



# **PATTERNS AND TRENDS OF SUBSTANCE USE**

**WITHIN AND ACROSS  
THE REGIONS OF FLORIDA**  
June 2018 Update



This product is supported by Florida Department of Children and Families' Office of Substance Abuse and Mental Health funding.





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# Patterns and Trends of Substance Use Within and Across the Regions of Florida

Update June 2018

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## SECTION I. INTRODUCTION

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This report provides a brief statewide and regional update of the substance abuse issues and trends in Florida most recently addressed in [the 2018 Annual Report](#), *Patterns and Trends of Substance Use Within and Across the Regions of Florida*. This update is based on information from multiple new sources available as of May 2018. These sources include:

- the [2017 Medical Examiners Interim Report](#) on drugs identified in deceased persons during the first six months of 2017;
- newly available online data from the 2017 [Florida Youth Tobacco Survey \(FYTS\)](#); and
- data for Fiscal Year 2016-2017 substance abuse treatment admissions by primary drug from the Department of Children and Families SAMHIS.

Based on data from the 2017 Medical Examiners Interim Report, half-year numbers (data reported for 6 months) were doubled for yearly projections for some graphs and tables used in this update report. It should be noted that this approach may underestimate data for the entire year when rates are increasing, and overestimate annual data when rates are decreasing.

Florida's 2017 population was estimated to be slightly more than 20,484,000 residents (20,363,867 when inmates are excluded), according to the [Bureau of Economic and Business Research](#) (BEBR). This is an increase of nearly 9% since the 2010 census. Approximately 4.1 million Floridians were born in another country (20%) and even more were born in another U.S. state, according to the [U.S. Census Bureau](#). Thus, Florida's population is a cultural sample of the America's and serves as a sentinel site for observing emerging issues and changing patterns of substance abuse.

The Florida Department of Children and Families recognizes six multi-county regions and provides behavioral health services to Florida's diverse population through its seven Managing Entities. Where possible, data have been broken down into geographical regions with separate data for the Broward Managing entity.

## Report Highlights

- In 2017, historic declines in alcohol use, binge drinking, and cigarette smoking among Florida middle and high school students continued mirroring national trends ([Florida Youth Substance Abuse Survey](#), 2017). About one of every thirteen students reported “vaping” (using electronic cigarettes or similar devices that produce an aerosol) during the past 30 days, three times the frequency of cigarette use, but a decline of 1.2% from 2016.
- Conversely, the opioid epidemic continued to worsen dramatically in Florida and across the nation during 2016 and 2017. The most lethal component of this epidemic has been the rapid spread of illicitly manufactured non-pharmaceutical opioids mostly from foreign clandestine labs, especially fentanyl analogs that often are extraordinarily potent.
- Concerns have been expressed recently about the potential for a second epidemic of stimulant drugs concurrent with the opioid epidemic. The Drug Enforcement Administration’s [Intelligence Brief](#) of August 2017 said, “Columbian coca cultivation and cocaine production in 2016 reached the highest levels ever observed.” It also said that national data showed “the most significant increase in domestic cocaine usage since at least 2009” and that trend “is likely to amplify through at least 2018.” In Florida, the [Medical Examiners 2017 Interim Report](#) released in 2018 showed that stimulant-related deaths have increased rapidly since 2013.
- Continuing declines in underage alcohol use are confirmed by multiple surveys across all regions of Florida over the past decade. ([National Survey on Drug Use and Health](#), [Youth Risk Behavior Surveillance System](#), [Florida Youth Substance Abuse Survey](#)). However, the 2017 [Monitoring the Future](#) data showed a slight increase in past month alcohol use nationwide among 8<sup>th</sup> graders. The 2018 FYSAS data, when they become available, can allow insight into whether Florida mirrors this increase.
- Alcohol continued to be the most frequently observed substance in drug-related deaths in Florida in the first half of 2017. It was determined to be a cause of death for 19% of the decedents in which it was detected. ([Florida Medical Examiners Commission 2017 Interim Report](#))
- Fentanyl and its analogs fueled the dramatic escalation of deaths related to Florida’s opiate epidemic in 2016 and the first half of 2017. ([Florida Medical Examiners Commission 2017 Interim Report](#))
- Heroin deaths escalated dramatically across Florida in 2016, totaling 1,023. Data for the first half of 2017 suggest that the death rate for that year will surpass 2016. ([Florida Medical Examiners Commission Interim 2017 Report](#))

