

National Drug Early Warning System (NDEWS) Southeastern Florida Sentinel Community Site (SCS) Drug Use Patterns and Trends, 2018

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Highlights

- **Cocaine**-related deaths nearly doubled between 2015 and 2016 in the southeastern Florida three counties region while increasing 57% statewide before stabilizing at high levels in the first half of 2017. Most of these deaths also involve one or more opioids including fentanyl analogues.
- **Methamphetamine** deaths more than doubled statewide between 2015 and 2016 and continued to increase in the first half of 2017 with the highest number of deaths reported in the central part of Florida and the Northwestern Panhandle as well as along the Gulf Coast. While the number of methamphetamine deaths remain relatively low in the southeastern Florida region, they have been steadily increasing in recent years.
- Most all **heroin** deaths in the three counties region and across the State of Florida during 2017 involved at least one or more other drugs detected in the decedents demonstrating the polysubstance abuse patterns of the opioid epidemic.
- While heroin primary treatment admissions rose from 7 % of all clients in 2014 to 22 % in 2017, primary admissions for **prescription opioid** declined from 12 % to 9 % in the southeastern Florida region.
- **Nonpharmaceutical fentanyl** from foreign clandestine labs is the major factor over the past two years for the dramatic escalation in opioid deaths related to adulterated heroin, counterfeit medications, and contaminated other street drugs. These occurrences appear to have stabilized at very high levels in the first half of 2017.
- **Marijuana** was the primary drug cited by 86% of addiction treatment patients younger than 18 years of age during calendar year 2017 across the southeastern Florida region.
- The most prevalent **synthetic cathinone** in the region is N-Ethylpentylone sold as “Mollys” followed by a return of *Alpha-PVP* or “flakka.”

NDEWS Priority Substances

COCAINE/CRACK

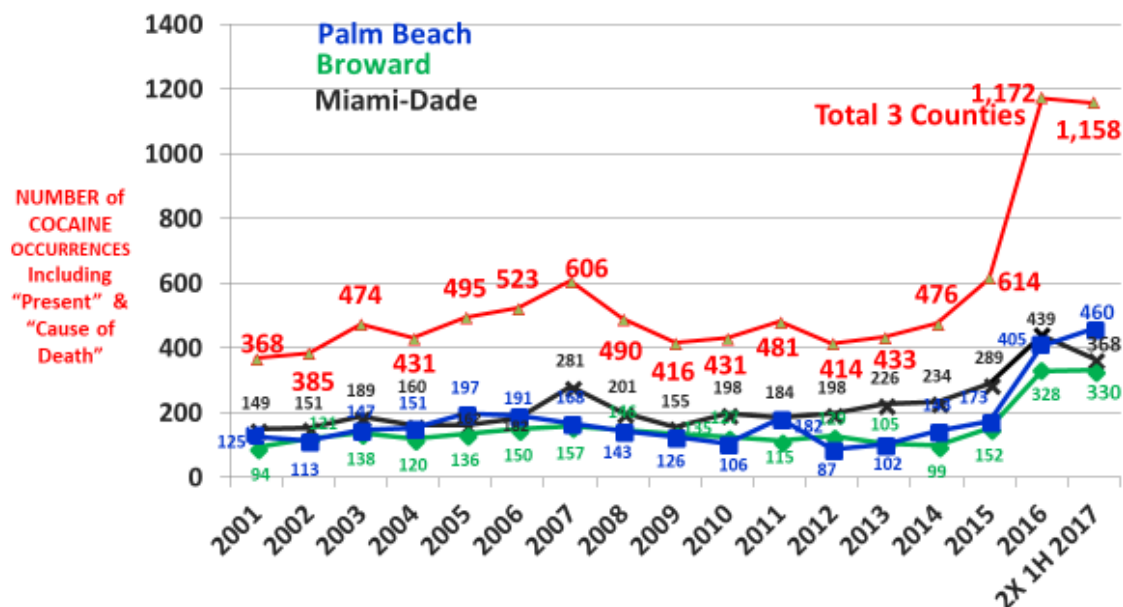
Key Findings

- **Cocaine**-related deaths nearly doubled between 2015 and 2016 in the Southeastern Florida three counties region while increasing 57% statewide before stabilizing at high levels in the first half of 2017. Most of these deaths also involve one or more opioids including fentanyl analogues.

Cocaine-related deaths increased 42% between 2015 and 2016 in the Southeast Florida region with the sharpest rise reported in Palm Beach County that continued to increase there in the first half of 2017 while stabilizing in Broward County and declining in Miami-Dade County (Figure 1). The drug was considered the cause of death in 77% of the Palm Beach County cases during the first half of 2017 as well as 74% of those in Broward and 60% of Miami-Dade County cocaine-related deaths. Many deaths involved polydrug use with 88% of the 2017 cases having one or more other substances present at the time of death. There were only three cocaine-related decedents younger than 18 years of age, 14% were 18–25, 25% were 26–34, 34% were 35–50, and 26% were older than 50 years of age.

Figure 1. Number of Cocaine Reports Detected Among Decedents in Southeast Florida: 2001-2017

Number of Cocaine Reports Detected Among Decedents in Southeast Florida: 2001 - 2017



SOURCE: Florida Medical Examiners Commission Reports Jan 2001-Jun 2017

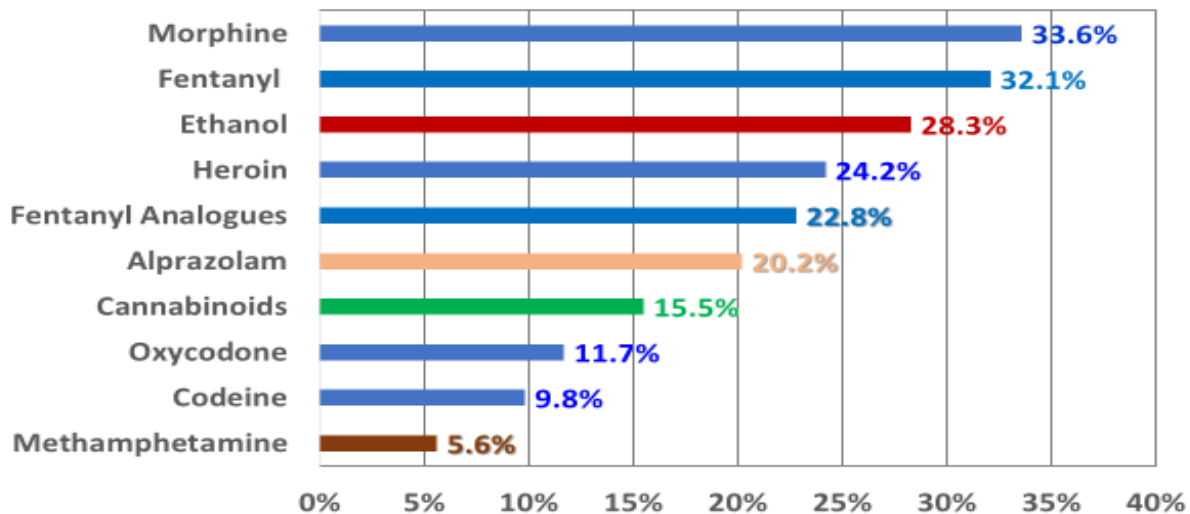
Primary addiction treatment admissions for cocaine totaled 2,812 patients in the three-county region during 2016 accounting for 10.5% of all admissions. Males accounted for 58% of these clients with crack cocaine specified by 59% of all cocaine patients. Only 10, or less than 1%, of the admissions were for someone younger than 18, 13% were 18–25, 26% were 26–34, and 60% were age 35 or older. Smoking was the route of administration reported by 48% of the clients with intranasal sniffing cited by 37% and injection cited by 5%. The remaining 10% reported oral or other/unknown routes of administration.

