0	2	1
6	St. Petersburg	149	143	0	8	43	61	31	6	0	1	3	1	1
7	Daytona Beach	32	31	0	2	11	10	8	1	0	0	0	1	0
8	Gainesville	4	3	0	0	1	2	0	1	0	0	0	0	1
9	Orlando	99	62	0	7	25	19	11	37	0	4	12	15	6
10	Lakeland	1	1	0	0	0	1	0	0	0	0	0	0	0
11	Miami	128	79	0	7	26	31	15	49	0	2	14	21	12
12	Sarasota	21	17	0	3	4	9	1	4	0	0	2	0	2
13	Tampa	9	9	0	1	3	4	1	0	0	0	0	0	0
14	Panama City	2	2	0	0	2	0	0	0	0	0	0	0	0
15	West Palm Beach	167	163	0	20	59	61	23	4	0	0	0	3	1
16	Florida Keys	1	1	0	0	1	0	0	0	0	0	0	0	0
17	Ft. Lauderdale	110	100	0	16	33	31	20	10	1	1	0	8	0
18	Melbourne	46	41	0	2	8	22	9	5	0	1	0	3	1
19	Ft. Pierce	25	9	0	1	2	4	2	16	0	1	5	9	1
20	Naples	15	9	0	1	3	4	1	6	0	0	0	5	1
21	Ft. Myers	36	23	0	2	5	11	5	13	0	2	4	3	4
22	Port Charlotte	0	0	0	0	0	0	0	0	0	0	0	0	0
23	St. Augustine	6	6	0	0	4	2	0	0	0	0	0	0	0
24	Sanford	15	15	0	0	3	8	4	0	0	0	0	0	0
25	Kissimmee	14	7	0	0	0	6	1	7	0	2	2	1	2
<b>Statewide Totals</b>		<b>1,052</b>	<b>874</b>	<b>1</b>	<b>81</b>	<b>288</b>	<b>348</b>	<b>156</b>	<b>178</b>	<b>1</b>	<b>17</b>	<b>49</b>	<b>76</b>	<b>35</b>

# Fentanyl Analog Deaths by County 2018



## Cocaine Deaths

January – December 2018

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
<b>Statewide Totals</b>	

Total Deaths with Cocaine		
Total	Cause	Present
71	41	30
11	9	2
12	6	6
251	144	107
84	55	29
225	135	90
102	57	45
35	19	16
266	181	85
67	45	22
363	195	168
96	56	40
140	64	76
20	8	12
338	136	202
11	8	3
236	179	57
114	85	29
69	36	33
45	30	15
146	68	78
10	4	6
33	10	23
50	31	19
61	42	19
<b>2,856</b>	<b>1,644</b>	<b>1,212</b>

Deaths with Cocaine Only		
Total	Cause	Present
9	4	5
2	2	0
1	1	0
37	18	19
15	10	5
26	11	15
9	4	5
10	4	6
49	24	25
11	9	2
43	14	29
11	6	5
30	10	20
0	0	0
29	13	16
1	1	0
31	18	13
11	7	4
12	10	2
5	3	2
16	4	12
0	0	0
4	2	2
4	2	2
9	5	4
<b>375</b>	<b>182</b>	<b>193</b>

Deaths with Cocaine in Combination with Other Drugs		
Total	Cause	Present
62	37	25
9	7	2
11	5	6
214	126	88
69	45	24
199	124	75
93	53	40
25	15	10
217	157	60
56	36	20
320	181	139
85	50	35
110	54	56
20	8	12
309	123	186
10	7	3
205	161	44
103	78	25
57	26	31
40	27	13
130	64	66
10	4	6
29	8	21
46	29	17
52	37	15
<b>2,481</b>	<b>1,462</b>	<b>1,019</b>

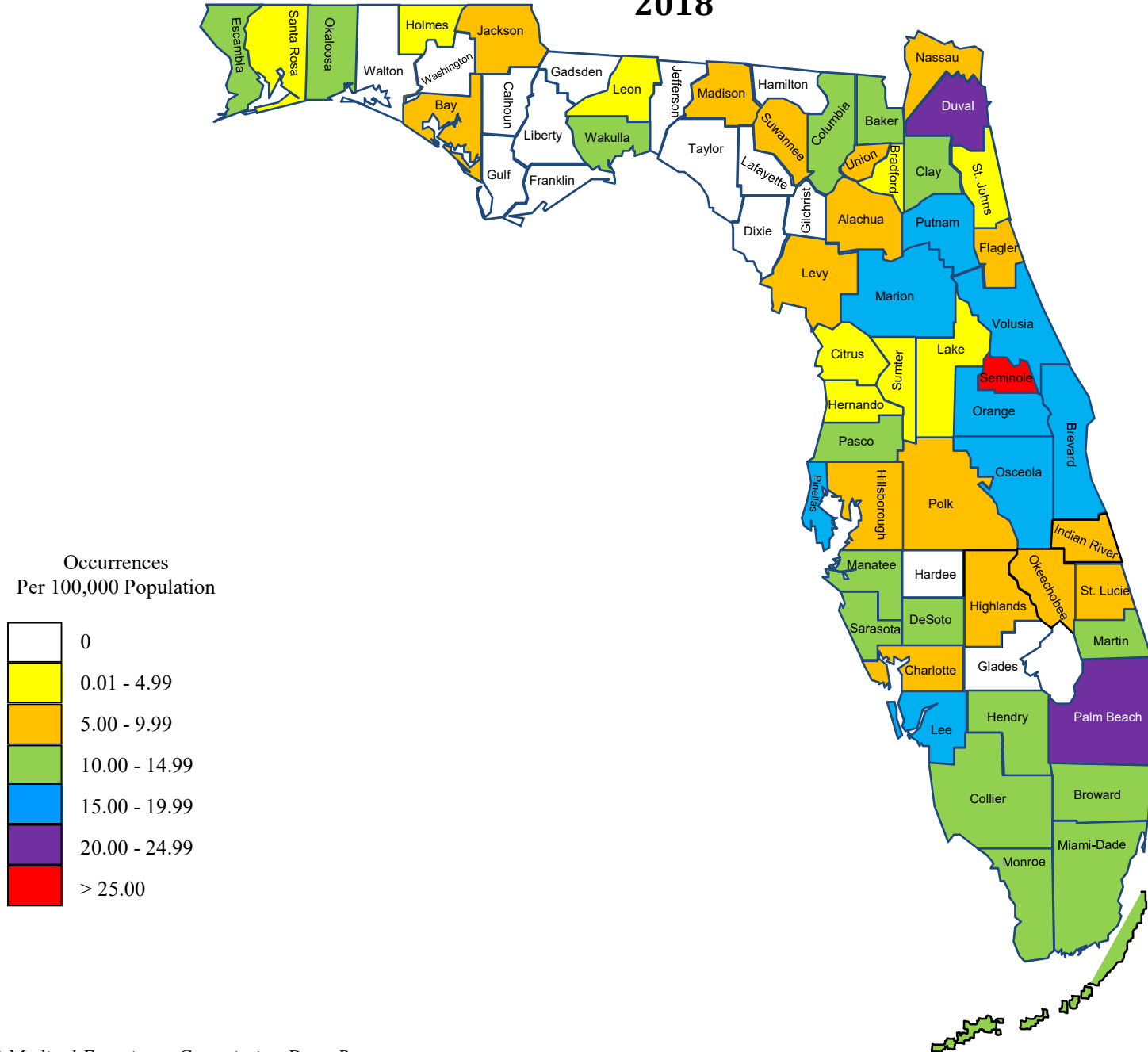
## Cocaine Deaths by Age January – December 2018

