NON-FATAL OPIOID OVERDOSE SURVEILLANCE

2018 Q1 REPORT

The purpose of this report is to describe and identify non-fatal (morbidity) geographically-specific and other statistically significant changes in the rate of **all drug** and **opioid-involved overdoses**, which occurred in Florida during 2018 Q1(January-March). 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 2018 Q1:

- EMS transports peaked on January 27th, 2018 at 155 non-fatal all drug overdoses.
- EMS transports peaked on February 16th, 2018 at 75 non-fatal opioid-involved overdoses.
- 1.78% of all 2018 Q1 EMS runs, or 8,015 events, are related to non-fatal all drug overdose; were 0.58%, or 2,604 events, are related to non-fatal opioid-involved overdose.
- Non-fatal all drug overdose rate decreased 9.87% from 2017 Q1 to 42.9 per 100,000 persons.
- Non-fatal opioid-involved overdose rate declined 29.08% from 2017 Q1 to 13.9 per 100,000 persons.
- Significant trends between 2016 Q1, 2017 Q1, and 2018 Q1 were not observed for either all drug or opioid-involved overdose.
- Persons aged 25-34 years were more likely than any other age group to experience either all drug or opioid-involved non-fatal overdose.
- In descending order, the most substantial number of non-fatal all drug overdose occurred in Palm Beach, Hillsborough, Orange, Miami-Date, and Broward counties. The highest rates, in descending order, occurred in Palm Beach, Orange, Pinellas, Hillsborough, and Manatee counties.
- In descending order, the substantial number of non-fatal opioid-involved overdose occurred in Palm Beach, Orange, Pinellas, Hillsborough, and Manatee counties. The highest rates, in descending order, occurred in Palm Beach, Dixie, Nassau, Pinellas, and Levy counties.

Non-fatal Overdose (Morbidity), Florida 2018 Q1

DATA SOURCE

Non-fatal overdose counts were derived from Florida's EMSTARS database, which receives information from EMS agencies that represent 95.52% of the total number of prehospital EMS runs in Florida.

CASE DEFINITIONS

	EMSTARS V (1.4)	EMSTARS V (3)
All drug overdose	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.
	EMSTARS V (1.4)	EMSTARS V (3)
Opioid-involved overdose	The medication administered is naloxone and patient exhibits positive response, no matter the primary or secondary impression listed.	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

Numeric descrepancy between FL-ESOOS and CDC may exist due to timing of data pull. CDC data pull on 07/13/2018. For this report FL-ESOOS data pull on 08/01/2018.

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 2) are responding to an emergency medical situation where the patient was treated and refused transport to the hospital; 3) exclude EMS transfers when a patient is transferred between hospitals or medical care facilities; 4) 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. Further, the U.S. Census Bureau estimated an annual increase of 1.5% for the Floridian population until 2020. For 2018, we estimated the population of Florida ≥ 11 years of age to be 18,675,035.

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).
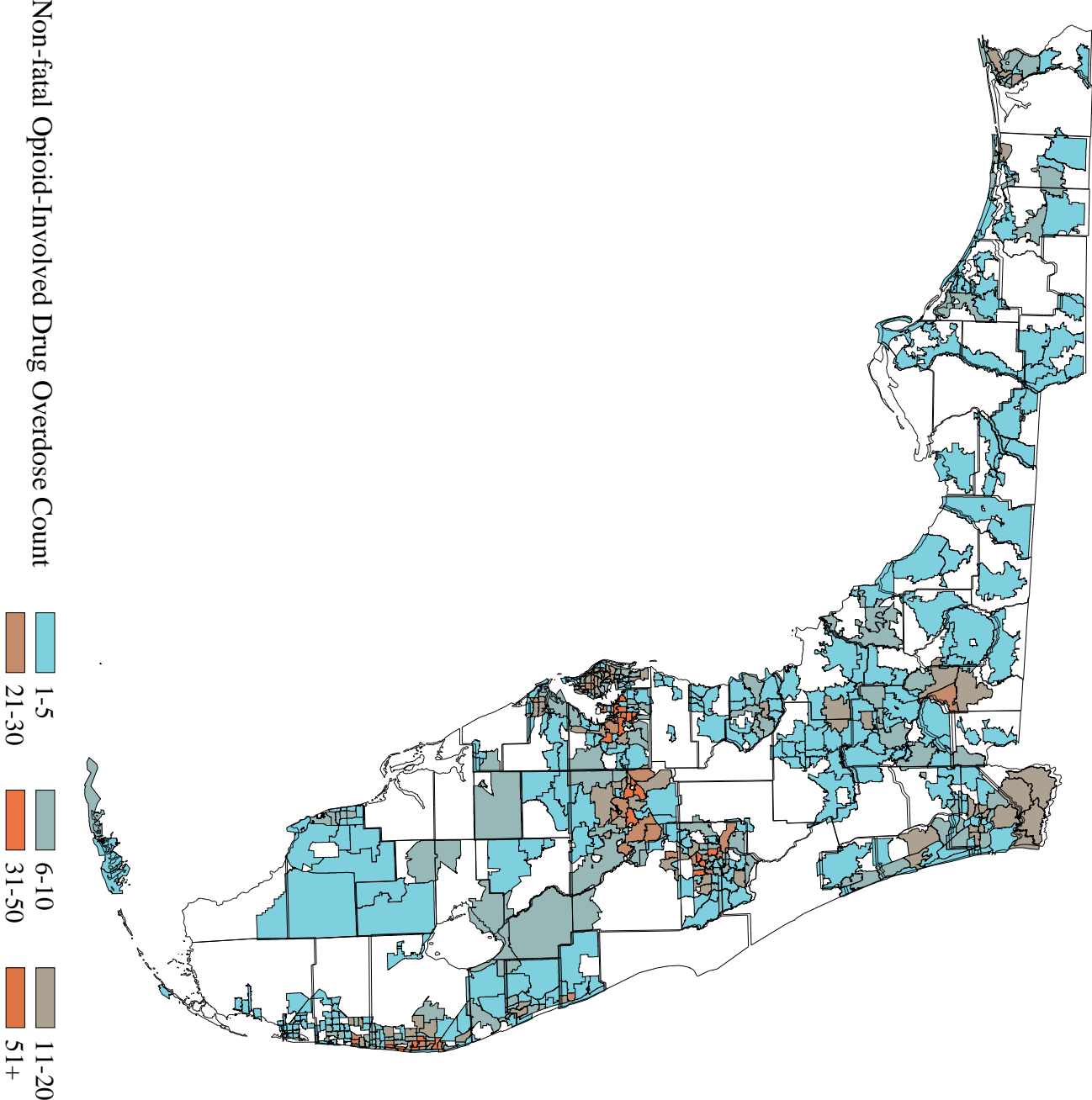
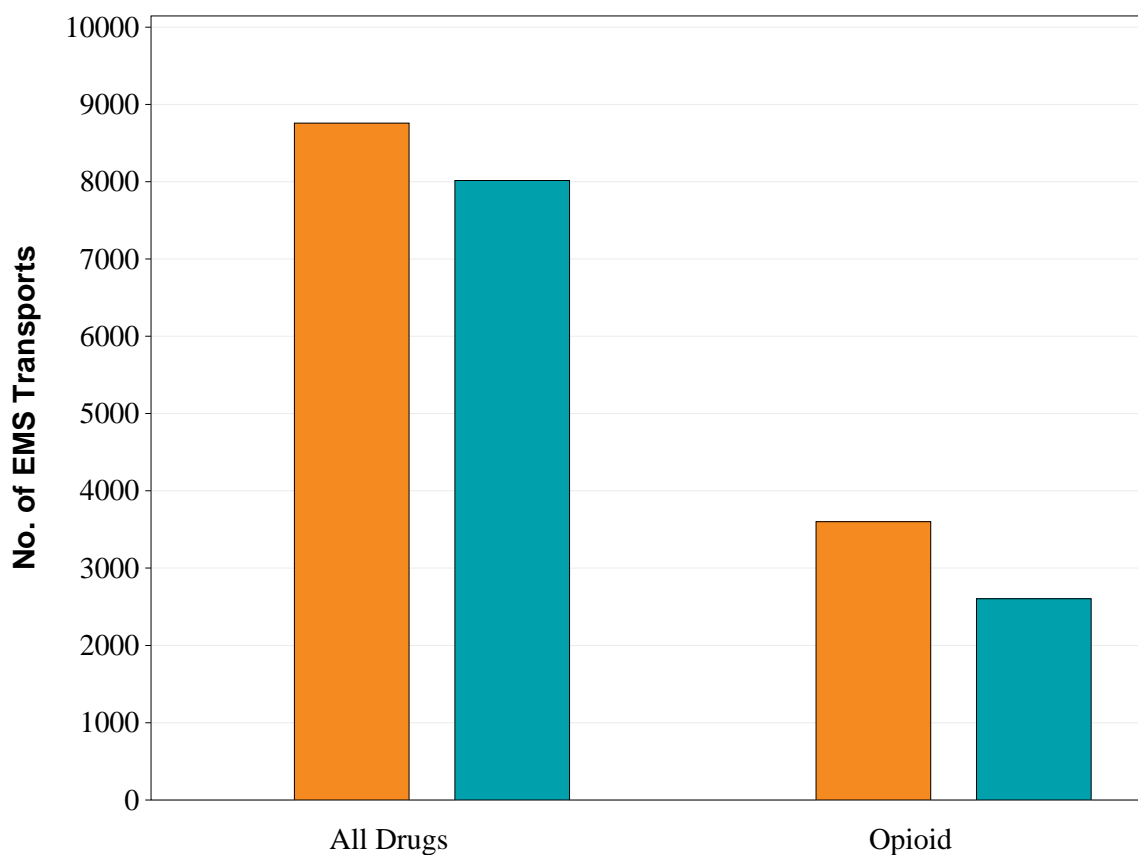Florida County All Non-fatal Drug Overdose Counts by Zip Code, 2018 Q1
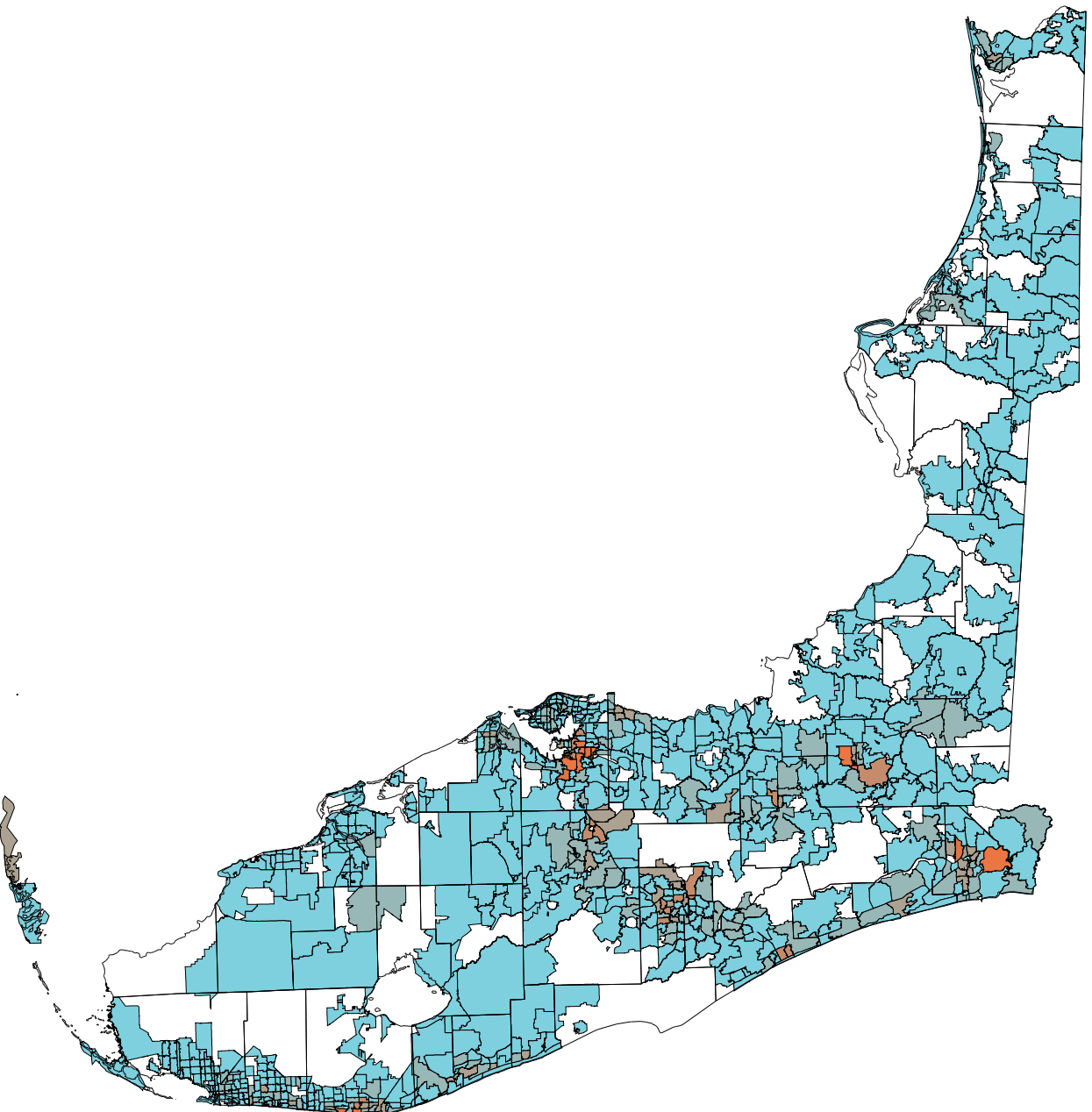
All Non-fatal Drug Overdose Count