Polydrug Use

Polysubstance abuse of opioids with cocaine either knowingly or unintentionally with nonpharmaceutical fentanyl-adulterated cocaine is considered a key factor in the rise of cocaine-related deaths nationally and in Florida over the past three years. A review of deaths caused by cocaine in Florida during 2016 revealed 34% were also found with morphine which most likely was heroin along with another 24% where heroin itself was identified. Fentanyl was found in 32% of the 2016 Florida cocaine-induced deaths plus 23% with a nonpharmaceutical fentanyl analogue. Other opioids detected included oxycodone in 12% of the cases and codeine in 10%. Nonopioid drugs found present in the 2016 cocaine-caused deaths included ethanol in 28% of the cases, alprazolam in 20%, cannabinoids in 16%, and methamphetamine in 6% (Figure 2).

Figure 2. Top 10 Co-Occurring Substances Among Florida Cocaine-Caused Deaths in 2016

Top 10 Co-Occurring Substances Among Florida Cocaine-Caused Deaths in 2016



Sources: Florida Medical Examiners Commission 2016 Report and Florida drug-Related Outcomes Surveillance and Tracking (FROST) System

Additional Findings

The 7,359 cocaine crime lab cases in the Southeast Florida counties during 2017 accounted for 35% of all drug reports in the three-counties region with cocaine maintaining the number one ranking of crime lab reports it has held for more than three decades.

METHAMPHETAMINE

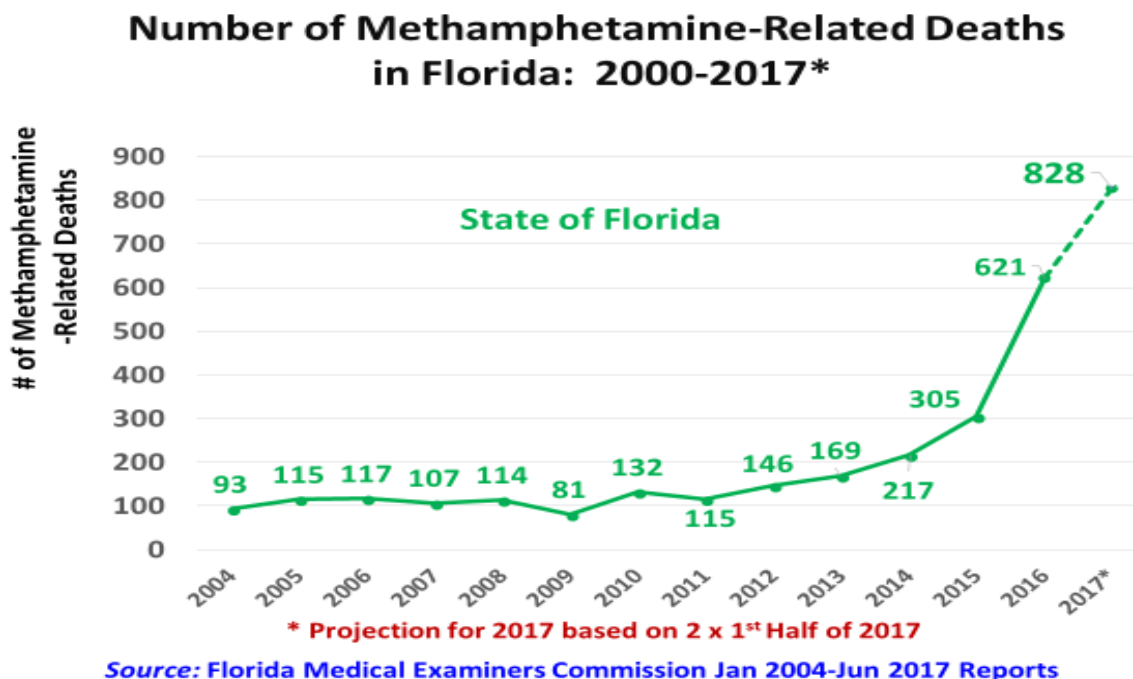
Key Findings

- **Methamphetamine** deaths more than doubled statewide between 2015 and 2016 and continued to increase in the first half of 2017 with the highest number of deaths reported in the central part of Florida and the Northwestern Panhandle as well as along the Gulf Coast. While the number of methamphetamine deaths remain relatively low in the southeastern Florida region, they have been steadily increasing in recent years.

Significantly higher rates of methamphetamine treatment admissions and crime lab cases are reported in other areas of Florida than the southeastern region particularly in the Tampa Bay, Western Panhandle, and Orlando areas. According to the Florida Department of Law Enforcement and the South Florida High Intensity Drug Trafficking Area, most methamphetamine being used in Florida is produced in Mexico. Domestic laboratory production in Florida primarily appears to be in the northern and central parts of the state where the 2-liter soda bottle “shake and bake” method is used to yield a relatively small amount of methamphetamine for personal use by the “cook” and for sharing with those who may have helped supply the precursor, pseudoephedrine.

Methamphetamine was detected among 414 deceased persons during the first half of 2017 statewide in Florida, compared with 237 in the first half of 2016 and 130 in the first half of 2015 and 621 for the full year of 2016 and 305 all of 2015 up from 217 in 2014 (Figure 3). Only the state totals of methamphetamine- and amphetamine-related deaths are available and are not reported for counties or regions. Methamphetamine was considered a cause of death in 213 (51%) of the cases during the first half of 2017.

Figure 3. Number of Methamphetamine-Related Deaths in Florida: 2000-2017



There were 93 primary treatment admissions for methamphetamine in Palm Beach County, 72 in Miami-Dade County, and 70 in Broward County during 2017. These totals represent 1% of the 22,567 treatment clients across the three counties region as compared to 5% of all clients statewide in 2017. Males accounted for 57% of the 235 methamphetamine clients across the region, and 49% were between 18 and 34 years of age, whereas 51% were age 35 and older. Smoking methamphetamine was the route of administration reported by 48% of these clients with intranasal sniffing cited by 16% and injection cited by 27%. The remaining 9% reported oral or other/unknown routes of administration. Private treatment counselors continued to report serious methamphetamine abuse problems among men who have sex with men and who are often not included in the number of clients from treatment programs receiving public funding. These clients are at high risk of infectious disease transmission related to both unprotected sexual activity and injecting drug use.

Polydrug Use

There were also 400 reports of amphetamine detected among decedents across Florida in the first 6 months of 2017, compared with 266 such reports in the first half of 2016 and 179 such occurrences in the first six months of 2015. Amphetamine was considered the cause of death in 114 (or 29%) of the cases in the first half of 2017.

A total of 16 primary treatment admissions for amphetamine were reported in Broward County, 15 in Miami-Dade County, and 6 in Palm Beach County during 2017. Males accounted for 51% of the 37 amphetamine clients across the region in 2017, and 68% were between 18 and 34 years of age, whereas 31% were age 35 and older.

Additional Findings

There were 692 methamphetamine crime laboratory reports, or 3.3% of the 21,289-total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach counties combined in 2017 up from 539 in 2017. Methamphetamine ranked eighth among all substances analyzed in the three counties in 2017 as it has in the previous two years. Also, 199 amphetamine crime laboratory reports were filed, or 1% of the 2017 total ranking twelfth among all substances.