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	71
2	Tallahassee	11
3	Live Oak	12
4	Jacksonville	251
5	Leesburg	84
6	St. Petersburg	225
7	Daytona Beach	102
8	Gainesville	35
9	Orlando	266
10	Lakeland	67
11	Miami	363
12	Sarasota	96
13	Tampa	140
14	Panama City	20
15	West Palm Beach	338
16	Florida Keys	11
17	Ft. Lauderdale	236
18	Melbourne	114
19	Ft. Pierce	69
20	Naples	45
21	Ft. Myers	146
22	Port Charlotte	10
23	St. Augustine	33
24	Sanford	50
25	Kissimmee	61
<b>Statewide Totals</b>		<b>2,856</b>

Cocaine Caused Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
41	1	5	11	15	9	
9	0	1	0	4	4	
6	0	0	1	2	3	
144	1	11	38	57	37	
55	0	1	10	25	19	
135	0	6	26	57	46	
57	0	2	14	26	15	
19	0	1	3	7	8	
181	0	12	45	68	56	
45	1	3	9	10	22	
195	0	10	39	76	70	
56	0	3	6	25	22	
64	1	4	15	22	22	
8	0	0	1	2	5	
136	1	13	34	51	37	
8	0	0	1	4	3	
179	0	12	39	69	59	
85	0	1	20	35	29	
36	1	5	4	14	12	
30	0	3	2	16	9	
68	1	5	18	29	15	
4	0	1	0	1	2	
10	0	2	3	2	3	
31	0	3	11	10	7	
42	0	4	14	14	10	
<b>1,644</b>	<b>7</b>	<b>108</b>	<b>364</b>	<b>641</b>	<b>524</b>	

Cocaine Present at Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
30	2	4	7	9	8	
2	0	0	1	1	0	
6	0	0	0	3	3	
107	0	10	35	40	22	
29	0	2	9	12	6	
90	0	7	17	40	26	
45	0	2	13	15	15	
16	0	2	2	2	10	
85	1	11	11	36	26	
22	0	3	4	12	3	
168	0	30	28	58	52	
40	1	3	12	13	11	
76	0	8	14	27	27	
12	0	0	4	4	4	
202	0	30	62	67	43	
3	0	0	1	0	2	
57	0	6	13	19	19	
29	0	4	8	8	9	
33	1	4	8	14	6	
15	0	3	4	4	4	
78	1	7	16	39	15	
6	0	1	1	3	1	
23	0	1	6	10	6	
19	0	2	8	6	3	
19	0	1	5	10	3	
<b>1,212</b>	<b>6</b>	<b>141</b>	<b>289</b>	<b>452</b>	<b>324</b>	

# Cocaine Deaths by County 2018



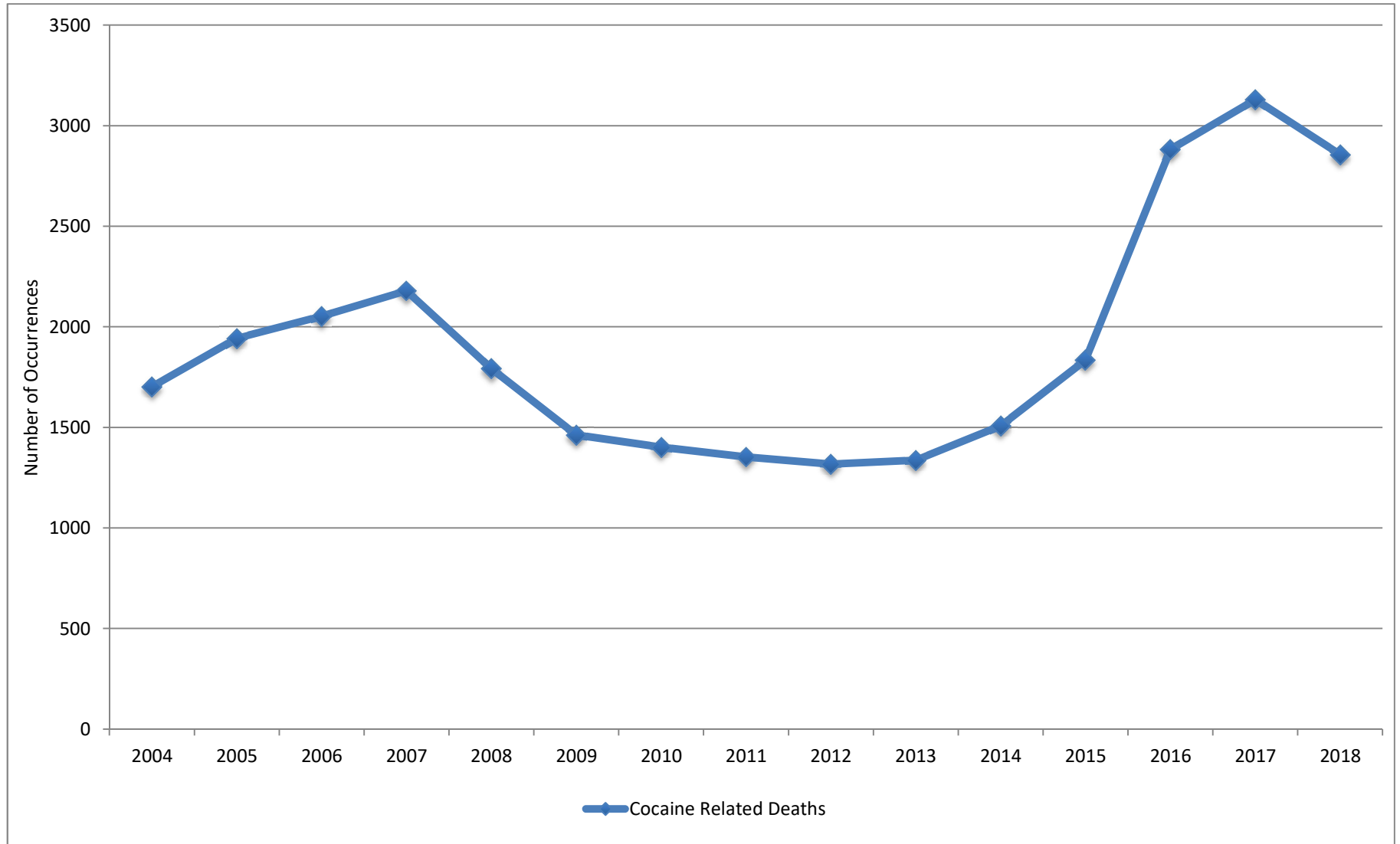
**Cocaine Related Deaths by Medical Examiner District**  
(Present and Cause)  
2004 to 2018

District	Area of Florida	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Pensacola	59	69	78	76	56	33	36	34	34	31	56	80	57	58	71
2	Tallahassee	38	58	51	40	27	30	25	36	25	23	20	18	32	15	11
3	Live Oak	22	19	16	10	13	16	9	8	13	10	6	5	10	4	12
4	Jacksonville	205	195	246	248	165	125	115	113	119	119	107	146	266	359	251
5	Leesburg	69	60	21	45	67	56	52	48	46	57	62	54	128	109	84
6	St. Petersburg	150	138	185	173	154	139	134	112	125	100	98	101	157	187	225
7	Daytona Beach	43	77	64	84	51	58	44	43	36	37	34	37	51	88	102
8	Gainesville	43	48	47	42	32	39	39	34	30	29	30	31	41	43	35
9	Orlando	136	165	178	190	179	145	128	124	120	137	181	203	230	234	266
10	Lakeland	46	75	53	41	40	35	42	29	27	37	33	33	53	70	67
11	Miami	160	162	182	281	201	155	198	184	198	226	234	289	439	401	363
12	Sarasota	69	83	106	105	75	59	57	54	60	60	84	134	147	132	96
13	Tampa	108	115	130	158	146	54	83	96	59	74	65	84	108	109	140
14	Panama City	22	24	32	31	17	20	9	9	10	11	13	15	5	15	20
15	West Palm Beach	151	197	191	168	143	126	106	91	87	105	143	173	405	417	338
16	Florida Keys	10	18	16	27	15	14	11	7	13	4	6	13	20	20	11
17	Ft. Lauderdale	120	136	150	157	146	135	127	115	129	102	99	152	328	321	236
18	Melbourne	62	84	80	62	68	59	49	38	52	53	60	86	103	128	114
19	Ft. Pierce	43	58	45	46	47	35	20	40	24	34	50	49	71	88	69
20	Naples	21	24	34	29	15	21	13	23	16	10	29	23	40	32	45
21	Ft. Myers	84	78	96	79	67	48	53	73	56	51	63	71	99	152	146
22	Port Charlotte	10	14	14	19	14	9	5	7	9	2	10	12	9	13	10
23	St. Augustine	20	24	17	33	27	19	23	15	11	11	1	9	23	39	33
24	Sanford	11	22	20	35	26	32	24	20	19	14	24	16	37	41	50
25	Kissimmee													23	54	61
<b>Statewide Total</b>		<b>1,702</b>	<b>1,943</b>	<b>2,052</b>	<b>2,179</b>	<b>1,791</b>	<b>1,462</b>	<b>1,402</b>	<b>1,353</b>	<b>1,318</b>	<b>1,337</b>	<b>1,508</b>	<b>1,834</b>	<b>2,882</b>	<b>3,129</b>	<b>2,856</b>