0-16
17-32
33-48
49-64
65-80
81+

Florida County Non-fatal Opioid-Involved Overdose Counts by Zip Code, 2018 Q1

Non-fatal Opioid-Involved Drug Overdose Count

1-5	6-10	11-20
21-30	31-50	51+

Non-fatal Overdose by Year and Drug Type, Florida 2018 Q1

No. of EMS Transports

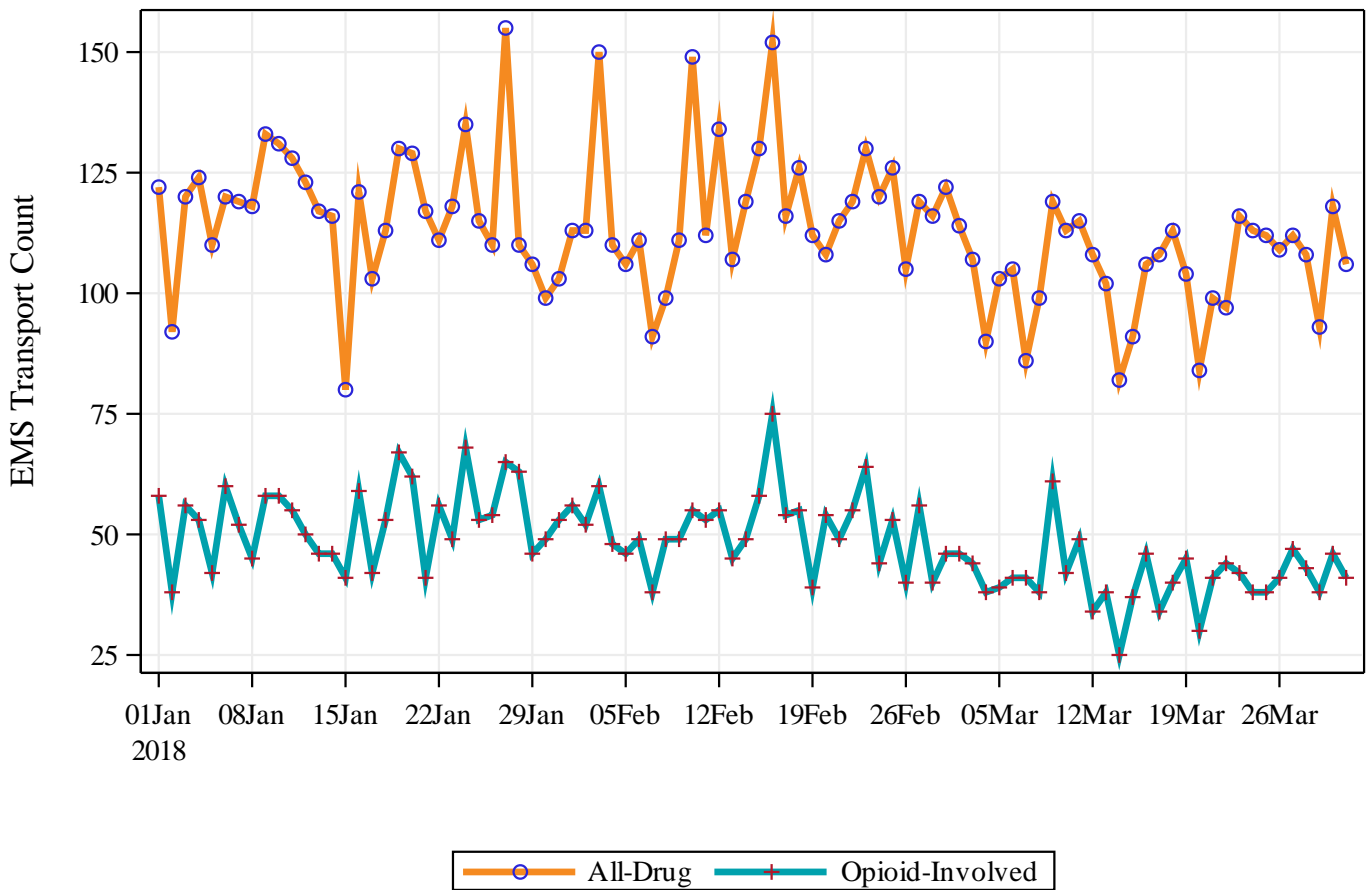|	All Drugs	Opioid
2017 Q1	8,759	3,601
2018 Q1	8,015	2,604

Note: Opioid may include prescription or illicit opioids. Categories are not mutually exclusive.