- Cocaine deaths also increased at a faster rate in 2016 than in previous years. Mid-year data for 2017 suggest a continued rapid rise in these deaths. ([Florida Medical Examiners Commission 2017 Interim Report](#))
- Methamphetamine-related deaths increased dramatically in Florida in 2016. The 2017 estimate based on mid-year data is for an additional 200 deaths versus 2016. ([Florida Medical Examiners Commission 2017 Interim Report](#))
- While there are some variations, most patterns and trends of substance abuse continue to be relatively similar within and across the regions of Florida. Notably, both Medical Examiner data and treatment admission data suggest that methamphetamines are a more prevalent problem in the Northwest region than elsewhere in the state, while this region seems to be less impacted by opioids.

## Florida's Regions and Population

The Department of Children and Families provides behavioral health services to Florida's diverse population through its seven Managing Entities as shown on the map below. Numbers on this map indicate circuit court districts. When possible, data in this report has been presented for the seven Managing Entity catchment areas including Broward.

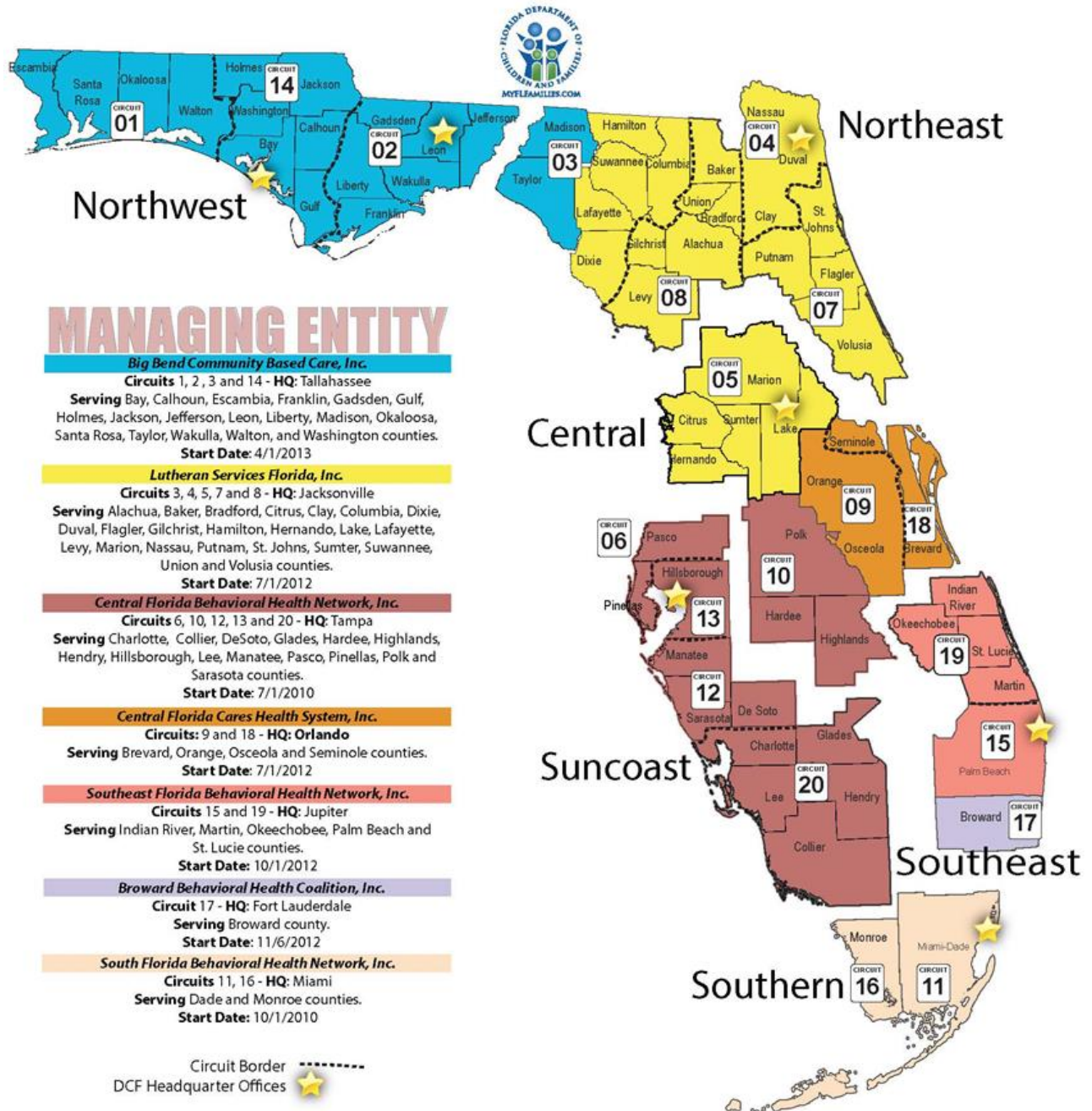
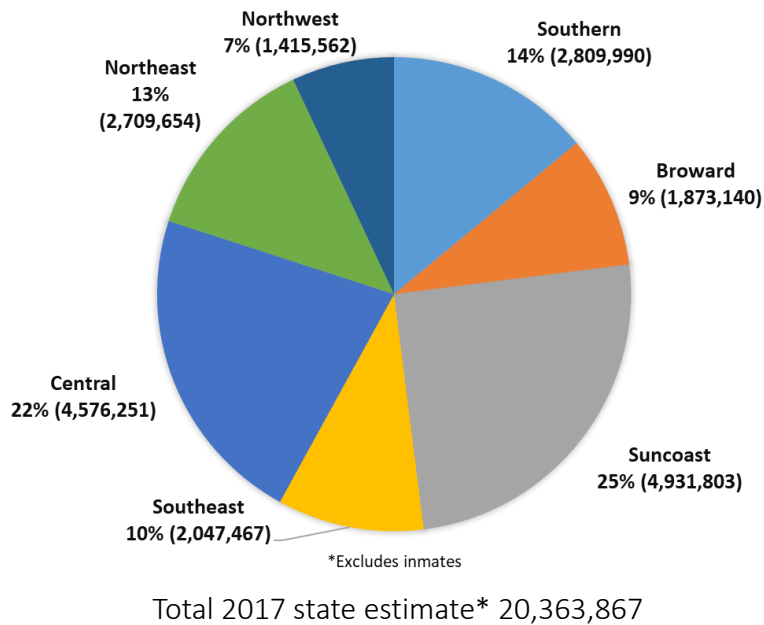