*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) 2004 to 2018





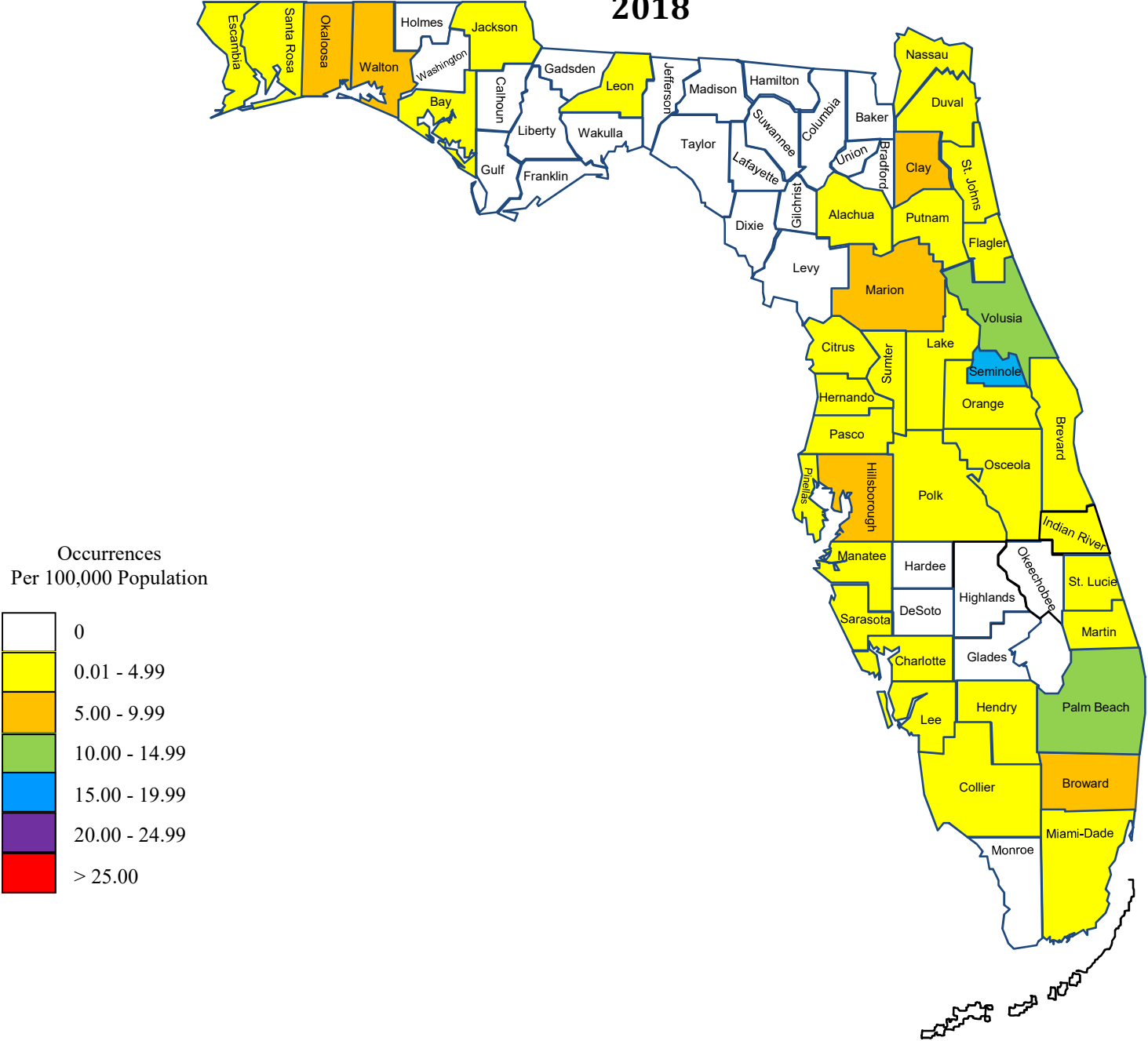
## Heroin Deaths by Age January – December 2018

Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	35
2	Tallahassee	1
3	Live Oak	0
4	Jacksonville	60
5	Leesburg	44
6	St. Petersburg	56
7	Daytona Beach	75
8	Gainesville	2
9	Orlando	54
10	Lakeland	5
11	Miami	59
12	Sarasota	17
13	Tampa	114
14	Panama City	7
15	West Palm Beach	174
16	Florida Keys	0
17	Ft. Lauderdale	110
18	Melbourne	18
19	Ft. Pierce	4
20	Naples	14
21	Ft. Myers	35
22	Port Charlotte	3
23	St. Augustine	5
24	Sanford	31
25	Kissimmee	17
<b>Statewide Totals</b>		<b>940</b>

Heroin Caused Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
34	0	5	13	10	6	
1	0	0	1	0	0	
0	0	0	0	0	0	
56	0	2	14	25	15	
39	0	5	10	20	4	
53	0	2	16	28	7	
72	0	5	20	30	17	
1	0	0	1	0	0	
52	0	5	19	18	10	
5	0	0	1	3	1	
59	0	3	13	23	20	
14	0	1	7	2	4	
108	0	9	39	42	18	
6	0	0	3	1	2	
87	0	11	28	28	20	
0	0	0	0	0	0	
96	0	7	30	39	20	
18	0	1	5	5	7	
4	0	0	0	3	1	
14	0	2	3	6	3	
35	0	1	9	16	9	
3	0	0	1	2	0	
5	0	0	1	3	1	
28	0	1	10	12	5	
16	0	2	6	5	3	
<b>806</b>	<b>0</b>	<b>62</b>	<b>250</b>	<b>321</b>	<b>173</b>	

Heroin Present at Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
1	0	0	0	1	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
4	0	1	2	1	0	
5	0	0	2	3	0	
3	0	0	1	2	0	
3	0	1	0	1	1	
1	0	0	0	1	0	
2	0	0	0	1	1	
0	0	0	0	0	0	
0	0	0	0	0	0	
3	0	0	2	1	0	
6	0	0	0	3	3	
1	0	0	0	1	0	
87	0	13	31	24	19	
0	0	0	0	0	0	
14	0	1	5	4	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	
0	0	0	0	0	0	
0	0	0	0	0	0	
0	0	0	0	0	0	
3	0	1	1	1	0	
1	0	0	1	0	0	
<b>134</b>	<b>0</b>	<b>17</b>	<b>45</b>	<b>44</b>	<b>28</b>	