- 8,015 total non-fatal all drug overdose occurrences were counted for 2018 Q1, 744 less than 2017 Q1. Likewise, 2,604 non-fatal opioid-involved overdoses were observed, 997 less than 2017 Q1.
- 1.78% of all 2018 Q1 EMS runs are related to all non-fatal drug overdose, a significant difference from 2.23% of all 2017 Q1 EMS runs.
- 0.58% of all 2018 Q1 EMS runs are related to non-fatal opioid-involved overdose, a significant difference from 0.92% of all 2017 Q1 EMS runs.
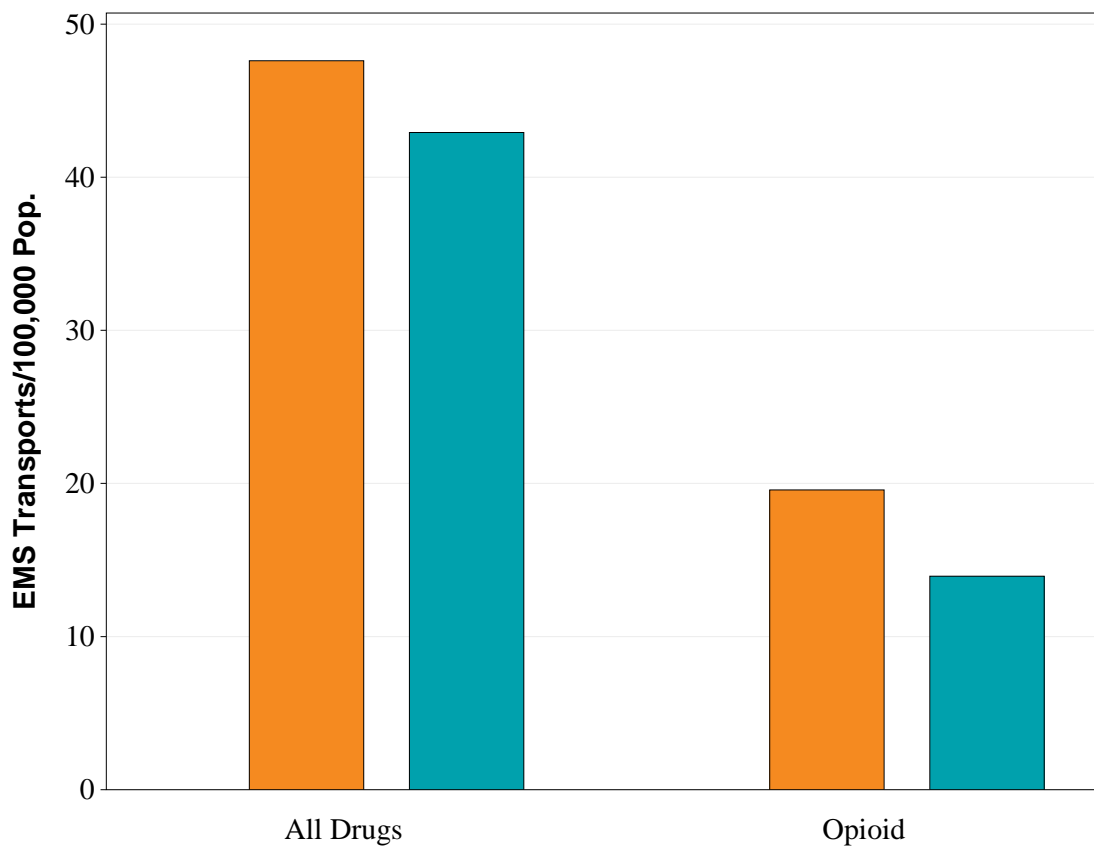
Florida Non-fatal Overdose Count Through Time, 2018 Q1

Note: Opioid may include prescription or illicit opioids. Categories are not mutually exclusive.

- EMS transports peaked on January 27, 2018 at 155 non-fatal all drug overdoses.
- EMS transports peaked on February 16, 2018 at 75 non-fatal opioid-involved overdoses.

Non-fatal Overdose Rate by Drug Type and Year, Florida 2018 Q1

	All Drugs	Opioid
■ 2017 Q1	47.6	19.6
■ 2018 Q1	42.9	13.9

Note: Opioid may include prescription or illicit opioids. Categories are not mutually exclusive.

- The estimated 2018 Q1 non-fatal all drug overdose rate is 42.9 per 100,000 persons. An 9.87% rate decrease from 2017 Q1.
- Non-fatal opioid-involved 2018 Q1 overdose rate is estimated at 13.9 per 100,000 persons. A 29.08% decline in rate from 2017 Q1.

Florida Non-fatal Overdose Rate Trends by Drug Type and Year Quarter

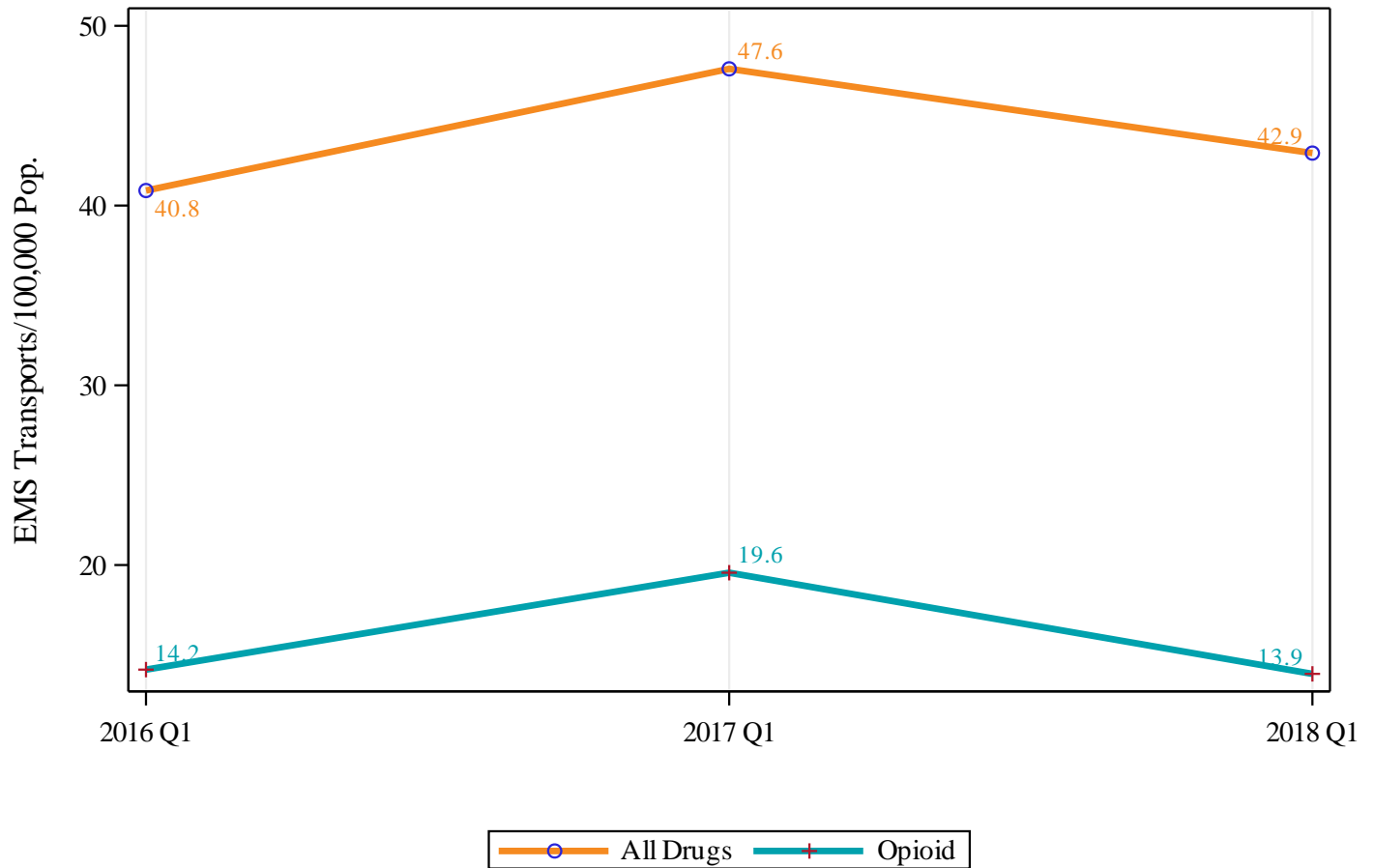All Drugs: 2016 Q1: 40.8; 2017 Q1: 47.6; 2018 Q1: 42.9

Opioid: 2016 Q1: 14.2; 2017 Q1: 19.6; 2018 Q1: 13.9

Note: Opioid may include prescription or illicit opioids. Categories are not mutually exclusive.