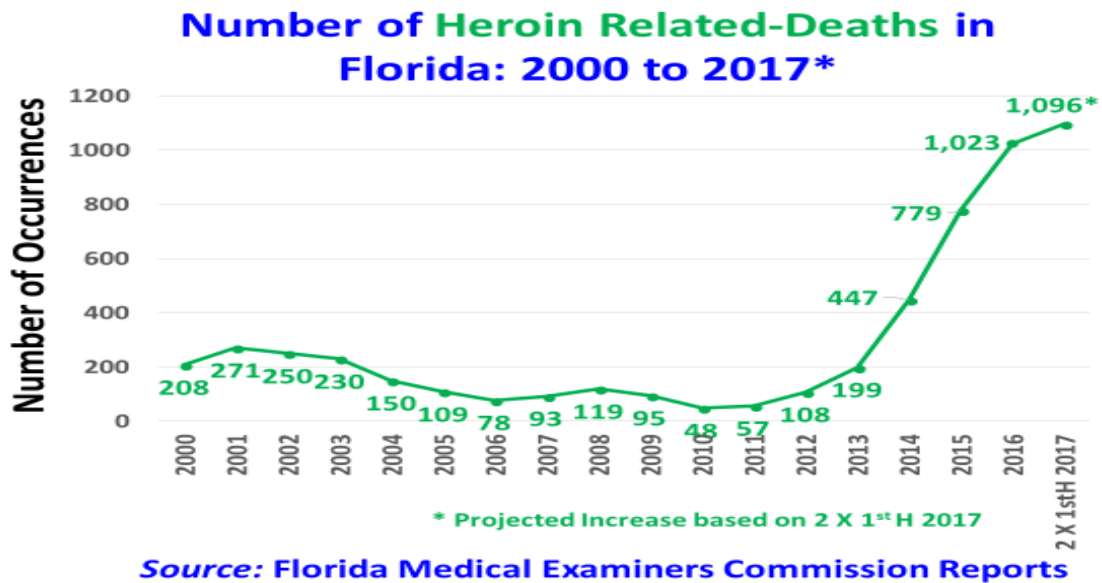
HEROIN

Key Findings

- Most all **heroin** deaths in the three counties region and across the State of Florida during 2017 involved at least one or more other drugs detected in the decedents demonstrating the polysubstance abuse patterns of the opioid epidemic.

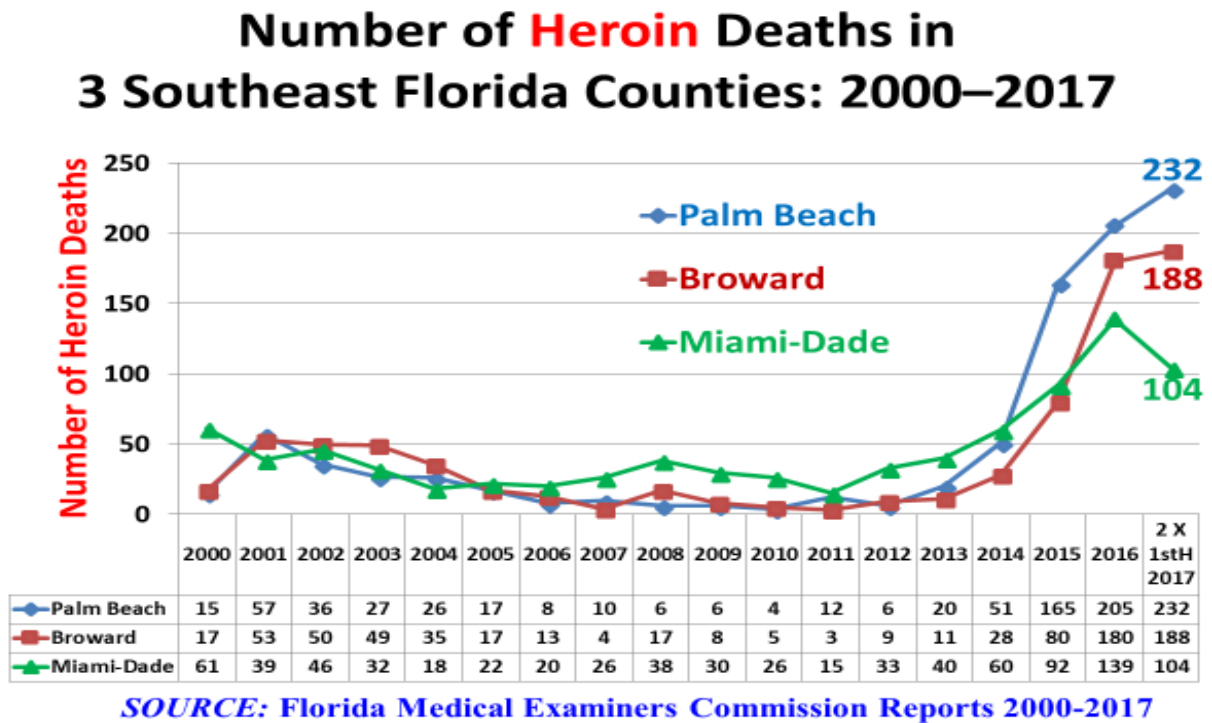
The number of heroin-related deaths increased sharply from 2011 to 2017 across Florida, rising 1,823% from 57 in 2011 to a projected 1,096 in 2017 based on the first half of that year (Figure 4). Heroin was considered “a cause of death” in 93% of the fatalities in which it was detected in 2017. In the three Southeast Florida counties, heroin deaths increased 1,647% from 30 in 2011 to 524 during 2016 prior to stabilizing at a projected 524 deaths in 2017 (Figure 5).

Figure 4. Number of Heroin-Related Deaths in Florida: 2000 – 2017



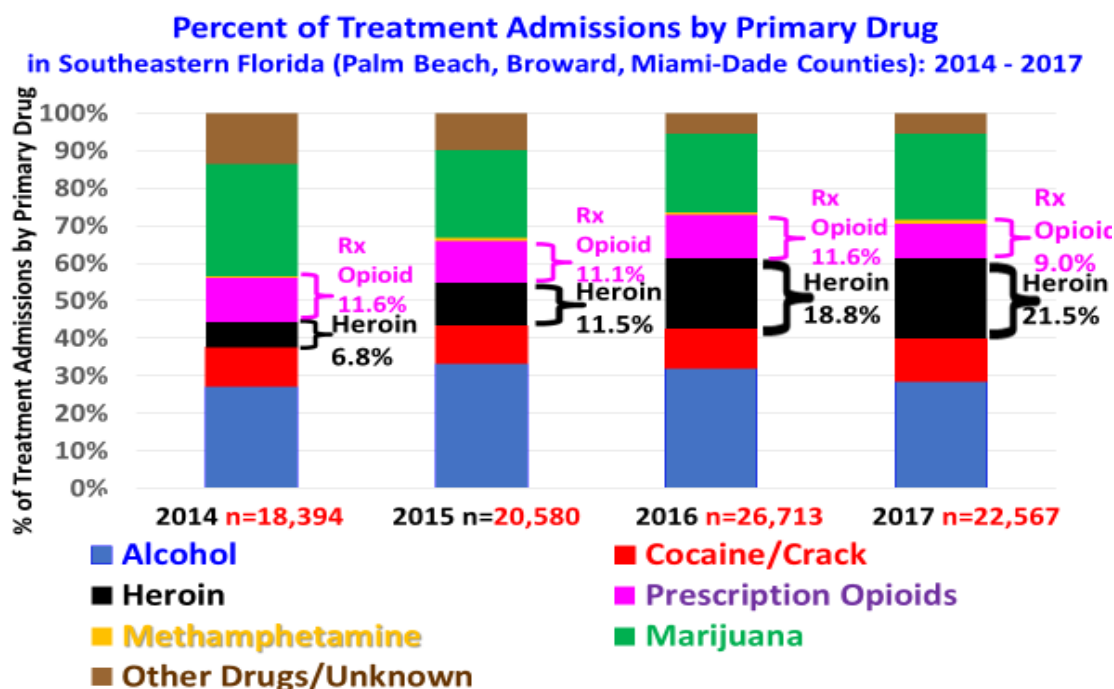
Heroin was considered the cause of death in 94% of the heroin-related cases in Southeast Florida in 2017. There was one heroin-related decedent younger than 18 years of age in the region, 15% were 18–25, 32% were 26–34, 29% were 35–50, and 23% were older than 50 years of age.

