

# NON-FATAL OPIOID OVERDOSE SURVEILLANCE

FLORIDA 2016



Florida Department of Health –Enhanced State Opioid Overdose Surveillance

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The purpose of this report is to describe and identify non-fatal (morbidity) geographically-specific and other statistically significant changes in the rate of **any drug** and **opioid-involved overdoses**, which occurred in Florida during 2016. Non-fatal overdose data were analyzed by the Florida Department of Health's Enhanced State Opioid Overdose Surveillance Program, using Florida's Emergency Medical Services Tracking and Reporting System (EMSTARS) data.

# Key Findings in Florida 2016:

- Non-fatal drug-involved overdoses accounted for 33,721 EMS transports and are estimated to occur at a rate of 186.2 per 100,000 persons.
- Non-fatal opioid-involved overdoses accounted for 11,911 EMS transports and are estimated to occur at a rate of 65.8 per 100,000 persons.
- The highest rates per 100,000 persons were observed during 2016 Q3 (July—September) for any drug and opioid-involved overdose, 55.7 and 18.9 respectively.
- Persons aged 25-34 years were more likely than any other age group to experience non-fatal drug-involved or opioid-involved overdose.
- Overall when comparing non-Hispanic whites to other non-Hispanic races, non-Hispanic whites had the highest frequency and rate of any non-fatal drug or opioid-involved overdose. When comparing non-Hispanics to Hispanics, non-Hispanics were at 1.81 times higher risk than Hispanics for non-fatal drug overdose and were at 2.17 times higher risk than Hispanics for opioid-involved overdose.
- Males aged 25-34 years experienced non-fatal drug and opioid-involved overdose more frequently and at a higher rate than females of the same age category. Overall in 2016, males, particularly younger men, were transported by EMS for drug and opioid-involved overdose more frequently than females.
- In descending order, the most substantial number of non-fatal drug-involved overdose occurred in Palm Beach, Hillsborough, Orange, Broward, and Manatee counties. However, the highest rates, in descending order, occurred in Manatee, Alachua, Martin, Palm Beach, and Walton counties.
- In descending order, the largest number of opioid-involved overdose occurred primarily in Palm Beach, Pinellas, Orange, Hillsborough, and Duval counties. However, the highest rates, in descending order, occurred in Palm Beach, Pinellas, Baker, Nassau, and Bay counties.

# Non-fatal Overdose (Morbidity), Florida 2016

## DATA SOURCE

Non-fatal overdose counts were derived from Florida's EMSTARS database, which receives information from EMS agencies that represent ~90% of the total number of prehospital EMS runs in Florida.

## CASE DEFINITIONS

	<b>EMSTARS V (1.4)</b>	<b>EMSTARS V (3)</b>
<b><i>Any drug overdose</i></b>	The primary or secondary impression is "Poisoning/Drug Ingestion;" or, any case where the medication administered is Naloxone, and the patient exhibits a positive response, no matter the primary or secondary impression listed.	The primary or secondary impression is any of the following ICD-10 CM "T36 - T50, F11 - F16, F18 - F19" codes.
<b><i>Opioid-involved overdose</i></b>	<b>EMSTARS V (1.4)</b> The medication administered is Naloxone and patient exhibits positive response, no matter the primary or secondary impression listed.	<b>EMSTARS V (3)</b> The primary or secondary impression of any of the following ICD-10 CM "T40.1 - T40.4, T40.60, T40.69, F11" codes.

## OTHER DEFINITIONS OR LIMITATIONS

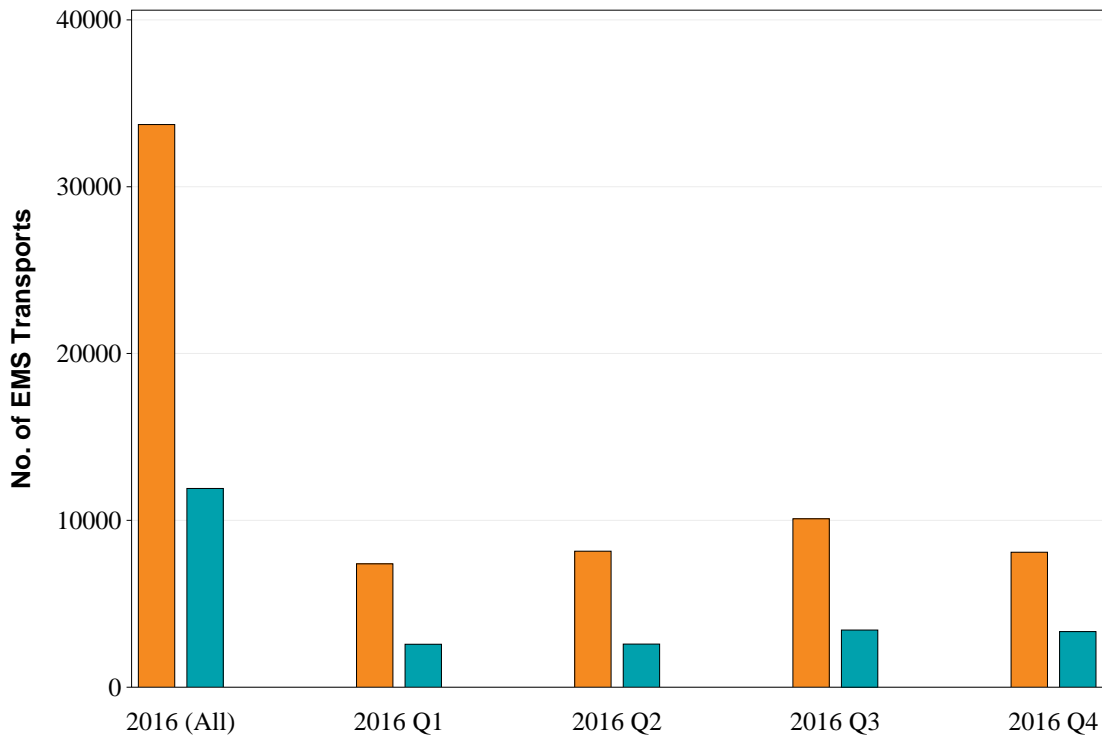
EMS transports indicate the incident-patient record meets the following criteria: 1) are responding to an emergency medical situation (e.g., response to 9-1-1 call) and transported to a hospital; or are responding to an emergency medical situation where the patient was treated and refused transport to the hospital; 2) exclude EMS transfers when a patient is transferred between hospitals or medical care facilities; 3) exclude children 10 years of age or younger.