- Between 2016 Q1, 2017 Q1, and 2018 Q1, significant trends were not observed for all non-fatal drug or opioid-involved overdose.

Non-fatal Overdose Rate by Age and Drug Type, Florida 2018 Q1
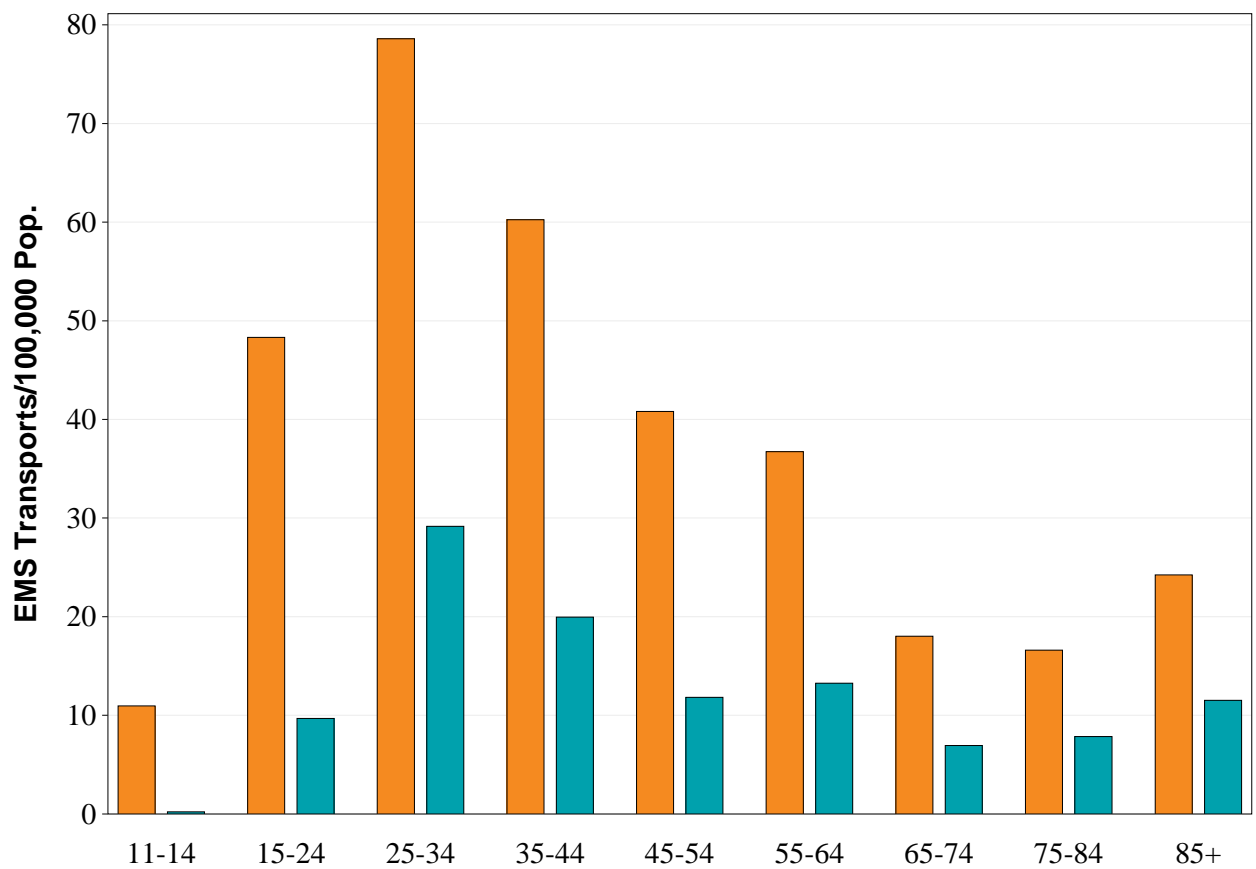
	11-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+
All Drugs	11.0	48.3	78.6	60.2	40.8	36.7	18.0	16.6	24.2
Opioid	0.2	9.7	29.2	20.0	11.8	13.3	6.9	7.8	11.5

Note: 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 the highest risk than any other age group for all non-fatal drug overdose and opioid-involved overdose.

Florida Non-fatal All Drug Overdose Rate Trends by Age Group and Year Quarter
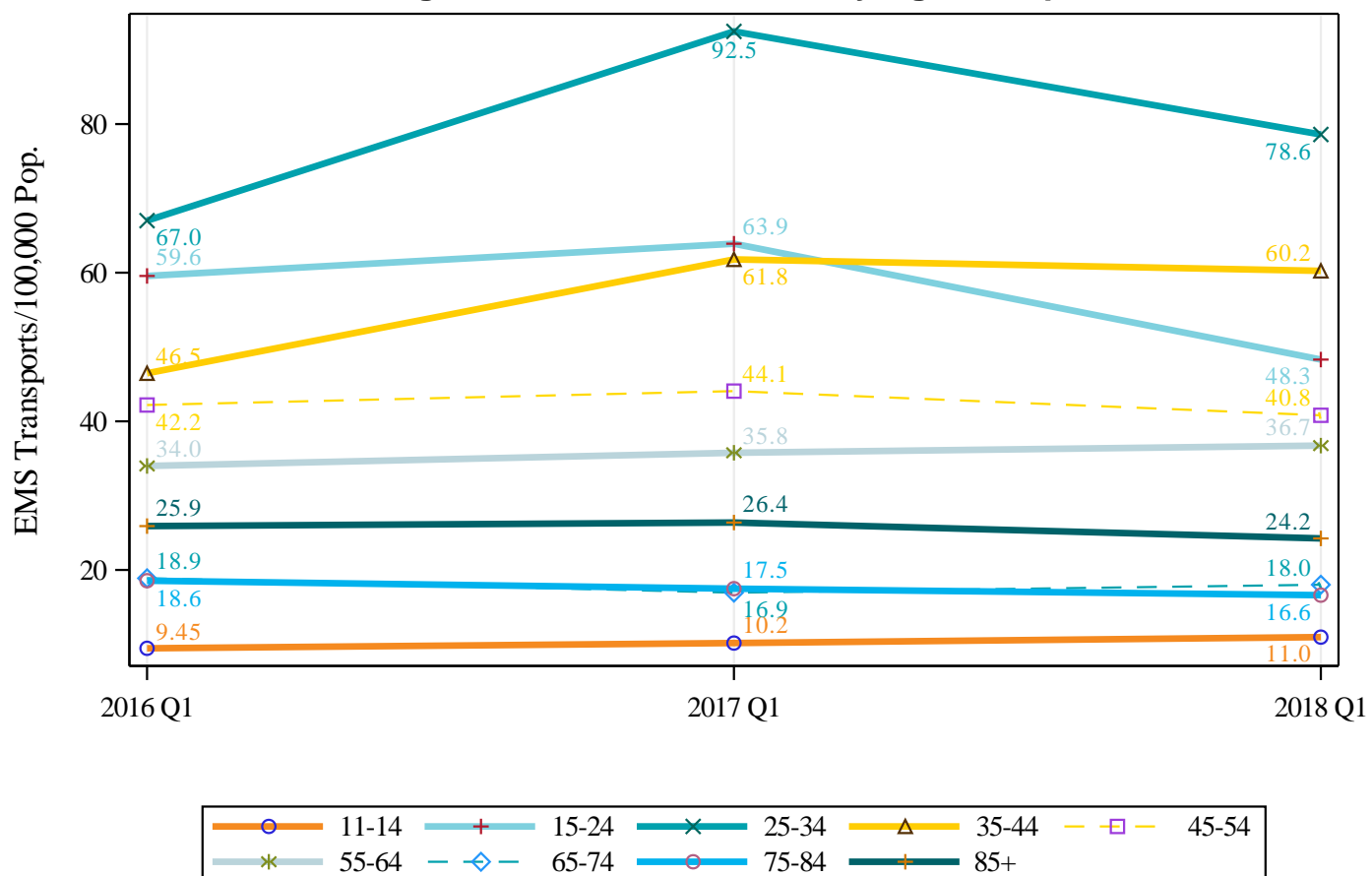
Note: Opioid may include prescription or illicit opioids.