Figure 1 - Florida's Managing Entities by Region





**Figure 2 - 2017 Estimated Total Populations in Florida's DCF Regions  
December 2017 - Bureau of Economic and Business Research**

The total population of Florida as of April 1, 2017 was estimated to be 20,484,142, an increase of 1,682,810 from the 2010 census. Population estimates for each region used in this report are based on the [Bureau of Economic and Business Research \(BEBR\) estimates](#) published in December 2017. The pie chart of population shows that the Suncoast Region accounts for the largest share of Florida's population (25%) while the Northwest Region, despite its large geographic area, accounts for only 7% of the population.

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## SECTION II. PATTERNS AND TRENDS OF SUBSTANCE USE

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### Alcohol

#### Underage Alcohol Use

Relatively little new information on underage alcohol use has become available since the Annual Report was prepared in December 2017. The [National Survey on Drug Use in Households](#) has made state-level tables available for 2014-2015 and [the Monitoring the Future \(MTF\) report for 2017](#) is now available. Data for Florida youth from the Florida Youth Substance Abuse Survey are collected in schools during the spring semester, so 2018 data will not be available until the autumn.

NSDUH has modified its reporting categories for the 2015-2016 data. Reports currently available online do not provide breakouts for ages 12-20 and 21+. The current estimates published to date instead break use out by ages 12-17 and 18-25. As a result, 2015-2016 data are not comparable with graphs published in previous reports which showed long term trends in alcohol use among persons 12-20.

Among youth ages 12-17 interviewed by NSDUH in Florida, 9.15% reported alcohol use in the past month compared to 9.40% nationally, a difference that was not statistically significant. Asked about binge drinking in the past month, 4.93% of Florida youth versus 5.33% of youth nationally reported binge drinking. The national estimate falls within the 95% confidence interval for the Florida estimate. Thus, it appears that both estimates for Florida do not differ significantly from national estimates.