Figure 5. Number of Heroin Deaths in 3 Southeast Florida Counties: 2000-2017



Primary addiction treatment admissions for heroin totaled 4,857 patients across the three-county region in 2017 accounting for 21.5% of all admissions. In 2014 heroin was the primary drug cited by 6.8% of treatment clients in the region and by 11.5% in 2015 and 18.8% in 2016 (Figure 6). Males accounted for 63% of the 2017 clients. There were 4 heroin treatment clients younger than 18 years of age, 13% were 18–25, 47% were 26–34, and 40% were age 35 or older. Injecting heroin was reported by 60% of clients, but that rate is probably higher because the route of administration was recorded as unknown for 17%. Intranasal snorting was reported by 12% of clients, and 2% reported smoking heroin. The county totals for heroin treatment primary admissions were 1,029 for Miami-Dade, 1,180 for Broward, and 2,648 in Palm Beach County.

Figure 6. Percent of Treatment Admissions by Primary Drug in 3 Southeastern Florida Counties: 2014-2017



Source: Florida Department of Children and Families - SAMH

Between calendar years 2016 and 2017, the number of primary heroin addiction treatment admissions in the three southeastern Florida counties decreased a modest 3% from 5,011 to 4,857 while primary prescription opioid (including fentanyl) treatment admissions decreased 34% from 3,092 to 2,040. Because the total number of treatment admissions for all substance declined 15.5% from 26,713 in 2016 to 22,567 in 2017, the percent of primary admissions for heroin rose slightly from 18.8 percent to 21.5 percent while primary prescription opioid admissions decreased from 11.6 percent to 9 percent.

In summary, heroin and other opioid use disorder treatment admissions stabilized in 2017 at high levels in the three southeastern Florida counties after steadily increasing over the previous three years. This trend parallels the stabilization of heroin and other opioid-related deaths while still at the highest levels between the second half of 2016 and the first half of 2017 halting the steadily increasing heroin and other opioid fatalities since 2013.

It is vital to remember that a single data point does not constitute a trend. Nonetheless, the 2017 treatment and death data raise the possibility that Southeastern Florida's opioid epidemic may be transitioning from its Escalation Phase to a Plateau Phase prior to an eventual Period of Decline.

Polydrug Use

Most all heroin deaths involved polydrug use with 99% of the 2017 cases both statewide and in the three southeastern Florida counties having one or more other substances present at the time of death. Polysubstance abuse of heroin with other opioids either knowingly or unintentionally with nonpharmaceutical fentanyl-adulterated street drugs is considered a key factor in the rise of opioid deaths nationally and in Florida over the past four years. A review of deaths caused by heroin in Florida during 2016 revealed 85% were also found with morphine and 51% with cocaine. Fentanyl was found in 39% of the 2016 Florida heroin-induced deaths plus 22% with a nonpharmaceutical fentanyl analogue. Other opioids detected included codeine in 34% of the cases and oxycodone in 12%. Other drugs found present in the 2016 heroin-caused deaths included ethanol in 28% of the cases, alprazolam in 25%, and cannabinoids in 17%.

Additional Findings

There were 1,716 heroin crime laboratory reports, or 8.1% of the 21,289-total primary, secondary, and tertiary NFLIS reports for Miami-Dade, Broward, and Palm Beach counties combined in 2017. Heroin reports increased 45% between 2015 and 2016 but decreased 15% between 2016 and 2017.

PRESCRIPTION OPIOIDS

Key Findings

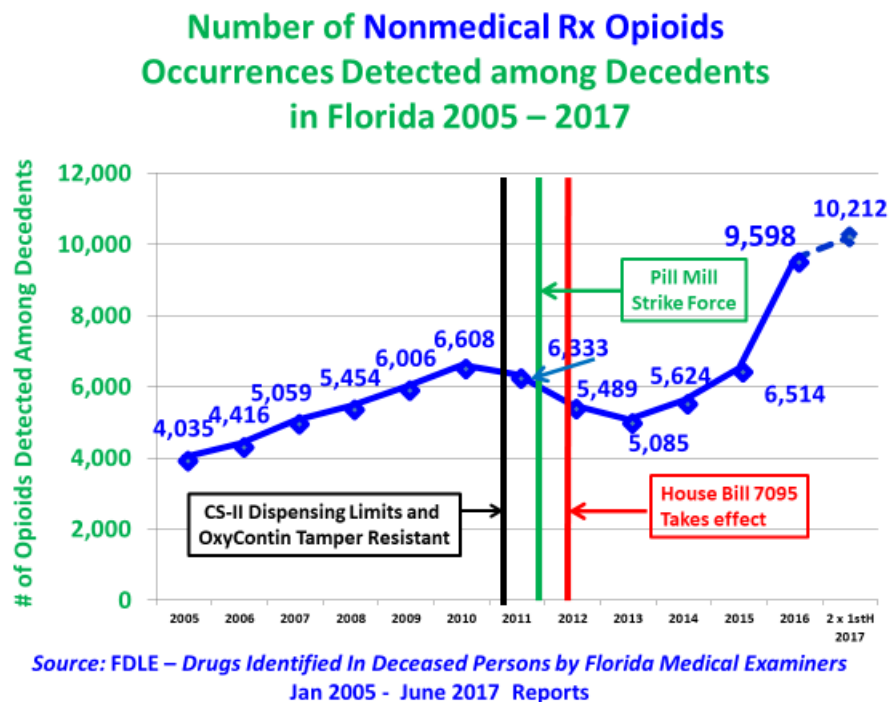
- While heroin primary treatment admissions rose from 7 % of all clients in 2014 to 22 % in 2017, primary admissions for **prescription opioid** declined from 12 % to 9 % in the southeastern Florida region.

In the first decade of the 21st Century there was a dramatic increase in the availability of diverted pharmaceutical opioids and deaths linked to their nonmedical misuse as well as primary addiction treatment admissions for prescription opioids. Numerous new laws and regulations took effect beginning in 2010 along with the abuse-deterrent reformulation of high dose extended release opioids. The collective impact of these supply-reduction strategies as well as a pill mill law enforcement strike force and funding of the State's PDMP (House Bill 7095) are seen in declining opioid deaths beginning in 2011.

In 2010 there were 6,608 opioids detected in deceased person in Florida. That toll steadily declined 23% to 5,085 by 2013 and then increased to 5,624 opioid occurrences in 2014 and then to 6,514 in 2015 before escalating to 9,598 in 2016. The projected number of opioid occurrences (not including heroin) among deceased person in 2017 is 10,212 based on the first six months of the year (Figure 7). The projected total includes 2,064 occurrences for morphine, many of which are believed to actually be

heroin, and 3,092 fentanyl occurrences including most that are nonpharmaceutical fentanyl from foreign clandestine labs used to adulterate street heroin or sold as counterfeit medications.