Rates per 100,000 persons were estimated using data from the 2016 U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates. In 2016, the estimated population of Florida ≥ 11 years of age was 18,109,300.

## ICD-10 CM CODE DESCRIPTION

Poisoning by: T36-T50 (range includes all drugs), T40.1 (heroin), T40.2 (other opioids), T40.3 (methadone), T40.4 (other synthetic narcotics), T40.60 (unspecified narcotics), T40.69 (other narcotics), F11 (opioid related), F12 (cannabis related), F13 (sedative, hypnotic, or anxiolytic related), F14 (cocaine related), F15 (other stimulant related), F16 (hallucinogen related), F18 (inhalant related), and F19 (other psychoactive substance related).

### Non-fatal Overdose by Reporting Quarter and Drug Type, Florida 2016

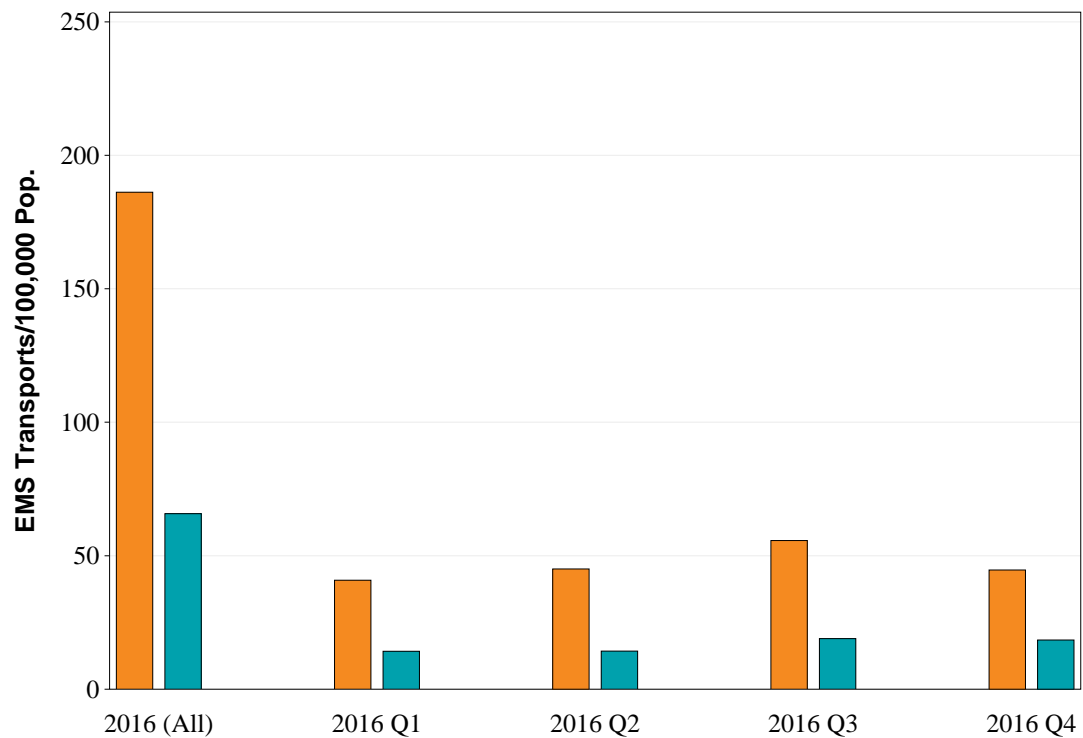


<b>Any Drug</b>	33,721	7,395	8,152	10,089	8,085
<b>Opioid</b>	11,911	2,568	2,585	3,424	3,334

**Note:** Any opioid may include prescription or illicit opioids. Categories are not mutually exclusive.  
**Note:** Q1: Jan-Mar; Q2: Apr-Jun; Q3: Jul-Sep; Q4: Oct-Dec

- 33,721 total any non-fatal drug overdoses were counted for 2016. Likewise, 11,911 non-fatal opioid-involved overdoses were observed.