As noted in past reports, various years of CDC's Youth Risk Behavior Survey (YRBS), the Monitoring the Future survey (MTF), and FYSAS surveys all show substantial reductions in both any current alcohol use and binge drinking since 2002 among national and Florida youth. The declining trend lines of underage drinking rates for both the state and nation parallel one another closely. However, nationally, 2017 [Monitoring the Future](#) data showed a decrease in 30 day "any alcohol use" only in 10<sup>th</sup> and 12<sup>th</sup> grade students, but a moderate increase from 7.3% to 8.0% among 8<sup>th</sup> graders.

It is important to investigate whether 2018 Florida data will mirror the national MTF patterns for younger students. The next opportunity to assess age-related differences in adolescent alcohol use in Florida will occur when the 2017 Youth Risk Behavior Survey (YRBS) data are made available (currently slated for June 14, 2018) and when the 2018 Florida Youth Substance Abuse Survey data (collected in spring 2018) are released late in this calendar year.

## Adult Alcohol Use and Misuse

BRFSS data for 2017 are not yet available. Consequently, the most current survey data available on adult use and problematic adult use in Florida are those reported in the most recent annual [report](#).

The [Florida Medical Examiners Commission](#) recently reported that in the first six months of 2017 there were 2,594 occurrences of ethanol alcohol detected among drug-related deaths in Florida and, in 490 of these occurrences, alcohol was considered a cause of death. The number of alcohol occurrences in the first half of 2017 represented a slight (2.7%) increase over the same period in 2016 while the number of deaths was a much larger 21% increase over the 405 deaths during the same period in 2016.

According to the most recent [Florida Uniform Crime Reports](#), there were 16,765 arrests in Florida for Driving Under the Influence (DUI) during the first six months of 2017 representing a 3.3% decrease compared to the 17,339 arrests during the same six month period in 2016. Full year data for 2017 had not been released as of May 2018. The substances involved in the DUI arrest are not specified but most are for alcohol intoxication.

## Tobacco/Nicotine/Vaping

### Youth Tobacco Use

The most significant decline in adolescent drug use nationally and in Florida has been the dramatic reduction in reported use of cigarettes. National Institute on Drug Abuse's Monitoring the Future survey [data for 2017](#) show that nationally each of the age groups that it follows has posted dramatic declines over the past two decades in lifetime cigarette use and that this decline continued into 2017.

Recently reported 2017 data from the [Florida Youth Tobacco Survey](#) (FYTS) show dramatic decreases from 2012 to 2017 in "ever tried" cigarettes (a 40.9% decrease) and current cigarette use (a 59% decrease). Only 2.5% of Floridians ages 12-17 surveyed by the FYTS in 2017 reported current smoking.

For 2016, when county-level data were available, the prevalence rates of current cigarette use varied across the seven managing entity regions with higher rates of smoking in the northern regions of the state. FYSAS 2018 data, available later this year, will allow these regional differences to be reexamined.

### Adult Tobacco Use

Paralleling the reduction in youth cigarette smoking, adult smoking reported in [BRFSS](#) surveys has dropped from 19.3% in 2011 to 15.5% in 2016. The 2016 percentage reflects tobacco use being reported by 17.8% of males and 13.3% of females in Florida. In 2016

the lowest adult prevalence was in persons aged 65 and over (8.4%) followed closely by the 18-24 age group (11.2%) with other age groups roughly twice as likely to be current smokers.

## Electronic Vaporizers

[FYTS data](#) recently available show a marked increase in the use of electronic vaporizers since 2012. Nearly one of every ten 11-17 year olds (9.8%) reported using electronic vaping in 2017, a 333.8% increase since 2012. 22.3% of youth reported having tried electronic vaping at some time. These rates are notably higher than those for cigarette smoking. Some, but not all of the products sold for use in vaporizing units, contain nicotine of varying levels. The majority of those who “vape” report using only nicotine-free flavorings, but according to [MTE](#), the use of nicotine containing products increases with grade level from about one in ten 8th graders to one of every three 12<sup>th</sup> graders who vapes.

Perhaps the most positive FYTS finding on this topic, which mirrors the 2017 FYSAS data included in the last Annual report, is that current use of electronic vaporizers dropped from 11.0% in 2015 and 2016 to 9.8% in 2017.

The 2016 FYSAS did not show marked differences among regions in the prevalence of vaping. It will be worthwhile to revisit the issue of regional differences when 2018 data become available.

Adult use of e-cigarettes as reported in the [2016 BRFSS](#) survey showed that use of e-cigarettes decreased as the age of the adults surveyed increased. Of the 18-24 age group, 9.8% reported current e-cigarette use. By comparison, only 1.4% of the 65 and over age group reported current use.