Figure 7. Number of Rx Opioid Occurrences Among Deceased Persons in Florida: 2005-2017



Seventy-five percent of the 2016 Florida opioid deaths (not including heroin) are related to 5 of the 11 opioids tracked by the Florida Medical Examiners Commission. Those five are morphine, oxycodone, hydrocodone, methadone, and fentanyl totaling 3,951 medical examiner occurrences in just the first six months of 2017 in all of Florida. Most of the fentanyl reports from 2014 to 2017 are believed to be nonpharmaceutical fentanyl analogues from foreign labs and that most of the morphine cases are considered to be heroin. The state total for occurrences of those five opioids during the first half of 2017 includes 1,214 reports in the three Southeast Florida counties representing a 47% increase from the 827 occurrences for the same five opioids during the first half of 2015. The total opioid occurrences for the first six months of 2017 includes 501 in Palm Beach County, 340 in Miami-Dade and 373 in Broward County. Eighty-one percent of these occurrences were considered to be a cause of death.

Figure 8 tracks the number of lethal opioid occurrences in Florida where the named drugs were classified as “a cause of death” for the 5 most prevalent opioids (not including heroin) by semi-annual reporting periods. The total for the first half of 2017 for the State of Florida was 2,005 which includes 980 lethal reports from the three Southeast Florida counties composed of 424 in Palm Beach County, 301 in Broward, and 255 in Miami-Dade County.

In the three southeastern Florida counties, opioid occurrences (not including heroin) detected in deceased persons during the first half of 2016 totaled 1,214 including 158 for oxycodone, 39 for hydrocodone, 32 for methadone, 320 for morphine, and 665 for fentanyl including nonpharmaceutical fentanyl analogues (Figures 9, 10 and 11).

Figure 8. Number of Lethal Selected Opioid Occurrences in Florida: 2008 -2017

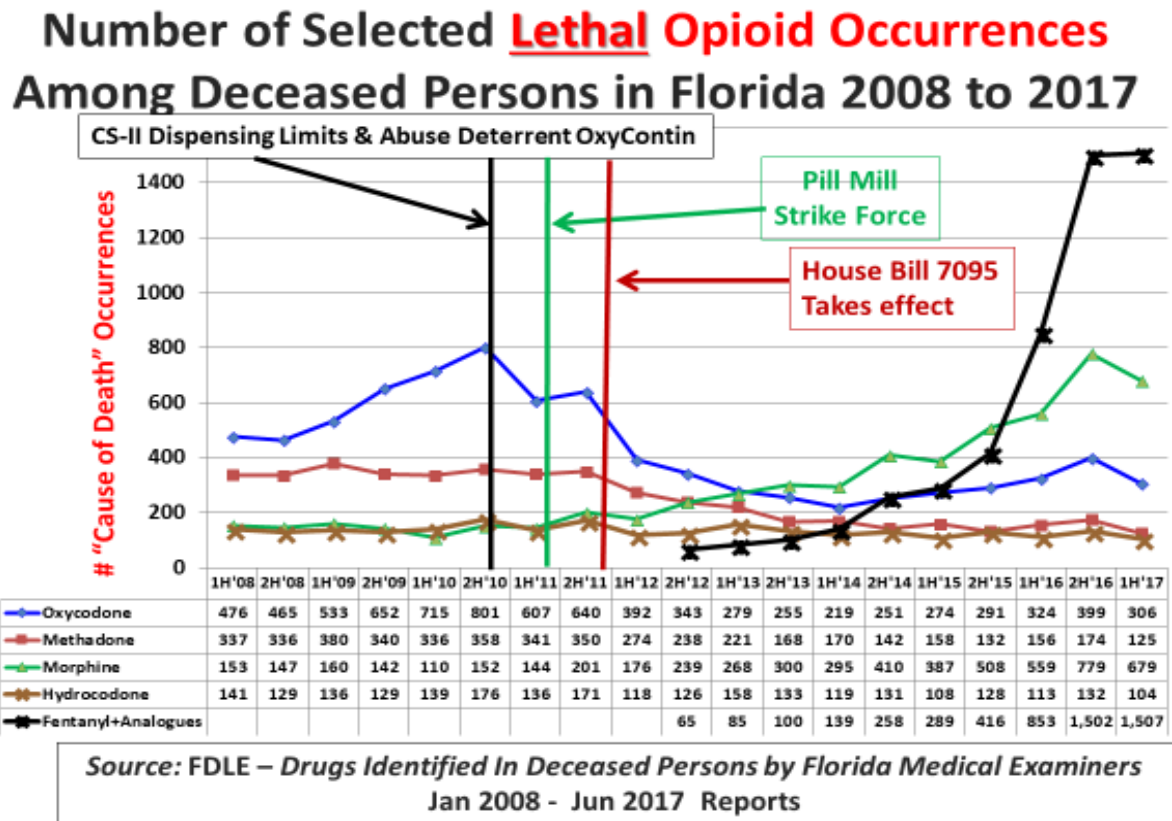
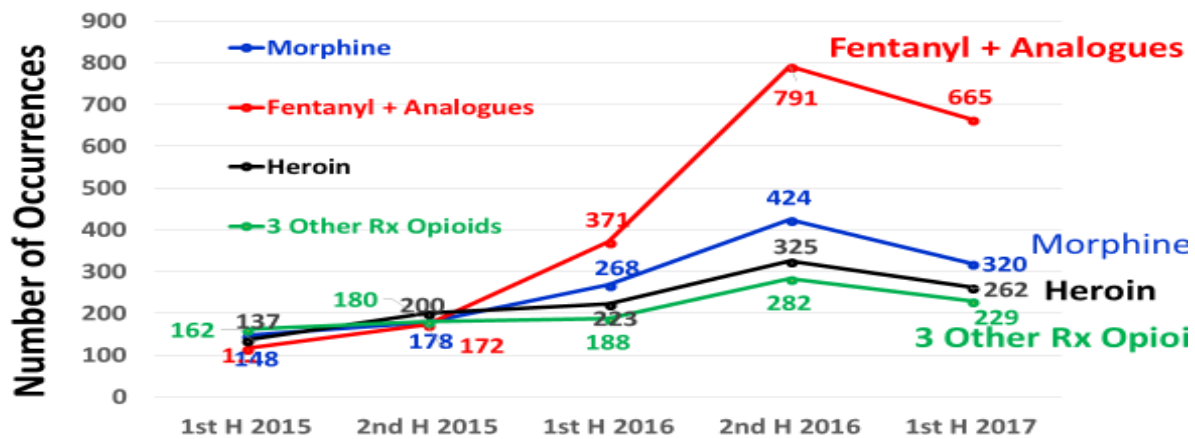


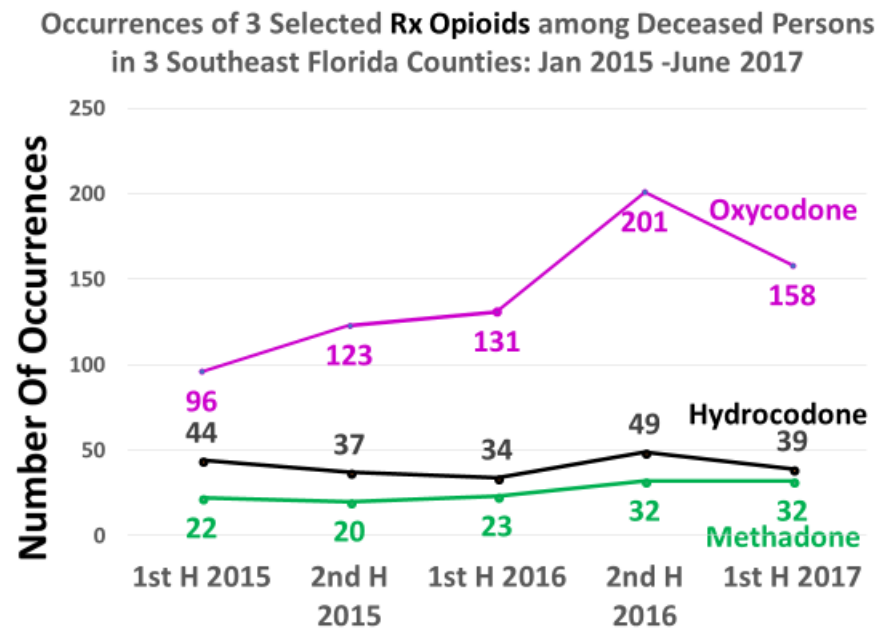
Figure 9. Number of Heroin and Opioid Occurrences Among Deceased Persons in Southeastern Florida