## Non-fatal Overdose Rate by Reporting Quarter and Drug Type, Florida 2016



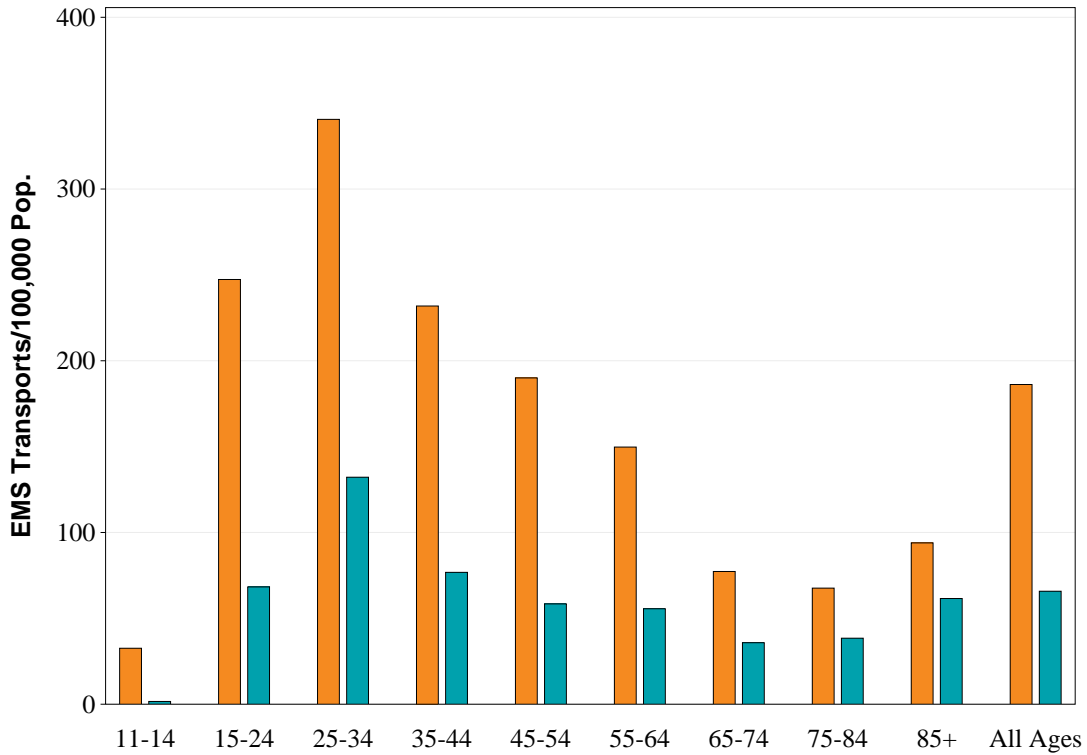
Any Drug	186.2	40.8	45.0	55.7	44.6
Opioid	65.8	14.2	14.3	18.9	18.4

**Note:** Any opioid may include prescription or illicit opioids. Categories are not mutually exclusive.

**Note:** Q1: Jan-Mar; Q2: Apr-Jun; Q3: Jul-Sep; Q4: Oct-Dec

- The estimated 2016 non-fatal all-cause drug overdose rate was 186.2 per 100,000 persons. Similarly, estimated non-fatal opioid-involved overdose rate was 65.8 per 100,00 persons.
- The highest rates per 100,000 persons were observed during 2016 Q3 (July—September) for any drug and opioid-involved overdose, 55.7 and 18.9 respectively.