# Heroin Deaths by County 2018



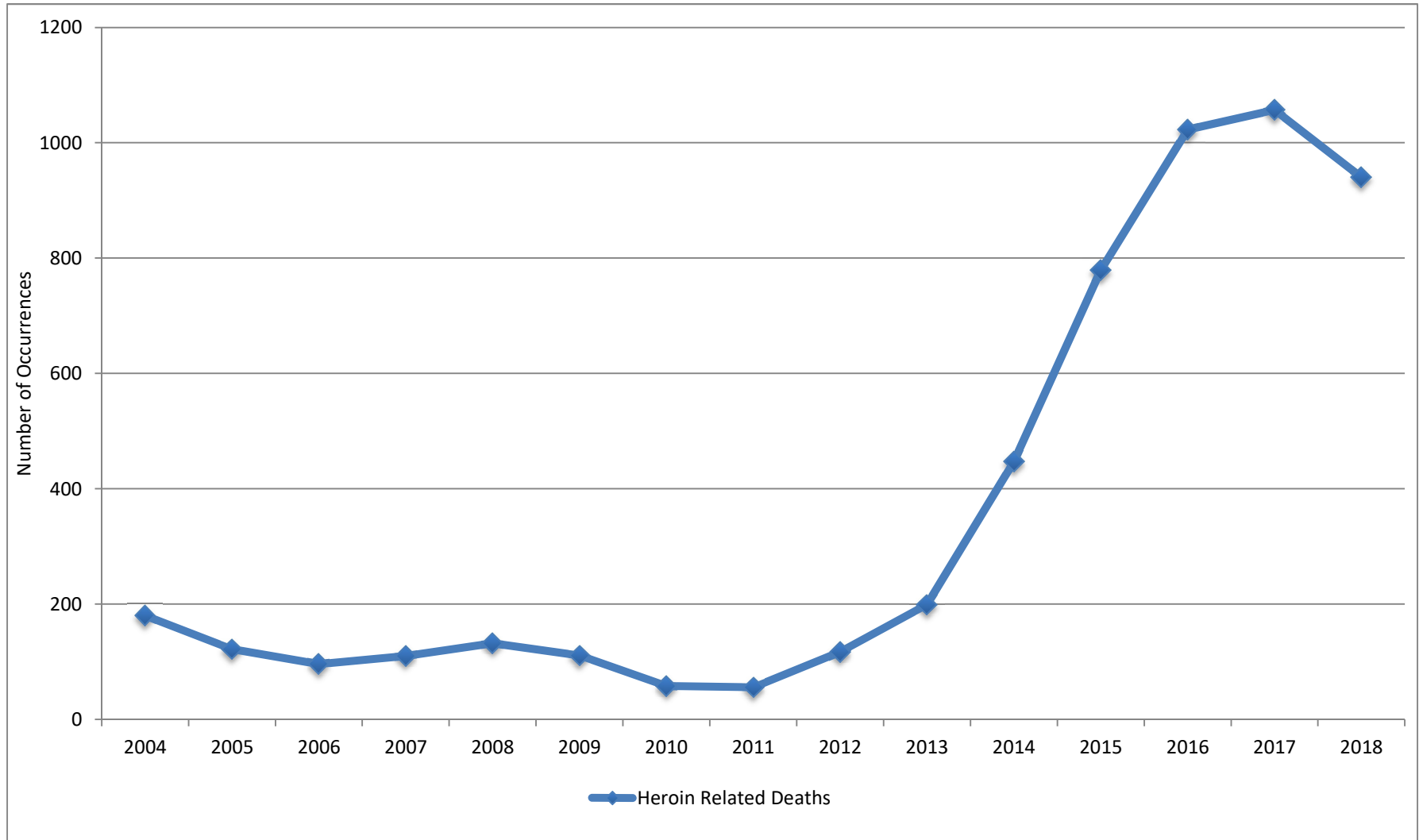
## Heroin Related Deaths by Medical Examiner District (Present and Cause) 2004 to 2018

District	Area of Florida	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
1	Pensacola	0	0	1	0	1	2	0	0	1	3	12	28	34	30	35
2	Tallahassee	0	0	0	0	0	0	0	1	0	1	2	0	1	2	1
3	Live Oak	0	0	0	0	0	0	0	0	0	1	0	1	0	2	0
4	Jacksonville	5	5	4	8	3	4	1	3	14	15	16	45	81	98	60
5	Leesburg	1	0	0	0	5	1	0	1	3	2	16	8	40	34	44
6	St. Petersburg	14	13	7	12	5	9	3	1	1	4	7	14	18	22	56
7	Daytona Beach	4	2	1	2	0	3	1	0	1	3	4	20	21	37	75
8	Gainesville	0	0	0	0	0	0	0	0	2	1	2	3	2	4	2
9	Orlando	22	15	7	16	16	24	10	18	26	41	83	108	68	59	54
10	Lakeland	3	2	2	0	0	2	1	0	1	4	7	10	11	10	5
11	Miami	18	22	20	26	38	30	26	15	33	40	60	92	139	97	59
12	Sarasota	15	9	14	4	19	4	2	2	8	19	55	68	32	22	17
13	Tampa	14	6	7	11	5	2	1	2	2	3	22	35	52	75	114
14	Panama City	0	0	0	1	0	0	1	0	0	2	2	4	8	4	7
15	West Palm Beach	29	19	8	10	7	7	4	6	6	20	51	165	205	215	174
16	Florida Keys	1	0	1	0	1	1	0	0	1	1	0	1	7	4	0
17	Ft. Lauderdale	35	17	13	4	17	8	5	3	9	11	28	80	180	186	110
18	Melbourne	3	2	1	1	1	2	0	0	0	2	7	12	21	25	18
19	Ft. Pierce	3	1	3	3	3	1	1	1	2	3	7	8	7	13	4
20	Naples	4	1	4	1	1	0	0	0	0	2	14	11	15	15	14
21	Ft. Myers	4	1	2	4	7	9	0	1	4	12	30	43	30	34	35
22	Port Charlotte	1	3	1	0	0	1	0	0	1	1	3	2	3	1	3
23	St. Augustine	0	0	0	0	0	0	1	0	1	1	1	2	6	14	5
24	Sanford	4	4	0	7	3	1	1	2	1	7	18	19	27	33	31
25	Kissimmee													15	21	17
<b>Statewide Totals</b>		<b>180</b>	<b>122</b>	<b>96</b>	<b>110</b>	<b>132</b>	<b>111</b>	<b>58</b>	<b>56</b>	<b>117</b>	<b>199</b>	<b>447</b>	<b>779</b>	<b>1,023</b>	<b>1,057</b>	<b>940</b>

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)  
2004 to 2018



## Methamphetamine Deaths

January – December 2018

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
<b>Statewide Totals</b>	

Total Deaths with Methamphetamine		
Total	Cause	Present
89	52	37
22	12	10
10	6	4
94	40	54
110	71	39
101	78	23
46	32	14
13	7	6
54	30	24
73	52	21
32	12	20
44	32	12
72	37	35
42	19	23
24	5	19
1	0	1
18	13	5
66	43	23
18	4	14
7	5	2
49	33	16
11	5	6
22	6	16
15	11	4
23	14	9
<b>1,056</b>	<b>619</b>	<b>437</b>

Deaths with Methamphetamine Only		
Total	Cause	Present
4	3	1
0	0	0
2	1	1
0	0	0
1	1	0
7	1	6
0	0	0
0	0	0
5	1	4
3	3	0
0	0	0
3	1	2
9	3	6
0	0	0
0	0	0
0	0	0
2	2	0
1	0	1
1	0	1
0	0	0
0	0	0
0	0	0
1	1	0
2	0	2
<b>42</b>	<b>17</b>	<b>25</b>

Deaths with Methamphetamine in Combination with Other Drugs		
Total	Cause	Present
85	49	36
22	12	10
8	5	3
94	40	54
109	70	39
94	77	17
46	32	14
13	7	6
49	29	20
70	49	21
32	12	20
41	31	10
63	34	29
42	19	23
24	5	19
1	0	1
16	11	5
65	43	22
17	4	13
7	5	2
48	33	15
11	5	6
22	6	16
14	10	4
21	14	7
<b>1,014</b>	<b>602</b>	<b>412</b>