Heroin, Morphine, Fentanyl, and 3 Other Rx Opioid Occurrences
Among Deceased Persons in Southeastern FL: Jan 2015-Jun 2017



Source: FDLE - Florida Medical Examiners Commission

Figure 10. Number of Selected Rx Opioid Occurrences Among Deceased Persons in Southeastern Florida: January 2015 – June 2017



Source: FDLE - Florida Medical Examiners Commission

Figure 11. Table of Heroin and Selected Opioid Occurrences Among Deceased Person in Southeastern Florida: January 2015 – June 2017

**Number of Selected Opioid Occurrences among
Among Deceased Persons in Southeastern FL: Jan 2015-Jun 2017**

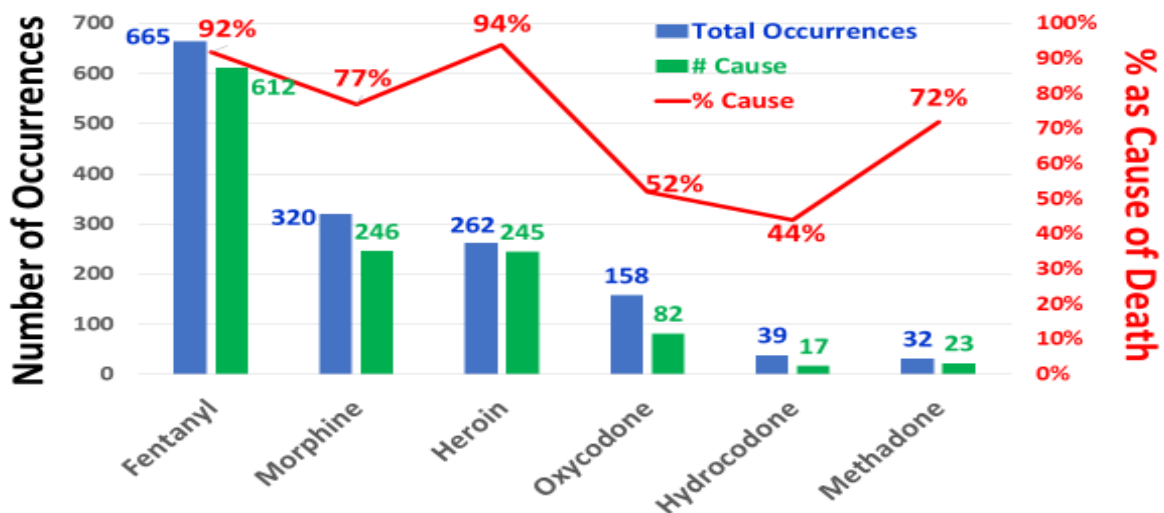
Opioid	1st H 2015	2nd H 2015	1st H 2016	2nd H 2016	1 st H 2017
Fentanyl + Analogues	115	172	371	791	665
Morphine	139	178	268	424	320
Heroin	137	200	223	325	262
Oxycodone	96	123	131	201	158
Hydrocodone	44	37	34	49	39
Methadone	22	20	23	32	32

Source: FDLE - Florida Medical Examiners Commission

Figure 12 tracks (1) the number of drug occurrences during the first half of 2017 from the three southeastern Florida Counties in Figure 11 for the various opioids shown in the blue bars, (2) the number of those cases considered to be “a cause of death” in the green bars, and (3) the percent of each opioid’s occurrences which are “a cause of death” on the red line graph.

Figure 12. Percent of Lethal Heroin and Opioid Occurrences in Southeastern Florida Jan-June 2017

**Opioid Occurrences and Number and Percent as Cause of Death Among
Deceased Persons in 3 Southeastern Florida Counties: Jan 2017-Jun 2017**



Source: 2017 FL Medical Examiners Commission Interim Report

In 2017 there were 2,040 admissions for opioids other than heroin reported as primary treatment admissions in the three southeastern Florida counties representing a 34% decrease from the 3,092 such admissions in 2016. Included in the 2017 total were 1,141 clients in Palm Beach County, 564 in Broward County, and 335 in Miami-Dade County. Females accounted for 57% of the 2017 opioid clients across the region, and 61% were between 18 and 34 years of age and 35% were aged 35 or older. Injecting Drug use was reported by 31% of the prescription opioid clients.

Polydrug Use

A review of deaths caused by the prescription opioid oxycodone in Florida during 2016 revealed 43% were also found with alprazolam and 41% with oxymorphone. Cocaine was found in 22% of the 2016 Florida oxycodone-induced deaths plus 22% each with ethanol and morphine. Fentanyl was detected in 17% of the oxycodone cases. Other drugs found present in the 2016 oxycodone-caused deaths included diazepam in 13% of the cases and as well as cannabinoids in 13%, nordiazepam in 13%, and clonazepam in 10%.

Additional Findings

A total of 1,074 prescription opioid primary, secondary, and tertiary NFLIS crime laboratory reports were filed in the three Southeastern Florida counties during 2017 representing 5% of all substances analyzed. This category of drugs ranked fourth among all crime lab reports from the three counties in 2017. The number of prescription opioid crime laboratory reports declined 37% between 2016 and 2017. Fentanyl was the most frequently reported prescription opioid as shown in Figure 13, nevertheless, it is not known how many of those items may have been nonpharmaceutical opiate analogues from foreign clandestine laboratories.

Figure 13. Number of NFLIS Pharmaceutical Opioid Crime Lab Cases in Southeastern Florida: 2017

Pharmaceutical Opioid Crime Lab Cases in Southeastern Florida in 2017	# of Cases
FENTANYL plus Nonpharmaceutical Analogues	1,069
OXYCODONE	759
HYDROMORPHONE	93
BUPRENORPHINE	85
HYDROCODONE	84
MORPHINE	90
CODEINE	45
METHADONE	13
TRAMADOL	19
OXYMORPHONE	8
MEPERIDINE	1
TOTAL	2,266

Source: US DEA - National Forensic Laboratory System Data Queried June 13, 2018

FENTANYL AND OTHER SYNTHETIC OPIOIDS

Key Findings

- **Nonpharmaceutical fentanyl** from foreign clandestine labs is the major factor over the past two years for the dramatic escalation in opioid deaths related to adulterated heroin, counterfeit medications, and contaminated other street drugs. These occurrences appear to have stabilized at very high levels in the first half of 2017.