### Non-fatal Overdose Rate by Age and Drug Type, Florida 2016

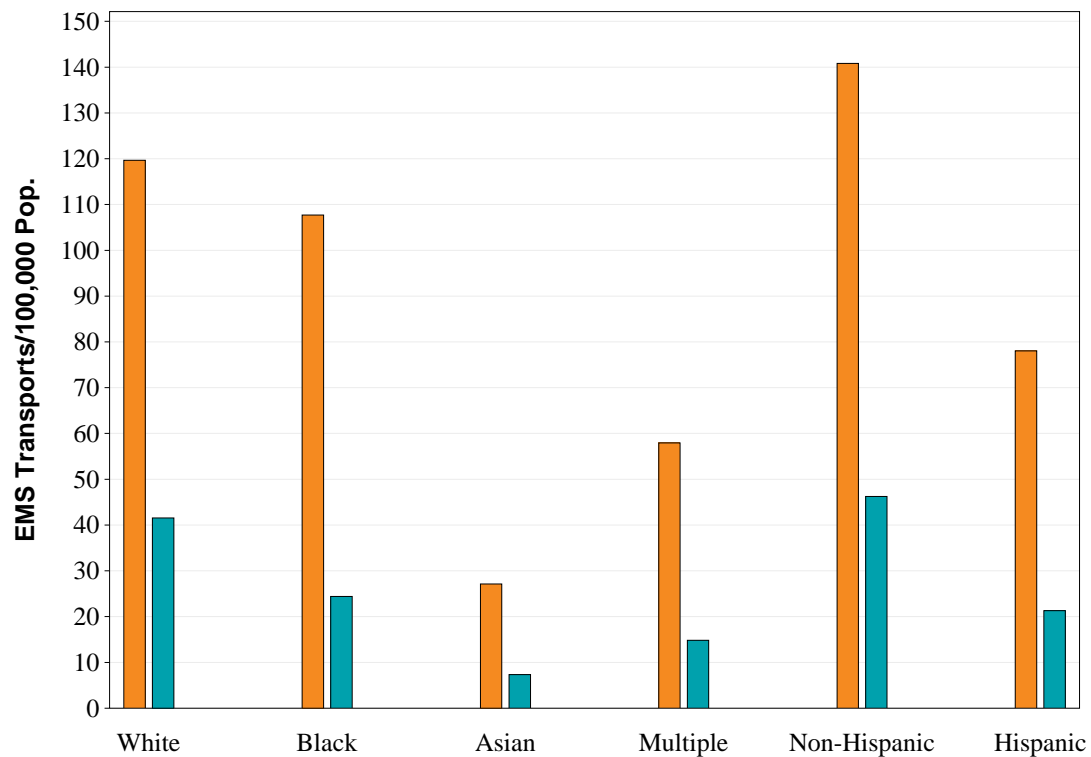


Any Drug	32.6	247.4	340.6	231.9	190.0	149.8	77.2	67.6	93.9	186.2
Opioid	1.6	68.3	132.2	76.8	58.4	55.6	35.8	38.5	61.5	65.8

**Note:** Any opioid may include prescription or illicit opioids. Categories are not mutually exclusive.  
**Note:** All Ages: 11-years and older

- Persons aged 25-34 years were at higher risk than any other age group for non-fatal drug-involved or opioid-involved overdose.

### Non-fatal Overdose Rate by Race/Ethnicity and Drug Type, Florida 2016



Any Drug	119.7	107.7	27.1	57.9	140.8	78.0
Opioid	41.6	24.4	7.3	14.8	46.2	21.3

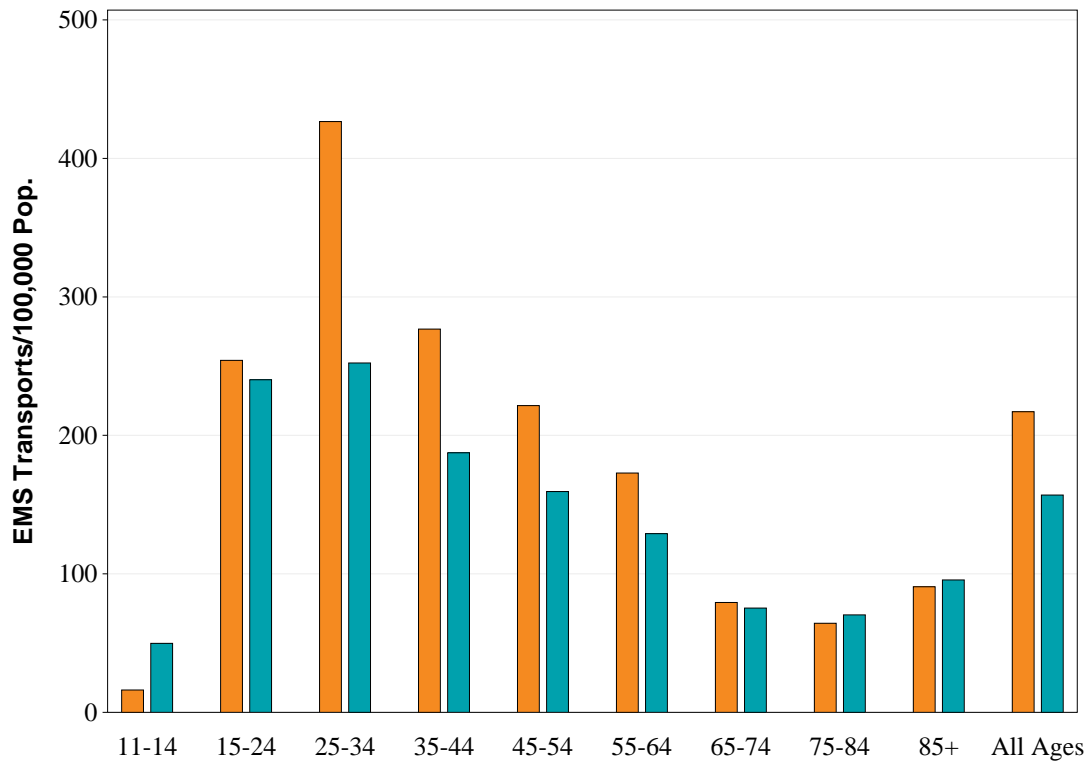
**Note:** Any opioid may include prescription or illicit opioids. Categories are not mutually exclusive.

**Note:** White: whites only; Black: blacks only; Asian: asian only; Multiple: more than one race; Hispanic: regardless of race; Non-Hispanic: regardless of race

- Overall when comparing non-Hispanic whites to other non-Hispanic races, non-Hispanic whites had the highest frequency and rate for any non-fatal drug or opioid-involved overdose.
- When comparing non-Hispanics to Hispanics, non-Hispanics were 1.81 times higher risk than Hispanics for non-fatal drug overdose and were 2.17 times higher risk than Hispanics for opioid-involved overdose.