## Methamphetamine Deaths by Age January – December 2018

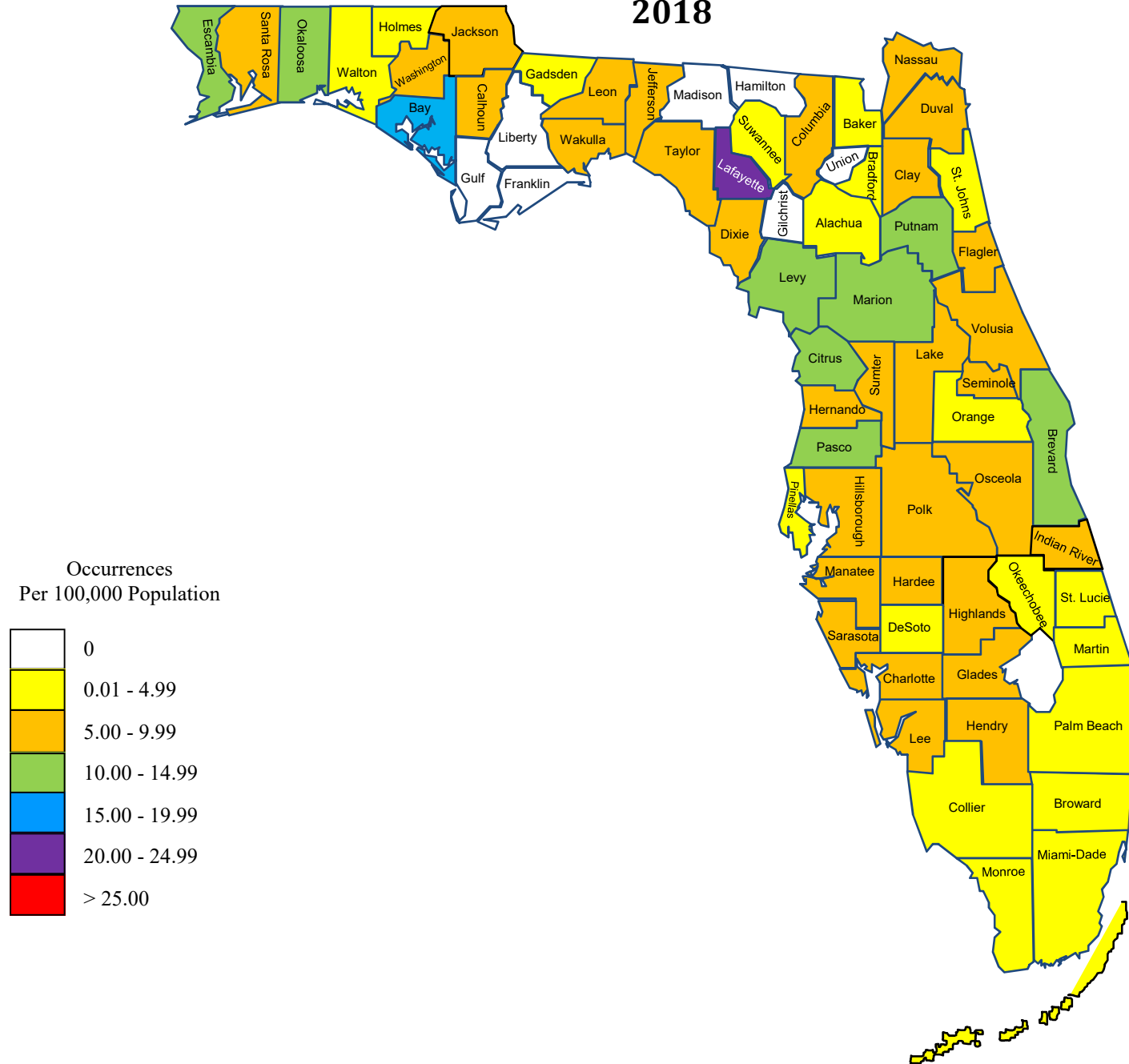
Medical Examiner District and Area of Florida		
District	Area of Florida	Total
1	Pensacola	89
2	Tallahassee	22
3	Live Oak	10
4	Jacksonville	94
5	Leesburg	110
6	St. Petersburg	101
7	Daytona Beach	46
8	Gainesville	13
9	Orlando	54
10	Lakeland	73
11	Miami	32
12	Sarasota	44
13	Tampa	72
14	Panama City	42
15	West Palm Beach	24
16	Florida Keys	1
17	Ft. Lauderdale	18
18	Melbourne	66
19	Ft. Pierce	18
20	Naples	7
21	Ft. Myers	49
22	Port Charlotte	11
23	St. Augustine	22
24	Sanford	15
25	Kissimmee	23
<b>Statewide Totals</b>		<b>1,056</b>

Methamphetamine Caused Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
52	1	6	17	22	6	
12	0	1	3	7	1	
6	0	0	2	2	2	
40	2	3	18	14	3	
71	0	1	20	31	19	
78	0	3	20	34	21	
32	0	2	11	16	3	
7	0	1	1	3	2	
30	0	2	12	14	2	
52	1	3	7	16	25	
12	0	1	5	6	0	
32	0	1	10	15	6	
37	0	4	11	19	3	
19	0	0	6	11	2	
5	0	0	2	2	1	
0	0	0	0	0	0	
13	0	0	4	6	3	
43	0	3	11	21	8	
4	0	0	1	3	0	
5	0	2	0	3	0	
33	0	2	13	15	3	
5	0	0	3	1	1	
6	0	1	1	4	0	
11	0	0	2	9	0	
14	0	1	4	4	5	
<b>619</b>	<b>4</b>	<b>37</b>	<b>184</b>	<b>278</b>	<b>116</b>	