Concerns have been expressed about the negative health effects of e-cigarettes and other vaporizing products. [Recent research studies](#) have not clearly verified the claim that e-cigarettes pose less of a health risk than smoking tobacco. Moreover, the “flavorings” for vapor products are constantly evolving to promote variety. Consequently, consumers have no way of knowing to what extent electronic smoking devices and products are safe or what potentially harmful chemicals the products contain. While we await better data on the long-term effects of “vaping” it is prudent to discourage use, especially among teens.

## Marijuana

Newly available national data from [MTE](#) showed slight increases from 2016 to 2017 at each grade level for lifetime marijuana/hashish use and increases in 30 day use for all youth, excluding 8<sup>th</sup> graders. In contrast, multiple years of Florida data from the FYSAS and YRBS surveys identified a rise in adolescent marijuana use around 2009 and 2010 with a relatively stable use or even a slight decline in reported use since that time period. The same surveys show that marijuana use among Florida middle school students

peaked in 2010 and decreased in 2017 to the lowest level measured in FYSAS surveys. It will be important to scrutinize these trends when 2018 FYSAS results become available.

The [Florida Medical Examiners Commission](#) 2017 Interim Report reported that there were 1,124 occurrences of cannabinoids detected in Florida toxicology studies during the first half of 2017. These were instances in which cannabinoids were determined to be present at the time of death. The number of occurrences in the first six months of 2017 represented a 4.9% increase over the 1071 cases in the same time period in 2016. In 2016 the [Commission](#) identified cannabinoids as the cause of death of only 4 of the people who died in whom a drug was determined to be present at the time of death.

## New Psychoactive Substances (NPS)

A critical issue impacting substance abuse in Florida and the U.S. over the past several years has been the emergence of new *synthetic* drugs of abuse. The [United Nations](#) and major national government agencies have adopted the term, “New Psychoactive Substances” or NPS, to describe these drugs. Others refer to these as “novel psychoactive substances” using the same NPS acronym. No occurrences of tryptamines were reported by medical examiners in the first half of 2017.

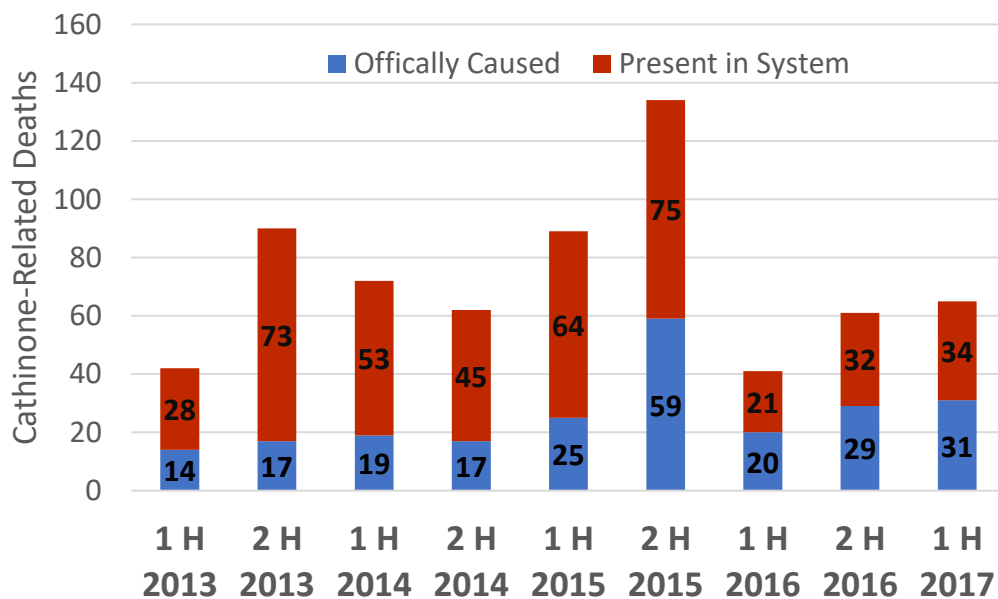
During this same time period, phenethylamines/iperazines (BZP or TFMPP) accounted for 21 occurrences and eight deaths according to the [Medical Examiners Commission](#), which is four more occurrences, but three fewer deaths than the prior year.