### Non-fatal Any Drug Overdose Rate by Sex and Age, Florida 2016

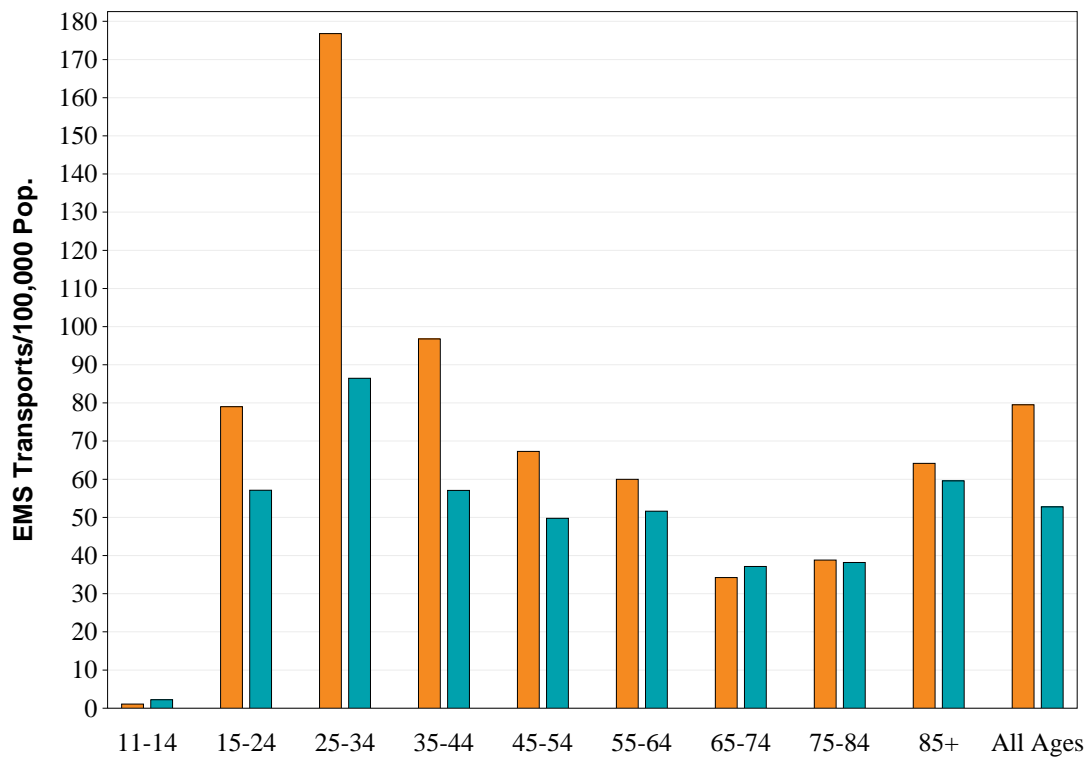


<b>Male</b>	16.2	254.2	426.7	276.8	221.5	172.9	79.3	64.3	90.7	217.1
<b>Female</b>	49.7	240.2	252.3	187.4	159.4	129.1	75.3	70.4	95.6	156.9

**Note:** Any opioid may include prescription or illicit opioids. Categories are not mutually exclusive.  
**Note:** All Ages: 11-years and older

- During 2016, males aged 25-34 years experienced non-fatal all-cause drug overdose more frequently and at a higher rate than females of the same age category.
- Overall in 2016, males, particularly adult men, were transported for any non-fatal drug overdose at a higher rate than females.