Florida Non-fatal Opioid-Involved Overdose Rate Trends by Age Group and Year Quarter
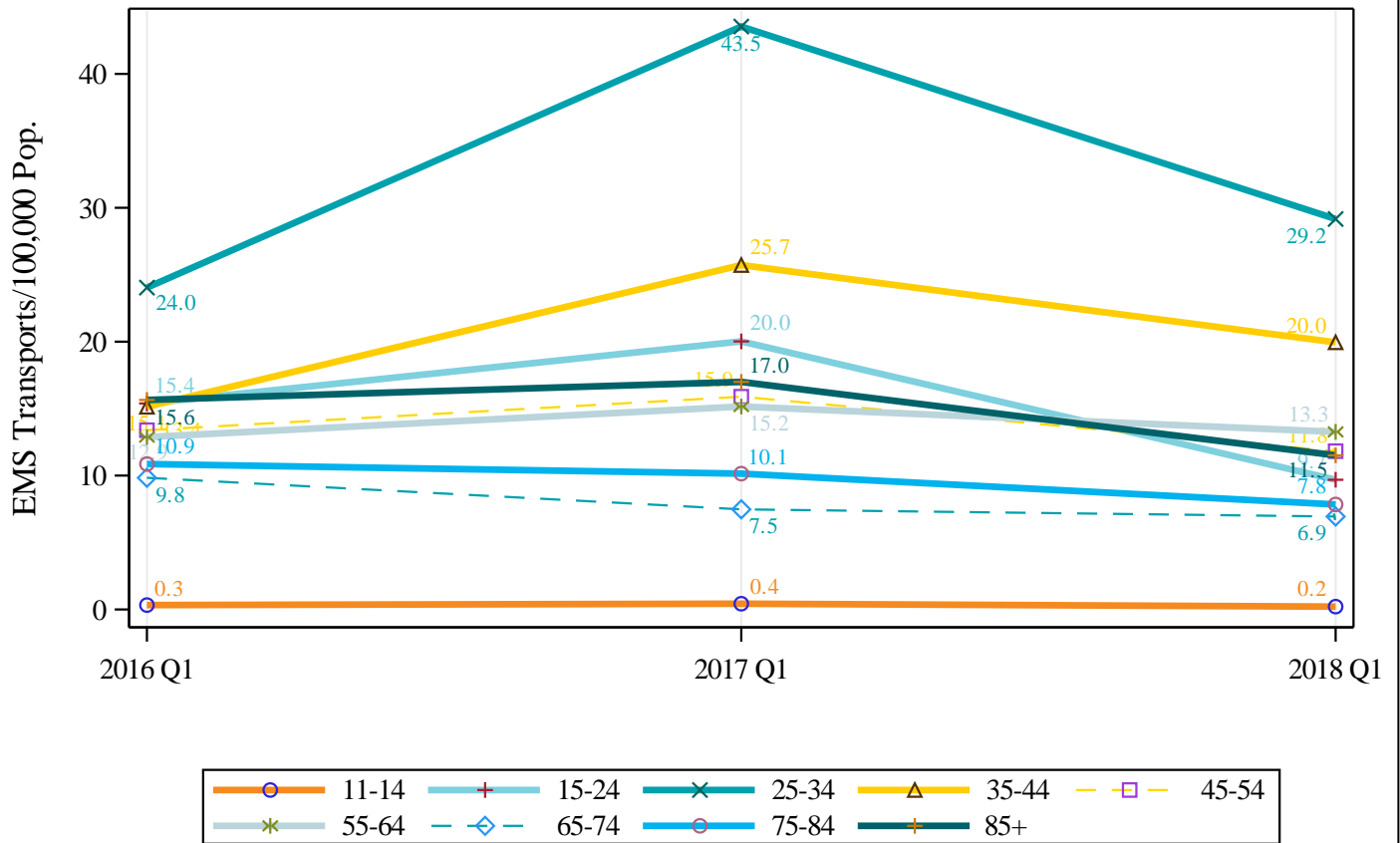
Note: Opioid may include prescription or illicit opioids.

- Between 2016 Q1, 2017 Q1, and 2018 Q1, significant trends were not observed for any non-fatal drug or opioid-involved overdose for all age groups.

Non-fatal All Drug Overdose by Sex and Age, Florida 2018 Q1
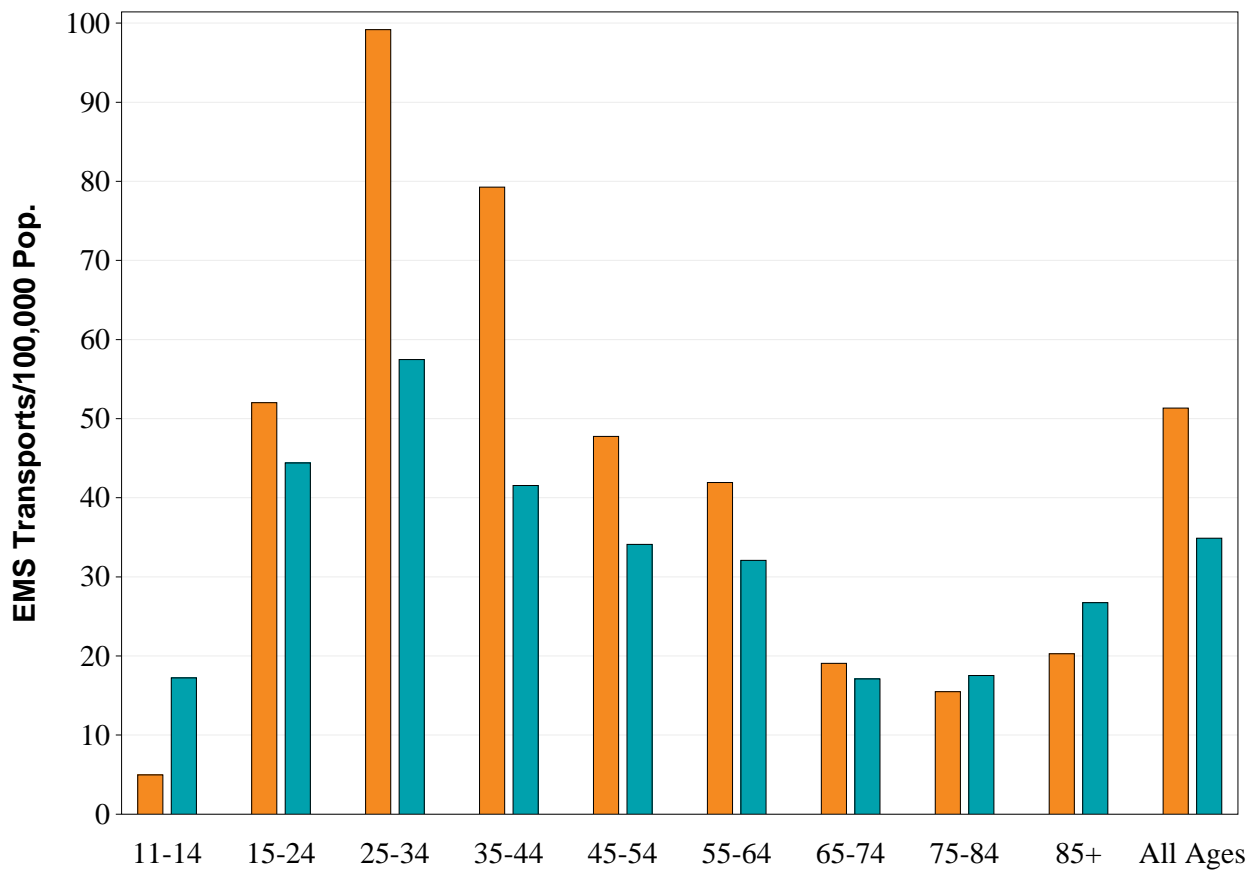
	11-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages
Male	5.0	52.0	99.2	79.3	47.8	41.9	19.1	15.5	20.3	51.3
Female	17.2	44.4	57.5	41.6	34.1	32.1	17.1	17.5	26.7	34.9

Note: 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 all-cause drug overdose more frequently and at a higher rate than females of the same age category, in 2018 Q1.
- Overall in 2018 Q1, males, particularly younger men, were transported for all cause non-fatal drug overdose at a higher rate than females.