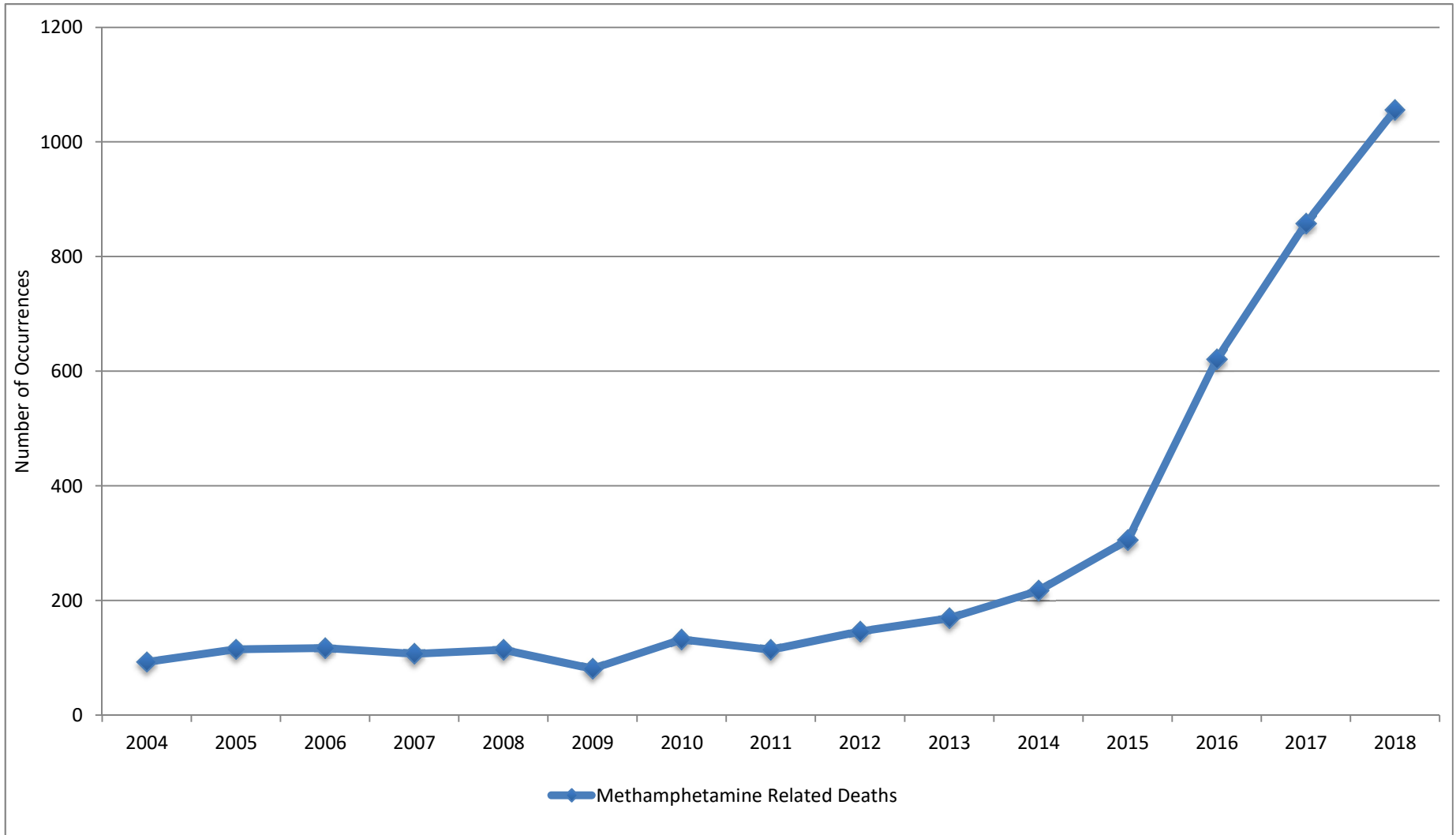
Methamphetamine Present at Death						
Age of Decedent						
Total	<18	18-25	26-34	35-50	>50	
37	0	2	10	18	7	
10	0	4	4	0	2	
4	1	0	1	1	1	
54	0	9	18	24	3	
39	0	3	12	17	7	
23	0	1	6	13	3	
14	0	3	3	8	0	
6	0	1	3	0	2	
24	0	4	9	11	0	
21	0	2	5	11	3	
20	0	1	5	9	5	
12	0	1	5	3	3	
35	0	6	7	11	11	
23	0	3	5	10	5	
19	0	2	5	8	4	
1	0	0	0	0	1	
5	0	0	4	1	0	
23	0	3	2	12	6	
14	0	1	7	5	1	
2	0	0	1	1	0	
16	1	0	6	4	5	
6	0	0	0	2	4	
16	0	1	5	10	0	
4	0	1	1	1	1	
9	0	1	4	3	1	
<b>437</b>	<b>2</b>	<b>49</b>	<b>128</b>	<b>183</b>	<b>75</b>	



# Methamphetamine Deaths by County 2018

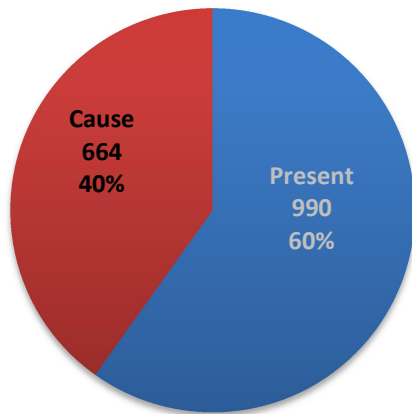


# Historical Overview of Methamphetamine Occurrences (Present and Cause) 2004 to 2018

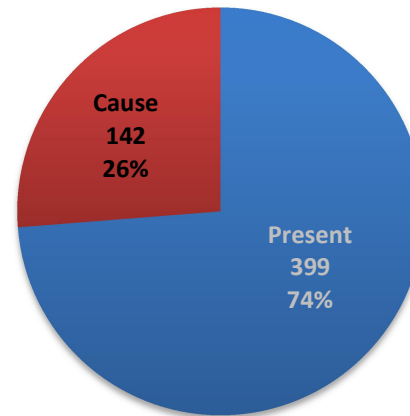


## 2018 Drug Detected at Death: Cause vs. Present

**Alprazolam Deaths**  
**Total Occurrences = 1,654**

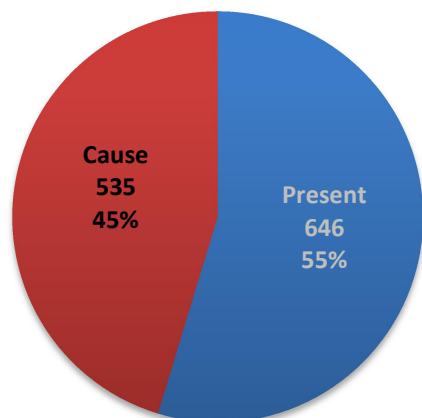


**Diazepam Deaths**  
**Total Occurrences = 541**

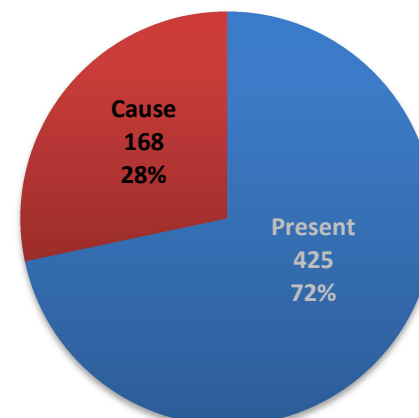


## 2018 Drug Detected at Death: Cause vs. Present

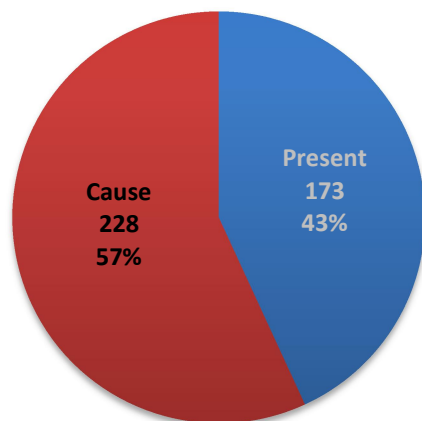
**Oxycodone Deaths**  
Total Occurrences = 1,181



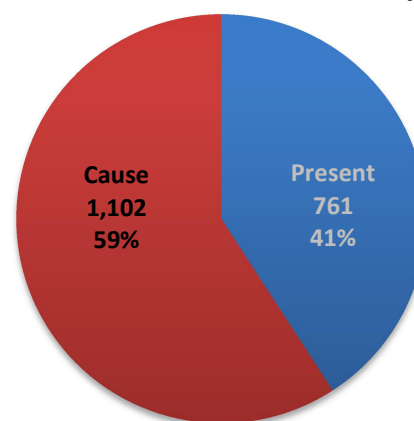
**Hydrocodone Deaths**  
Total Occurrences = 593



**Methadone Deaths**  
Total Occurrences = 401

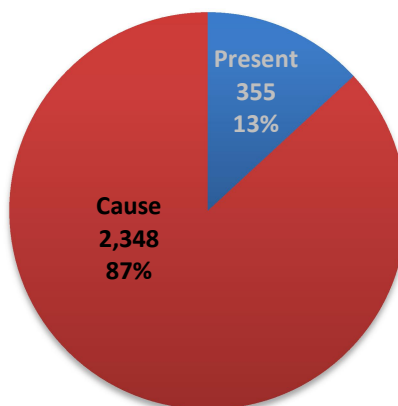


**Morphine Deaths**  
Total Occurrences = 1,863

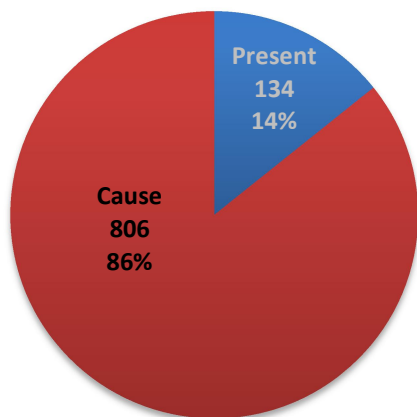


## 2018 Drug Detected at Death: Cause vs. Present

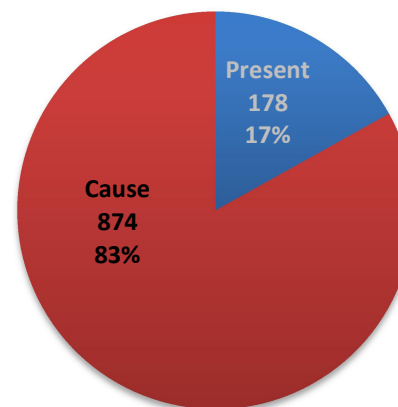
**Fentanyl Deaths**  
Total Occurrences = 2,703