### Non-fatal Opioid-Involved Overdose Rate by Sex and Age, Florida 2016



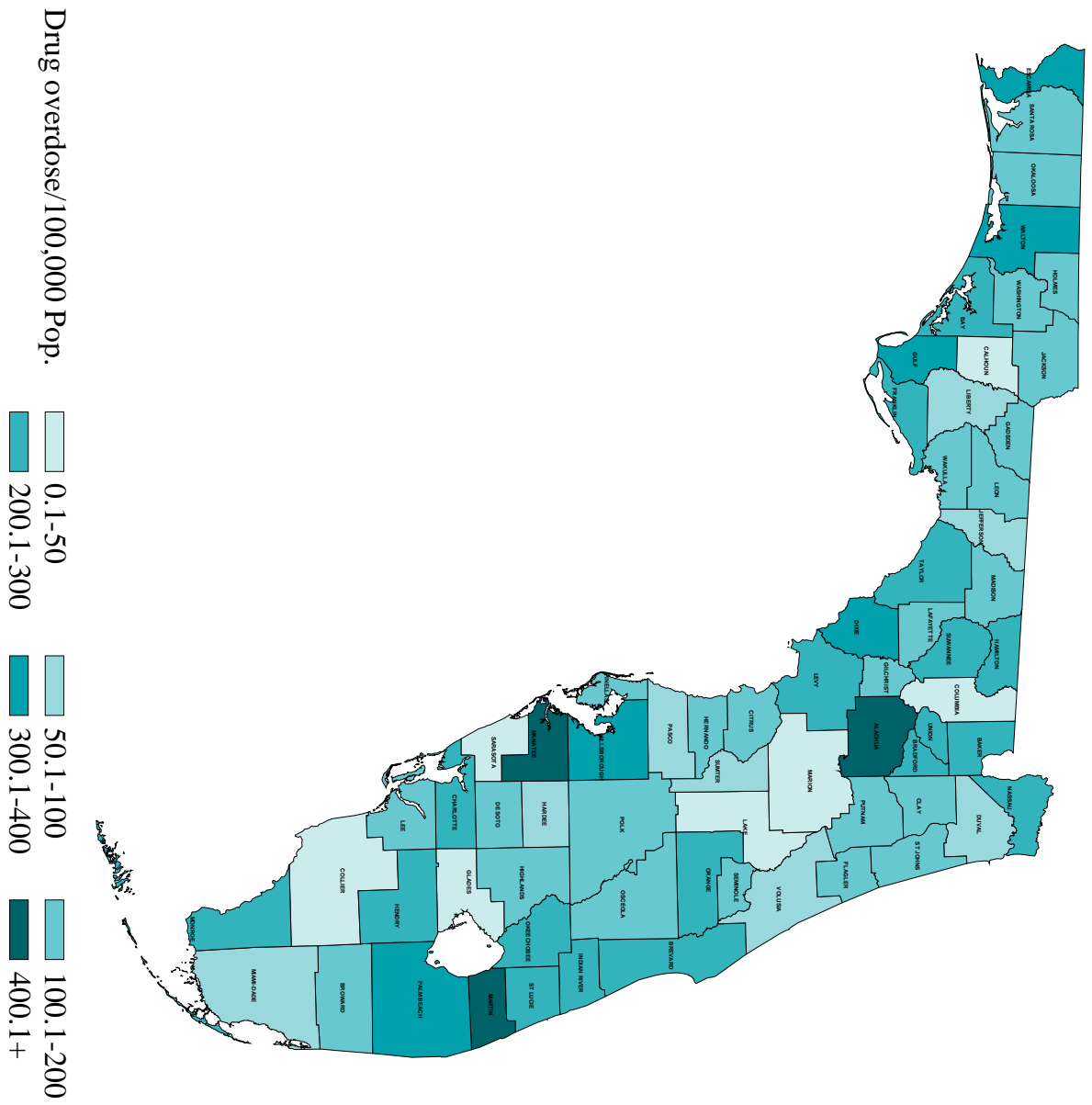
<b>Male</b>	1.1	79.0	176.8	96.8	67.3	60.0	34.2	38.8	64.2	79.5
<b>Female</b>	2.2	57.1	86.5	57.1	49.8	51.6	37.1	38.2	59.6	52.8