Non-fatal All Drug Overdose Rate Trends by Age and Sex, Florida 2018 Q1
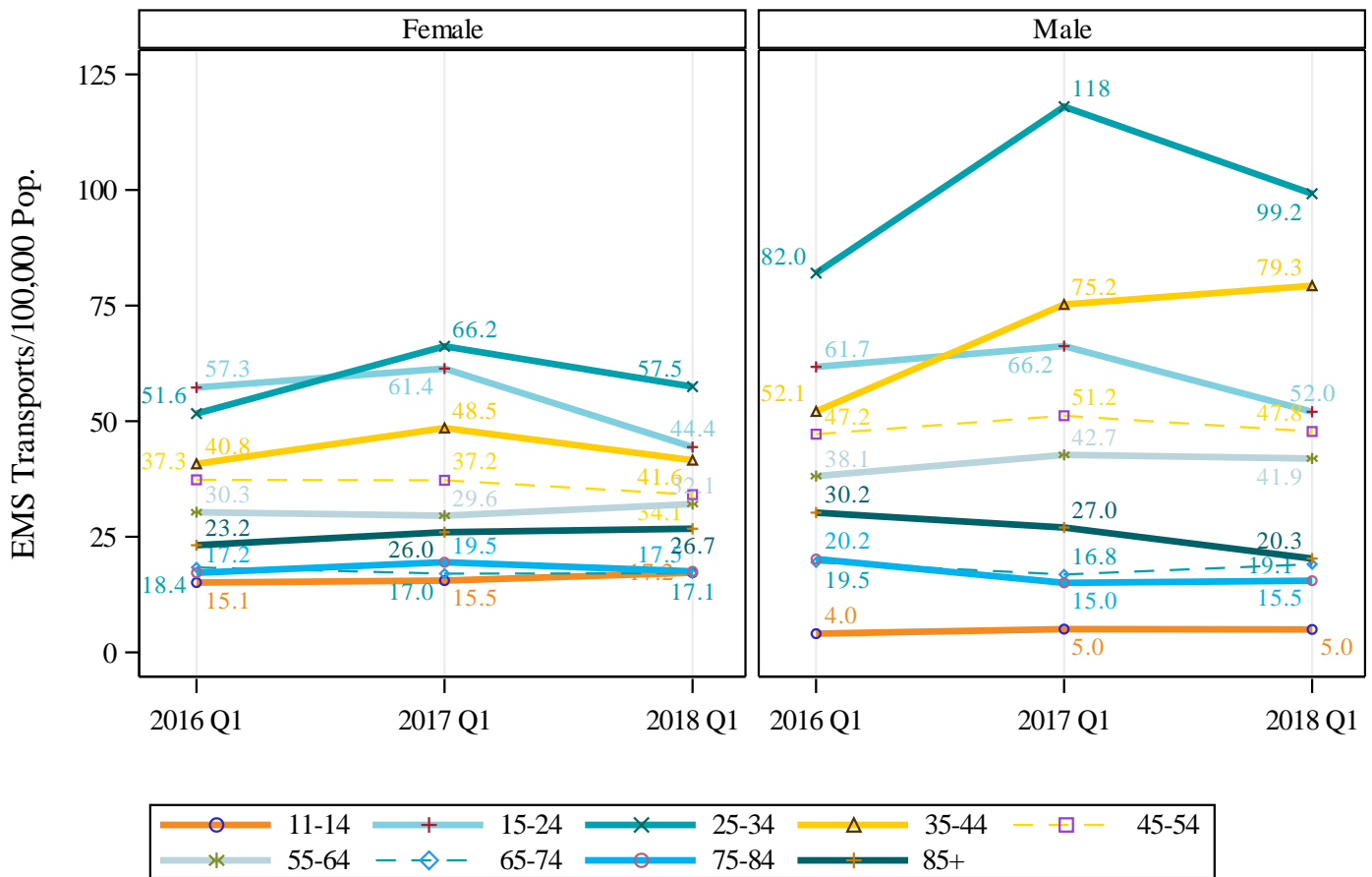
Note: Opioid may include prescription or illicit opioids. Categories are not mutually exclusive.

- Between 2016 Q1, 2017 Q1, and 2018 Q1, all non-fatal drug overdose significant trends were not observed for either males or females among all age groups.

Non-fatal Opioid-Involved Overdose by Sex and Age, Florida 2018 Q1

	11-14	15-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	All Ages
Male	0.0	10.9	38.8	28.1	12.8	14.8	7.5	8.7	10.4	17.3
Female	0.4	8.4	19.3	11.9	10.9	11.9	6.4	7.1	12.2	10.7

Note: 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 2018 Q1.
- Overall in 2018 Q1, males, particularly younger men, were transported for non-fatal opioid-involved overdose at a higher rate than females.

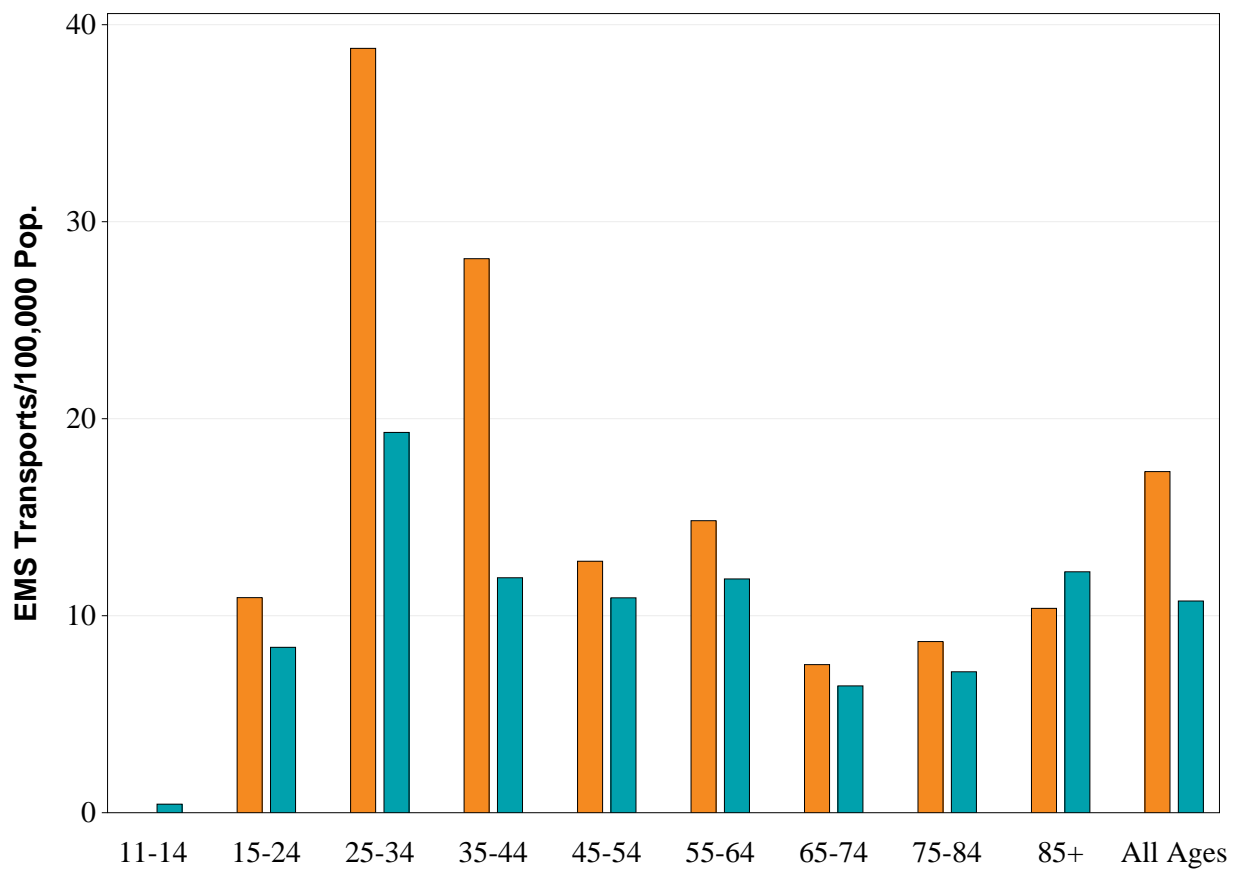**Non-fatal Opioid-Involved Overdose Rate Trends by Age and Sex, Florida 2018 Q1**
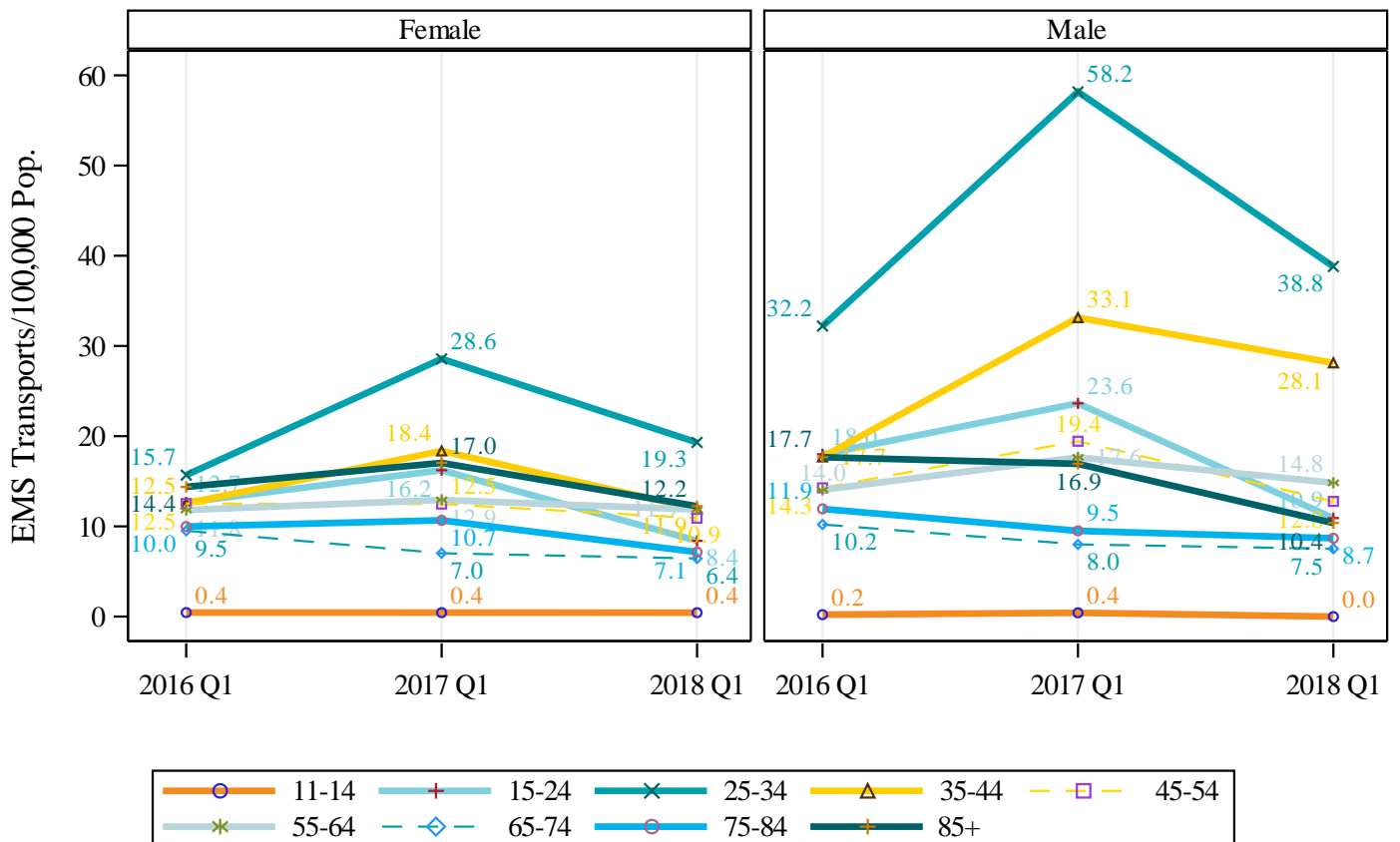
Note: Opioid may include prescription or illicit opioids. Categories are not mutually exclusive.