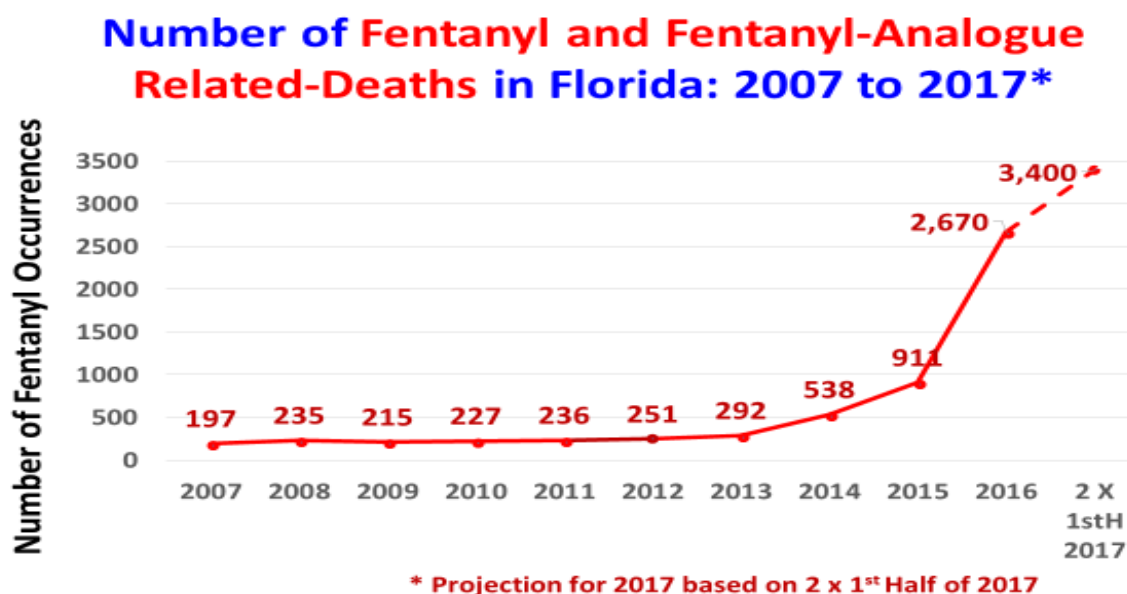
Nonpharmaceutical Opioids

The increasing availability of poisonous fentanyl analogues and their distribution are critical issues related to the escalation of deaths from the opioid epidemic. These novel psychoactive opioids are found not only as adulterated street heroin, cocaine, or methamphetamine but also as counterfeit medications including fake “Xanax®” pills and as oxycodone and hydrocodone tablets. Other opioid analogues include U-47700 which also has been reported in Florida.

The key measure of fentanyl consequences is the number of deaths attributed to it. In previous years medical examiner reports in Florida included both pharmaceutical fentanyl as well as its non-pharmaceutical analogues from clandestine labs mostly produced in China, Mexico, and Canada. Beginning in early 2016 some Florida medical examiner officers have been able to identify specific fentanyl analogues in their toxicology reports. Figure 14 illustrates the escalation of fentanyl-related deaths in Florida beginning in 2014 with the introduction of the drug’s analogues into the illicit drug market. Between 2007 and 2013 fentanyl deaths total from 200 to nearly 300 per year. Most of those

deaths are believed to have been related to non-medical use of pharmaceutical fentanyl. Yet the sharp rise in fentanyl occurrences detected in deceased persons in Florida from 2014 to 2017 is a result of non-pharmaceutical fentanyl analogues. The projected 3,400 fentanyl deaths for all of 2017 is based on doubling the 1,700 occurrences in the first six months of that year, which includes 875 reports of substances specifically identified as fentanyl analogues (Figure 14). Several Florida medical examiners advise that the most dramatic rise of opioid deaths and particularly those from poisonous fentanyl analogues occurred in the second half of 2016 in part because of the arrival of carfentanil, the most toxic of opioids considered to be 10,000 more potent than morphine.

Figure 14. Number of Fentanyl-Related Deaths in Florida: 2007-2017



Source: Florida Medical Examiners Commission Reports

Polydrug Use

A review of the 1,391 deaths caused by the prescription opioid fentanyl in Florida during 2016 revealed 46% were also found with cocaine and 37% with morphine. Heroin was found in 27% of the 2016 Florida fentanyl-induced deaths plus 25% with alprazolam and 24% with ethanol. Other fentanyl analogues were detected in 21% of the pharmaceutical fentanyl cases. Other drugs found present in the 2016 fentanyl-caused deaths included cannabinoids in 19%, oxycodone in 13% of the cases and as well as codeine in 10%, and clonazepam in 7%.

Additional Findings

A total of 484 fentanyl analogues and other synthetic opioid primary, secondary, and tertiary NFLIS crime laboratory reports were filed in the three southeastern Florida counties during 2017 representing 2.3% of all substances analyzed. Carfentanil was the most frequently reported synthetic opioid as shown in Figure 15 with 308 or 64% of the synthetic opioid crime lab reports.

Figure 15. Number of NFLIS Pharmaceutical Opioid Crime Lab Cases in Southeastern Florida: 2017

Fentanyl Analogues and Other Synthetic Opioid Crime Lab Cases in Southeastern Florida in 2017	# of Cases
CARFENTANIL	308
FURANYL FENTANYL	67
CYCLOPROPYL/CROTONYL FENTANYL	35
U-47700	32
METHOXYACETYL FENTANYL	27
FLUOROISOBUTRYLFENTANYL	8
ACETYL FENTANYL	2
BUTYRL FENTANYL	2
BENZYL FENTANYL	1
FLUOROFENTANYL	1
CYCLOPENTYL FENTANYL	1
TOTAL	484

Source: US DEA - National Forensic Laboratory System Data Queried June 13, 2018

Other Priority Substances in Southeastern Florida SCS

MARIJUANA

Key Findings

- **Marijuana** was the primary drug cited by 86% of addiction treatment patients younger than 18 years of age during calendar year 2017 across the southeastern Florida region.

Primary addiction treatment admissions for marijuana totaled 5,187 patients across the three counties region in 2017 accounting for 23% of all admissions. In 2014, marijuana was the primary drug cited by 30% of treatment clients in the three counties of the region. Then in 2015, it accounted for 23% of clients. The declining proportion of marijuana treatment admissions is due to increasing rates of primary heroin admissions and fewer adolescent clients referred by the juvenile justice system with the institution of civil citations in lieu of arrests.

Additional Findings

The 3,553 cannabis crime lab cases in the Southeast Florida counties during 2017 accounted for 17% of all drug reports and was ranked second among all other drugs.

SYNTHETIC CATHINONES

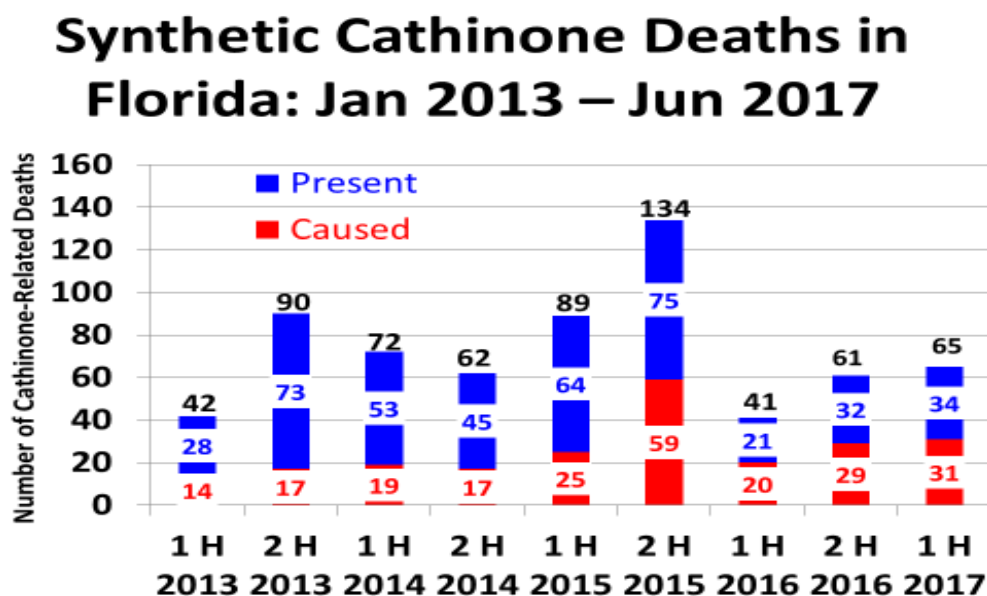
Key Findings

- The most prevalent **synthetic cathinone** in the region is N-Ethylpentylone sold as “Mollys” followed by a return of *Alpha-PVP* or “flakka.”