**Note:** Any opioid may include prescription or illicit opioids. Categories are not mutually exclusive.

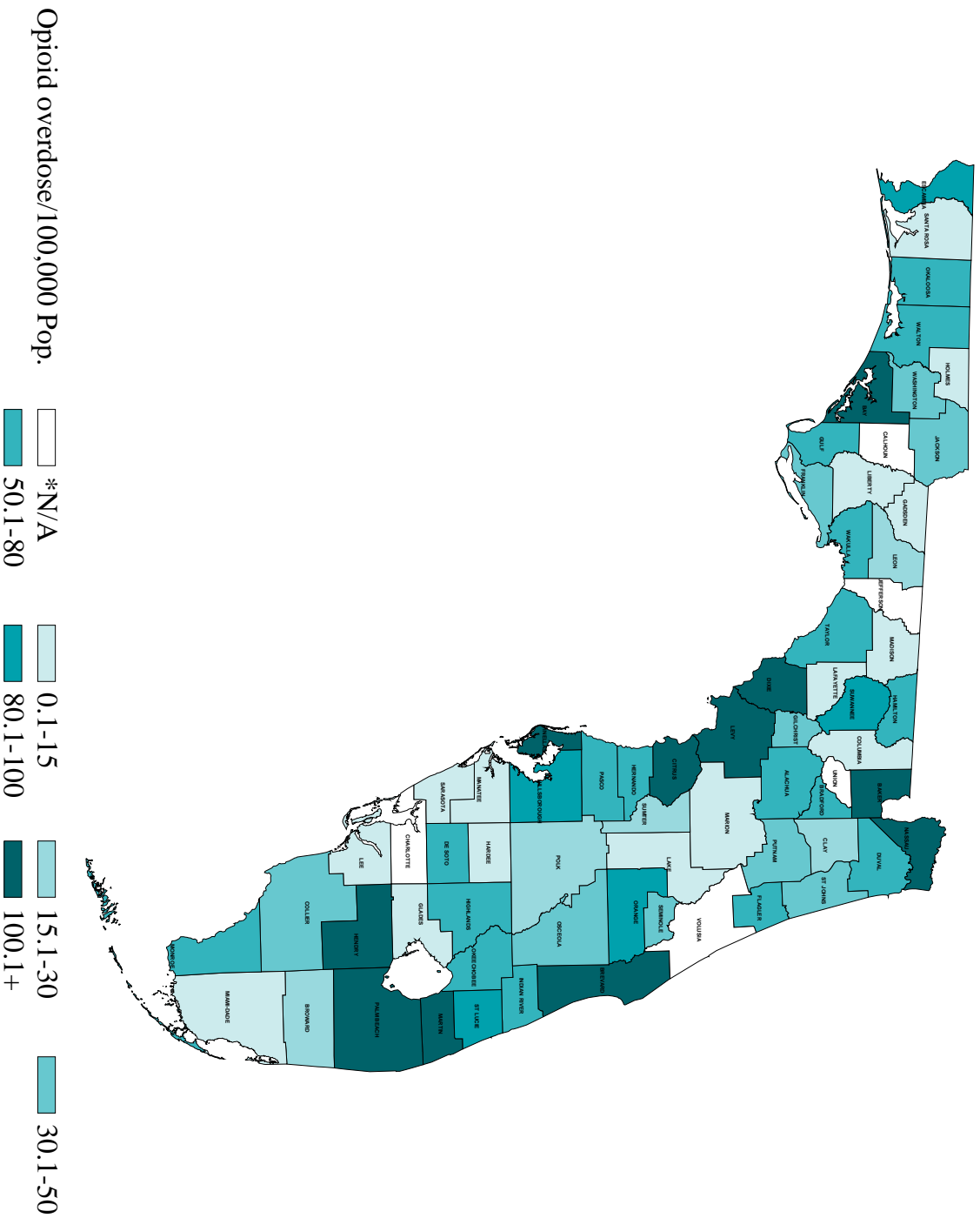
**Note:** All Ages: 11-years and older

- Males aged 25-34 years experienced non-fatal opioid-involved overdose more frequently and at a higher rate than females of the same age category, in 2016.
- Overall in 2016, males, particularly younger men, were transported for a non-fatal opioid-involved overdose at a higher rate than females.

# County Map of Florida Non-fatal Any Drug Overdose Rates, 2016



# County Map of Florida Non-fatal Opioid-Involved Overdose Rates, 2016



\*Rates not calculated or observations unavailable

## Florida Counties with the Highest Count and Rate of Non-Fatal Drug-Involved Overdoses—Florida 2016

RANK	COUNTY (COUNT)	RANK	COUNTY (RATE PER 100,000)
<b>ANY DRUG-INVOLVED NON-FATAL OVERDOSE</b>			
1	PALM BEACH (5,039)	1	MANATEE (627.9)
2	HILLSBOROUGH (3,875)	2	ALACHUA (537.9)
3	ORANGE (3,020)	3	MARTIN (417.6)
4	BROWARD (2,212)	4	PALM BEACH (389.8)
5	MANATEE (2,118)	5	WALTON (343.0)
6	MIAMI-DADE (1,917)	6	DIXIE (334.6)
7	PINELLAS (1,296)	7	ESCAMBIA (324.2)
8	ALACHUA (1,267)	8	HILLSBOROUGH (322.9)
9	BREVARD (1,116)	9	GULF (307.6)
10	LEE (954)	10	ORANGE (262.6)
<b>OPIOID-INVOLVED NON-FATAL OVERDOSE</b>			
1	PALM BEACH (3,595)	1	PALM BEACH (278.1)
2	PINELLAS (1,293)	2	PINELLAS (148.0)
3	ORANGE (1,034)	3	BAKER (144.1)
4	HILLSBOROUGH (989)	4	NASSAU (138.6)
5	DUVAL (589)	5	BAY (136.3)
6	BREVARD (539)	6	DIXIE (129.7)
7	BROWARD (463)	7	LEVY (115.1)
8	PASCO (320)	8	HENDRY (105.2)
9	ESCAMBIA (248)	9	BREVARD (103.2)
10	ST LUCIE (242)	10	CITRUS (102.7)