- Between 2016 Q1, 2017 Q1, and 2018 Q1, non-fatal opioid-involved overdose significant trends were not observed for either males or females among all age groups.

Florida County Map of Non-fatal All Drug Overdose Estimates, 2018 Q1

Drug overdose/100,000 Pop.

- *N/A
- 0.1-20
- 20.1-40
- 40.1-60
- 60.1-80
- 80.1-100
- 100.1+
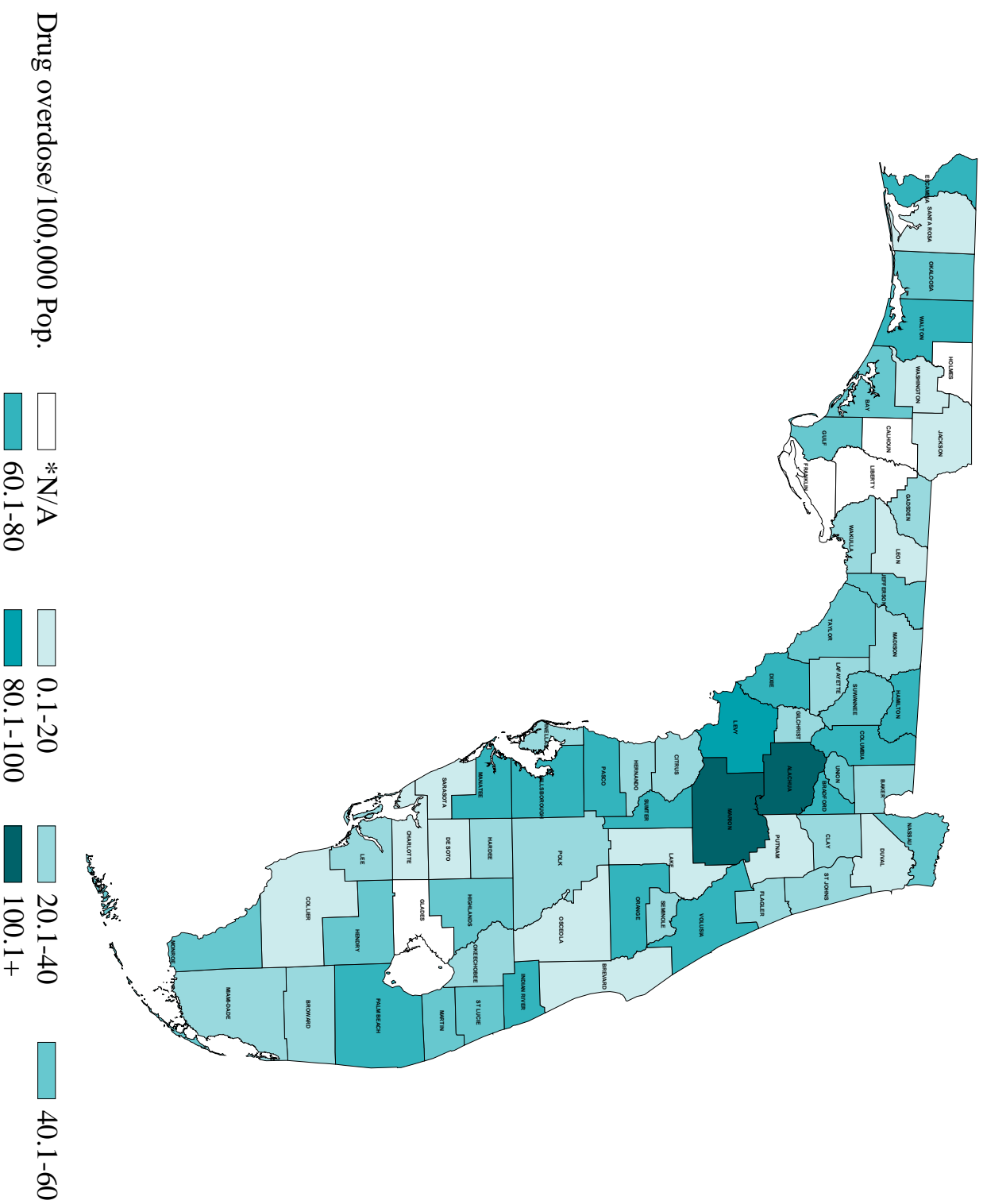
*Rates not calculated or observations unavailable

Florida County Map of Non-fatal Opioid-Involved Overdose Estimates, 2018 Q1

Opioid overdose/100,000 Pop.

- *N/A
- 0.1-10
- 10.1-20
- 20.1-30
- 30.1-40
- 40.1-50
- 50.1+
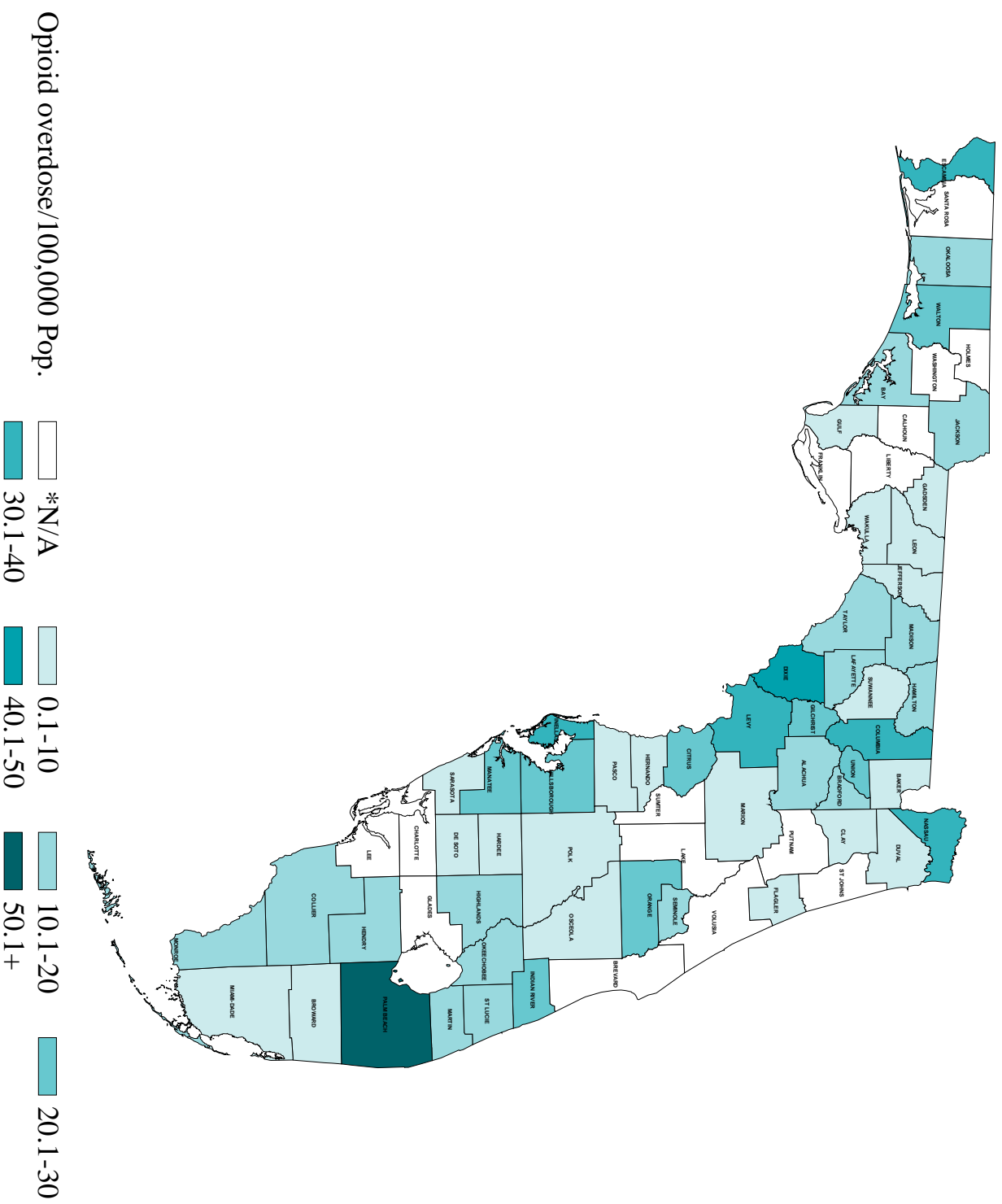
*Rates not calculated or observations unavailable