Substitute cathinones are potent stimulants with varying degrees of hallucinogenic properties. Cathinones are chemically designed to mimic but be more potent than the stimulant in the khat plant found in East Africa and the Middle East. The first substitute cathinones to appear were often referred to as “bath salts” and have been banned nationally and in Florida as well as many other nations. The most prevalent substitute cathinones in Florida have been methylone, ethylone, and diButylone all of which have been falsely sold as “pure MDMA” or “Mollys” for several years. The most dramatic problems associated with synthetic cathinones was with *alpha-PVP* or “flakka” particularly in Broward County from late 2014 and throughout 2015.

There were 132 synthetic cathinone deaths in all of Florida during 2013, 134 in 2014, 223 in 2015, and 102 in 2016. There were an additional 65 synthetic cathinone medical examiner occurrences statewide in the first half of 2017 with 31 attributed as being a cause of death (Figure 16).

Figure 16. Number of Synthetic Cathinone Deaths in Florida: January 2013 – June 2017



Source: Florida Medical Examiners Commission 2017 Interim Report

An epidemic of the synthetic cathinone, *alpha-PVP*, the drug sold as “flakka” erupted in Broward County in September of 2014. Consequences of its abuse rapidly escalated in 2015 fueling the increase of cathinone deaths that year with the drug also linked to thousands of hospital emergency cases many from the excited delirium syndrome. Broward County had more crime lab cases of *alpha-PVP* than any other county in the nation.

In part because of worldwide negative media coverage about flakka as well as diplomatic efforts, the government of China banned *alpha*-PVP and 115 other novel psychoactive substances on October 1, 2015. By the end of 2015 hospital emergency department cases, arrests, and treatment admissions related to *alpha*-PVP abuse dramatically declined. By early 2016 it had practically disappeared from street drug sales. However, there have been several medical emergencies related to “flakka” use in 2018 and increased amounts of the drug seized in law enforcement activity over the past two years.

Additional Findings

There were 1,284 crime lab reports for synthetic cathinones during 2017 in the three southeastern counties of Florida. Among the 2017 crime lab reports there were 845 for N-Ethylpentylone, 270 for *alpha*-PVP, 99 for DiButylone as well as 7 each for ethylone and pentylone. *Alpha*-PVP is usually sold as “flakka” and the other cathinones are sold as “Mollys” capsules or powder. There were also 169 crime lab cases for MDMA in 2017.

Infectious Diseases Related to Substance Use

With 29% of the State’s population, the three southeastern Florida Counties have 49% of the number of people living with HIV (PLWH) in the State (Figure 17). With per capita rates exceeding 1,000 per 100,000 population, Broward County (rate per 100,000 = 1,096.3) and Miami-Dade County (rate per 100,000 = 1,015.3) have led the nation in HIV infections. The rate in Palm Beach County is 601.5 contributing to a rate for the three counties region of 944 PLWH per 100,000 population.

Combining the two modes of transmission categories of (1) only injecting drug use [IDU] and (2) the dual risk of IDU among Men Who Have Sex with Other Men [IDU + MSM], Broward County has a rate of 94.8 per 100,000 compared to 87 for Miami-Dade County and 54.9 for Palm Beach County. The combined rate for the three counties region is 81.9 and 65.1 for the entire State (Figure 17).

Figure 17: Number of Persons Living with HIV by Injective Drug Use Modes of Transmission

**Number of Persons Living with HIV (PLWH) in
Southeastern Florida Counties as of June 30, 2017**

County	Population	# PLWH	Rate per 100,000
Miami-Dade	2,754,749	27,969	1,015.3
Broward	1,884,545	20,661	1,096.3
Palm Beach	1,411,054	8,488	601.5
Total 3 County Region	6,050,348	57,118	944.0
State of Florida	20,555,728	116,944	568.9

**Number of Persons Living with HIV (PLWH) by Injecting Drug Use (IDU)
Modes of Transmission in Southeastern Florida Counties as of June 30, 2017**

County	# by IDU	# by IDU + MSM	Total IDU	Rate per 100K
Miami-Dade	1,634	763	2,397	87
Broward	1,147	639	1,786	94.8
Palm Beach	561	213	774	54.9
Total 3 County Region	3,342	1,615	4,957	81.9
State of Florida	9,044	4,344	13,388	65.1

Source: Florida Department of Health – Florida CHARTS online

New Substance-Related Legislative and Policy Updates

Major legislation addressing Florida's Opioid Epidemic and other substance use disorders were passed by the 2018 Florida Legislature as House Bill 21 which went into effect on July 1, 2018. The new law limits Schedule II opioid prescriptions for acute pain to a three-day supply and when deemed medically necessary to a seven-day supply. The law allows an exception for certain patients, such as those suffering cancer and other forms of chronic pain who will not be affected by the new prescription limits.

House Bill 21, now Florida law, requires physicians and other prescribers as well as pharmacists to consult with the State's Prescription Drug Monitoring Program (PDMP), e-FORCE, prior to prescribing or dispensing controlled substances. The law provides a series of citations for failing to check with the PDMP and if those failures are determined to be willful, punishment escalates as misdemeanor offenses.

The new law also requires continuing medical education for practitioners on responsible prescribing of opioids. The law also includes a \$53 million appropriation for substance use prevention, treatment, and updating the State's PDMP. That amount is part of an overall \$65 million budgeted to address the Opioid Epidemic including \$11 million for medication-assisted treatment.

Sources

Data for this report were drawn from the following sources:

Data on drug-related deaths are from the Florida Department of Law Enforcement: Florida Medical Examiners Commission Interim and Annual reports on Drugs Detected in Deceased Persons in Florida January 2010 - June 2017. The Florida Medical Examiners Commission uses a statewide classification of drugs detected among deceased persons as being either (1) “a cause of death” determined by one of the State’s 24 local medical examiners or (2) merely found as “present at the time of death.” Thus, the terms “drug-related,” “drug reports detected,” “number of drug occurrences,” and “drugs identified in a decedent.” The number of drug occurrences exceeds the number of drug deaths for a specific drug because of multiple drugs detected in most decedents.

Treatment data are for primary drug admissions in calendar year 2017 of all clients in programs receiving any public funding located in Miami-Dade, Broward, and Palm Beach counties as provided by the Florida Department of Children and Families Office of Substance Abuse and Mental Health. Each admission does not necessarily represent a unique individual as some persons are admitted to treatment more than once in the same calendar year.

Data on crime lab cases are from the U.S. Drug Enforcement Administration: National Forensic Laboratory Information System: - Southeast Florida crime lab cases 2017 data. Queried: June 13, 2018.

Information on emerging drug issues are from the United Way of Broward County Commission on Behavioral Health and Drug Prevention – Surveillance Support Committee and the Florida Department of Children and Families Statewide Epidemiology and Outcome Measures Workgroup.

Data on polysubstance use detected in drug-related deaths are from the University of Florida College of Medicine’s Florida drug-Related Outcomes Surveillance and Tracking (FROST) System.

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