## Non-Fatal Drug Overdose (Morbidity), Florida 2016

OPIOID-INVOLVED MAY INCLUDE PRESCRIPTION, AND ILLICIT OPIOIDS;  
CATEGORIES ARE NOT MUTUALLY EXCLUSIVE

	ANY DRUG		OPIOID-INVOLVED	
	No.	Rate	No.	Rate
<b>TOTAL</b>	33,721	186.2	11,911	65.8
<b>Q1</b>	7,395	40.8	2,568	14.2
<b>Q2</b>	8,152	45.0	2,585	14.3
<b>Q3</b>	10,089	55.7	3,424	18.9
<b>Q4</b>	8,085	44.6	3,334	18.4
<b>AGE</b>				
<b>11-14</b>	300	32.6	15	1.6
<b>15-24</b>	6,093	247.4	1,683	68.3
<b>25-34</b>	9,140	340.6	3,547	132.2
<b>35-44</b>	5,714	231.9	1,892	76.8
<b>45-54</b>	5,237	190.0	1,609	58.4
<b>55-64</b>	4,084	149.8	1,516	55.6
<b>65-74</b>	1,759	77.2	816	35.8
<b>75-84</b>	853	67.6	485	38.5
<b>85+</b>	522	93.9	342	61.5
<b>ETHNICITY (RACE)</b>				
<b>HISPANIC</b>	3,226	78.0	881	21.3
<b>NON-HISPANIC</b>	19,677	140.8	6,463	46.2
<b>WHITE</b>	16,351	119.7	5,679	41.6
<b>BLACK</b>	2,958	107.7	670	24.4
<b>ASIAN</b>	126	27.1	34	7.3
<b>MULTIPLE RACES</b>	207	57.9	53	14.8
<b>SEX (AGE)</b>				
<b>MALE</b>	19,088	217.1	6,990	79.5
<b>11-14</b>	76	16.2	5	1.1
<b>15-24</b>	3,207	254.2	997	79.0
<b>25-34</b>	5,790	426.7	2,399	176.8
<b>35-44</b>	3,379	276.8	1,181	96.8
<b>45-54</b>	2,995	221.5	910	67.3
<b>55-64</b>	2,227	172.9	773	60.0
<b>65-74</b>	839	79.3	362	34.2
<b>75-84</b>	366	64.3	221	38.8
<b>85+</b>	195	90.7	138	64.2
<b>FEMALE</b>	14,618	156.9	4,917	52.8
<b>11-14</b>	224	49.7	10	2.2
<b>15-24</b>	2,885	240.2	686	57.1
<b>25-34</b>	3,346	252.3	1,147	86.5
<b>35-44</b>	2,331	187.4	710	57.1
<b>45-54</b>	2,239	159.4	699	49.8
<b>55-64</b>	1,857	129.1	743	51.6

65-74	918	75.3	453	37.1
75-84	487	70.4	264	38.2
85+	326	95.6	203	59.6
<b>COUNTY</b>				
ALACHUA	1,267	537.9	150	63.7
BAKER	61	251.1	35	144.1
BAY	401	248.5	220	136.3
BRADFORD	48	200.7	18	75.3
BREVARD	1,116	213.6	539	103.2
BROWARD	2,212	131.2	463	27.5
CALHOUN	4	31.2	0	N/A
CHARLOTTE	361	216.3	0	N/A
CITRUS	164	123.8	136	102.7
CLAY	210	114.5	46	25.1
COLLIER	125	37.8	109	33.0
COLUMBIA	12	19.7	5	8.2
DE SOTO	49	153.7	23	72.1
DIXIE	49	334.6	19	129.7
DUVAL	602	74.8	589	73.2
ESCAMBIA	900	324.2	248	89.3
FLAGLER	148	150.0	51	51.7
FRANKLIN	26	240.3	5	46.2
GADSDEN	47	116.5	6	14.9
GILCHRIST	27	176.5	6	39.2
GLADES	6	46.8	1	7.8
GULF	45	307.6	11	75.2
HAMILTON	27	210.2	9	70.1
HARDEE	15	64.3	3	12.9
HENDRY	75	225.5	35	105.2
HERNANDO	274	165.7	98	59.3
HIGHLANDS	93	102.0	50	54.8
HILLSBOROUGH	3,875	322.9	989	82.4
HOLMES	25	143.8	2	11.5
INDIAN RIVER	282	204.0	76	55.0
JACKSON	53	122.1	20	46.1
JEFFERSON	10	79.8	0	N/A
LAFAYETTE	8	103.1	1	12.9
LAKE	8	2.7	2	0.7
LEE	954	146.5	96	14.7
LEON	351	136.0	43	16.7
LEVY	82	230.2	41	115.1
LIBERTY	6	80.6	1	13.4
MADISON	28	172.2	2	12.3
MANATEE	2,118	627.9	42	12.5
MARION	83	26.5	9	2.9
MARTIN	606	417.6	146	100.6
MIAMI-DADE	1,917	79.7	59	2.5
MONROE	162	224.4	40	55.4

<b>NASSAU</b>	156	216.2	100	138.6
<b>OKALOOSA</b>	306	174.8	116	66.3
<b>OKEECHOBEE</b>	74	209.1	24	67.8
<b>ORANGE</b>	3,020	262.6	1,034	89.9
<b>OSCEOLA</b>	499	170.9	128	43.8
<b>PALM BEACH</b>	5,039	389.8	3,595	278.1
<b>PASCO</b>	407	89.0	320	70.0
<b>PINELLAS</b>	1,296	148.3	1,293	148.0
<b>POLK</b>	684	116.9	141	24.1
<b>PUTNAM</b>	71	111.4	25	39.2
<b>ST JOHNS</b>	343	164.2	81	38.8
<b>ST LUCIE</b>	698	255.2	242	88.5
<b>SANTA ROSA</b>	185	122.9	22	14.6
<b>SARASOTA</b>	104	27.3	20	5.2
<b>SEMINOLE</b>	691	170.5	136	33.6
<b>SUMTER</b>	82	68.9	33	27.7
<b>SUWANNEE</b>	88	226.6	34	87.6
<b>TAYLOR</b>	51	259.1	11	55.9
<b>UNION</b>	33	243.8	0	N/A
<b>VOLUSIA</b>	440	92.0	0	N/A
<b>WAKULLA</b>	46	162.2	19	67.0
<b>WALTON</b>	200	343.0	45	77.2
<b>WASHINGTON</b>	35	159.0	10	45.4

N/A: Rates not calculated or not enough observations available.