Florida Counties with the Highest Count and Rate of Non-fatal Overdoses— Florida 2018 Q1

ALL DRUG-INVOLVED NON-FATAL OVERDOSE

RANK	COUNTY (COUNT)	RANK	COUNTY (RATE PER 100,000)
1	Palm Beach (947)	1	Alachua (156.9)
2	Hillsborough (942)	2	Marion (106.7)
3	Orange (831)	3	Levy (87.1)
4	Miami-Dade (677)	4	Bradford (77)
5	Broward (433)	5	Escambia (76.8)
6	Alachua (381)	6	Hillsborough (76.1)
7	Volusia (355)	7	Sumter (74.9)
8	Marion (345)	8	Volusia (72)
9	Pasco (329)	9	Palm Beach (71)
10	Pinellas (324)	10	Orange (70.1)

OPIOID-INVOLVED NON-FATAL OVERDOSE

RANK	COUNTY (COUNT)	RANK	COUNTY (RATE PER 100,000)
1	Palm Beach (668)	1	Palm Beach (50.1)
2	Orange (328)	2	Dixie (46.4)
3	Pinellas (321)	3	Nassau (36.3)
4	Hillsborough (289)	4	Pinellas (35.6)
5	Manatee (100)	5	Levy (32.7)
6	Escambia (93)	6	Escambia (32.5)
7	Broward (90)	7	Columbia (30.3)
8	Miami-Dade (71)	8	Manatee (28.7)
9	Seminole (56)	9	Orange (27.7)
10	Duval (55)	10	Citrus (27.1)

Non-fatal Drug Overdose (Morbidity), Florida 2018 Q1

RATE PER 100,000 FLORIDIANS ≥11-YEARS.
OPIOID-INVOLVED MAY INCLUDE PRESCRIPTION, AND ILLICIT OPIOIDS, CATEGORIES ARE NOT MUTUALLY EXCLUSIVE

	ALL DRUG		OPIOID-INVOLVED	
	No.	Rate	No.	Rate
TOTAL Q1	8,015	42.9	2,604	13.9
AGE				
11-14	104	11.0	2	0.2
15-24	1,227	48.3	246	9.7
25-34	2,175	78.6	807	29.2
35-44	1,531	60.2	507	20.0
45-54	1,160	40.8	336	11.8
55-64	1,033	36.7	373	13.3
65-74	423	18.0	163	6.9
75-84	216	16.6	102	7.8
85+	139	24.2	66	11.5
ETHNICITY (RACE)				
HISPANIC	523	N/A	161	N/A
WHITE	21	N/A	4	N/A
BLACK	2	N/A	0	N/A
ASIAN	1	N/A	1	N/A
MULTIPLE RACE	2	N/A	0	N/A
UNKNOWN RACE	497	N/A	156	N/A
UNKNOWN-HISPANIC	7,492	N/A	2,443	N/A
WHITE	5,400	N/A	1,945	N/A
BLACK	955	N/A	206	N/A
ASIAN	86	N/A	41	N/A
MULTIPLE RACE	256	N/A	77	N/A
UNKNOWN RACE	795	N/A	174	N/A
SEX (AGE)				
MALE	4,654	51.3	1,570	17.3
11-14	24	5.0	0	N/A
15-24	677	52.0	142	10.9
25-34	1,388	99.2	543	38.8
35-44	998	79.3	354	28.1
45-54	666	47.8	178	12.8
55-64	557	41.9	197	14.8
65-74	208	19.1	82	7.5
75-84	91	15.5	51	8.7
85+	45	20.3	23	10.4
FEMALE	3,353	34.9	1,032	10.7
11-14	80	17.2	2	0.4
15-24	550	44.4	104	8.4
25-34	786	57.5	264	19.3
35-44	533	41.6	153	11.9
45-54	494	34.1	158	10.9

55-64	476	32.1	176	11.9
65-74	215	17.1	81	6.4
75-84	125	17.5	51	7.1
85+	94	26.7	43	12.2
COUNTY				
ALACHUA	381	156.9	26	10.7
BAKER	8	31.9	2	8
BAY	78	46.9	29	17.4
BRADFORD	19	77	4	16.2
BREVARD	1	0.2	0	N/A
BROWARD	433	24.9	90	5.2
CALHOUN	0	N/A	0	N/A
CHARLOTTE	11	6.4	0	N/A
CITRUS	44	32.2	37	27.1
CLAY	49	25.9	11	5.8
COLLIER	40	11.7	36	10.6
COLUMBIA	40	63.7	19	30.3
DE SOTO	5	15.2	3	9.1
DIXIE	10	66.2	7	46.4
DUVAL	88	10.6	55	6.6
ESCAMBIA	220	76.8	93	32.5
FLAGLER	29	28.5	3	2.9
FRANKLIN	0	N/A	0	N/A
GADSDEN	10	24	1	2.4
GILCHRIST	6	38	4	25.4
GLADES	0	N/A	0	N/A
GULF	7	46.4	1	6.6
HAMILTON	9	67.9	2	15.1
HARDEE	6	24.9	2	8.3
HENDRY	19	55.4	5	14.6
HERNANDO	38	22.3	10	5.9
HIGHLANDS	44	46.8	11	11.7
HILLSBOROUGH	942	76.1	289	23.4
HOLMES	0	N/A	0	N/A
INDIAN RIVER	87	61	30	21
JACKSON	8	17.9	5	11.2
JEFFERSON	7	54.2	1	7.7
LAFAYETTE	2	25	1	12.5
LAKE	8	2.6	0	N/A
LEE	179	26.6	0	N/A
LEON	45	16.9	10	3.8
LEVY	32	87.1	12	32.7
LIBERTY	0	N/A	0	N/A
MADISON	6	35.8	2	11.9
MANATEE	212	60.9	100	28.7
MARION	345	106.7	23	7.1
MARTIN	89	59.5	17	11.4
MIAMI-DADE	677	27.3	71	2.9
MONROE	37	49.7	9	12.1
NASSAU	40	53.8	27	36.3
OKALOOSA	82	45.4	28	15.5

OKEECHOBEE	13	35.6	4	11
ORANGE	831	70.1	328	27.7
OSCEOLA	58	19.3	18	6
PALM BEACH	947	71	668	50.1
PASCO	329	69.8	9	1.9
PINELLAS	324	36	321	35.6
POLK	230	38.1	50	8.3
PUTNAM	4	6.1	0	N/A
ST JOHNS	2	1.3	0	N/A
ST LUCIE	23	5.8	8	2
SANTA ROSA	92	22	56	13.4
SARASOTA	65	30.2	0	N/A
SEMINOLE	134	47.5	34	12.1
SUMTER	92	74.9	0	N/A
SUWANNEE	19	47.4	3	7.5
TAYLOR	11	54.2	4	19.7
UNION	7	50.1	3	21.5
VOLUSIA	355	72	0	N/A
WAKULLA	7	23.9	2	6.8
WALTON	39	64.9	14	23.3
WASHINGTON	4	17.6	0	N/A

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