**Heroin Deaths**  
Total Occurrences = 940

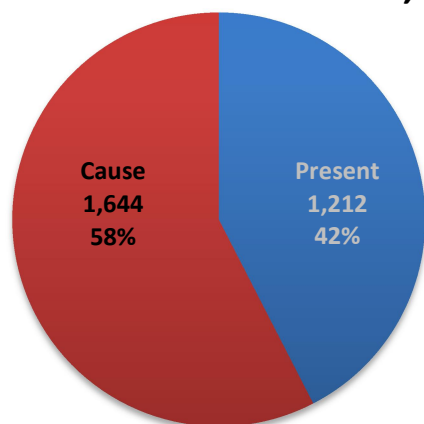


**Fentanyl Analogs Deaths**  
Total Occurrences = 1,052

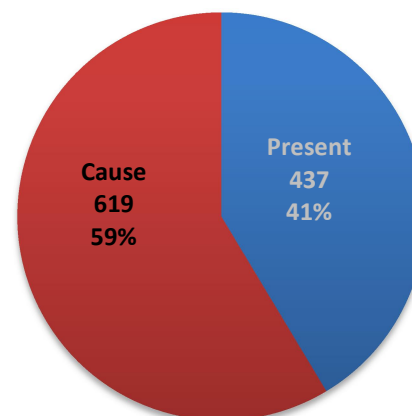


## 2018 Drug Detected at Death: Cause vs. Present

**Cocaine Deaths**  
**Total Occurrences = 2,856**

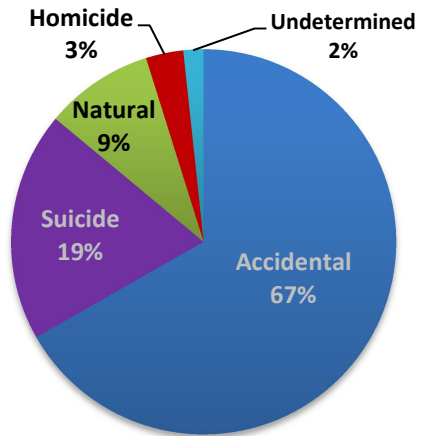


**Methamphetamine Deaths**  
**Total Occurrences = 1,056**

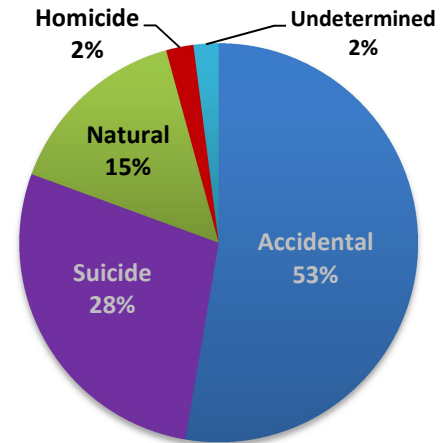


## 2018 Manner of Death for Reported Drug Occurrences

### Alprazolam Deaths

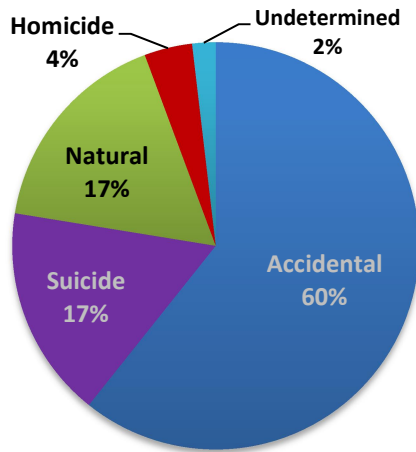


### Diazepam Deaths

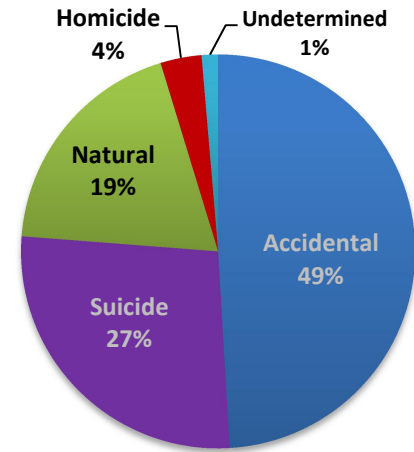


## 2018 Manner of Death for Reported Drug Occurrences

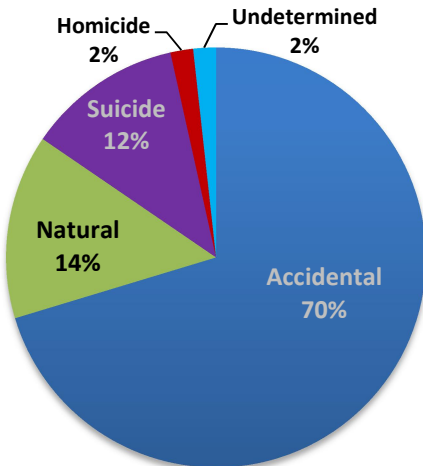
### Oxycodone Deaths



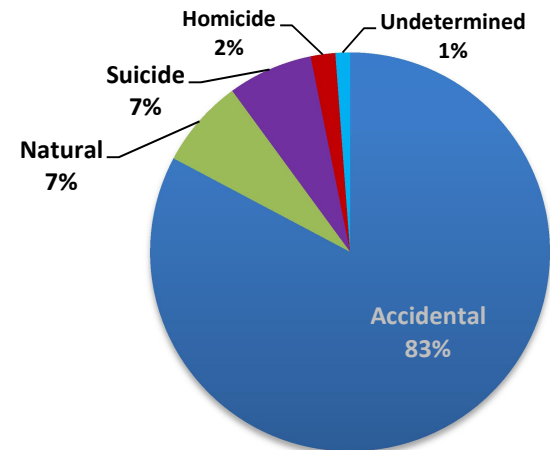
### Hydrocodone Deaths



### Methadone Deaths

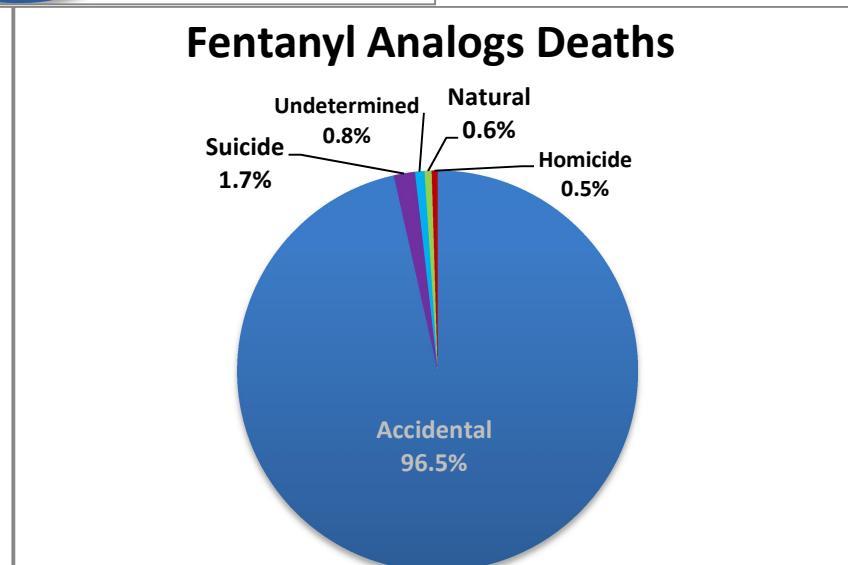
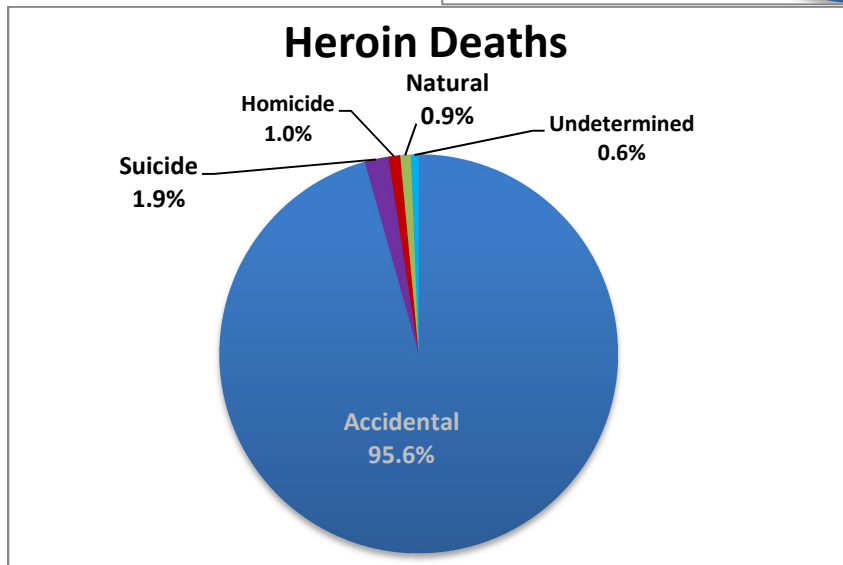
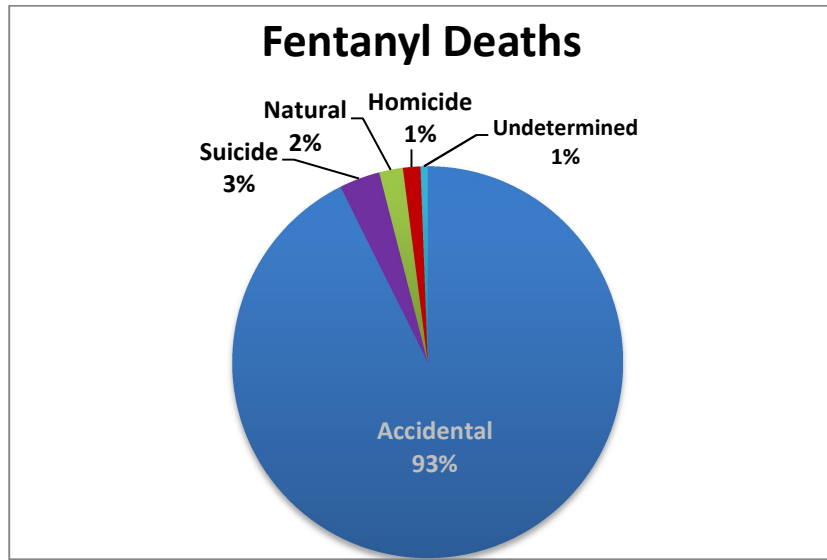


### Morphine Deaths

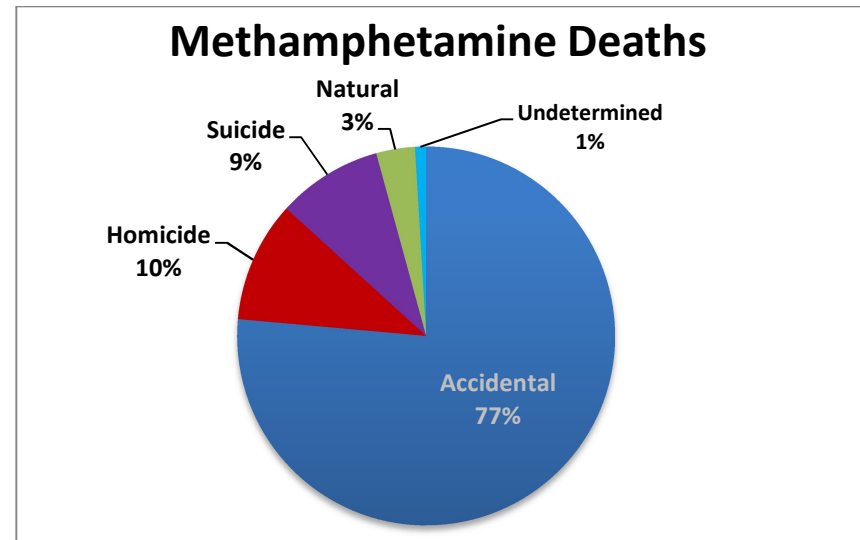
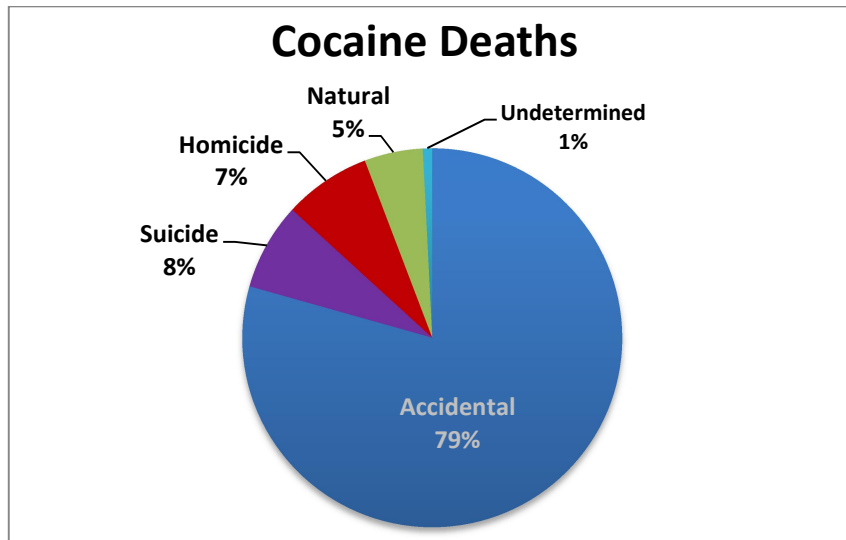




## 2018 Manner of Death for Reported Drug Occurrences



## 2018 Manner of Death for Reported Drug Occurrences



## **Analytes**

Below are specific analytes that were identified in the decedents:

### **Cathinones**

- N-Ethylpentylone
- Alpha-PVP
- Dibutylone
- Butylone
- Chloromethcathinone
- Tertylone
- 4-Methyl Pentedrone
- Eutylone
- Ethylone

### **Synthetic Cannabinoids**

- 5F-ADB 3,3-Dimethyl-Butanoic Acid
- FUB-AMB 3-Methyl-Butanoic Acid
- 5-Fluoro-ADB
- 5-Fluoro-MDMB-Pinaca/5-Fluoro-EMB-Pinaca
- 5F-ADB-Butanoic Acid
- ADB-FUBINACA
- MMB-FUBINACA
- 5F-ADB

### **Phenethylamines/Piperazines**

- 3,4-Methylenedioxyamphetamine
- 3,4-Methylenedioxymethamphetamine
- Ethylamphetamine
- M-Chlorophenylpiperazine

## 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.

**Mitragynine** – An alkaloid found in the Kratom plant, which is consumed for its stimulant and analgesic (opioid-like) effects. The leaves of the Kratom plant, either whole or crushed, are smoked, chewed or prepared as tea. In addition, plant extract containing mitragynine is available in tablets and capsules.

**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."

## **Glossary (Continued)**

**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.

**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.