Reported use of synthetic cannabinoids has decreased dramatically among youth in Florida in recent years according to data from the FYSAS. Nevertheless, adults continued to use these substances and during the first six months of 2017, the [Florida Medical Examiners Commission](#) reports that occurrences of synthetic cannabinoids among decedents that they studied increased by 200 percent (20 more) and deaths caused by synthetic cannabinoids also increased (18 more). The majority of the synthetic cannabinoids reported during the first half of 2017 were 5F-ADB (19 occurrences).

Very recently, injuries and deaths in the Midwest from synthetic “marijuana” have received much attention from the news media. The [CDC](#) reports that “from 10 March 2018 through 05 April 2018, 94 people presented to Emergency Departments (89 in Illinois, 2 in Indiana, 1 in Maryland, 1 in Missouri, and 1 in Wisconsin).” As of April 14, 2018, the [Illinois Department of Public Health](#) had received reports of 126 cases in eleven different counties across the state, including three deaths. According to an Illinois Health Department [report](#), samples of synthetic marijuana have tested positive for brodifacoum, a lethal anticoagulant often used as a rodenticide, or rat poison. As of May, 2018, two similar cases have been reported in Hillsborough County Florida according to a report from the [Hillsborough County Health Department](#).

The [Florida Medical Examiners Commission](#) reports that when the first six months of 2017 are compared with the same time period in 2016, occurrences of synthetic cathinones

increased by 38 percent (18 more) and deaths caused by cathinones increased by 55 percent (11 more). Figure 3 shows that after a marked drop in early 2016, deaths involving cathinones appear again to be increasing slightly.



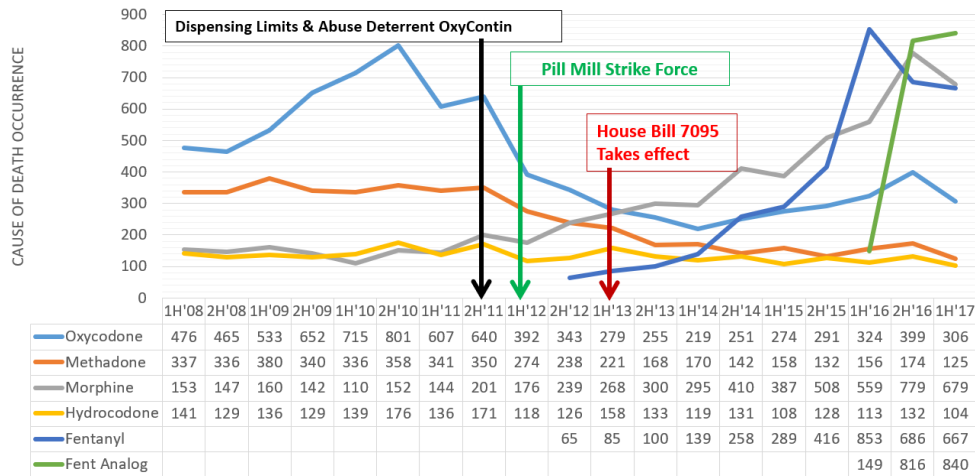
**Figure 3 – Synthetic Cathinone Deaths in Florida: Jan 2013 – June 2017**  
 FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2017 Interim Report

## Opioids

This broad category of drugs includes those derived directly from opium, often called opiates, (e.g. morphine, codeine) as well as semi-synthetic drugs such as oxycodone and hydrocodone, and completely synthetic drugs like fentanyl and its analogs many of which fit the definition of NPS noted above.

Overall occurrences of every opioid except Methadone increased in Medical Examiners Reports between the first six months of 2016 and the same time period in [2017](#). Most of these increases ranged between 1% and 30%. Alarming, overall occurrences of fentanyl analogs, a particularly powerful and deadly opioid increased by 383% (from 181 to 875) when the two time periods were compared.

Figure 4 illustrates deaths considered by Florida Medical Examiners to have been *caused* by various opiates. Fentanyl analogs (depicted with a green line starting in 2016) accounted for much of the overall increase in opioid-caused deaths in Florida from the first half of 2016 to the first half of 2017. Of 875 occurrences, these drugs were considered the cause of death in 840 cases (96% of occurrences) in 2017 versus 149 deaths in 2016, an increase of 563%. By contrast, heroin is considered the cause of death for 93% of deaths in cases where it occurs.

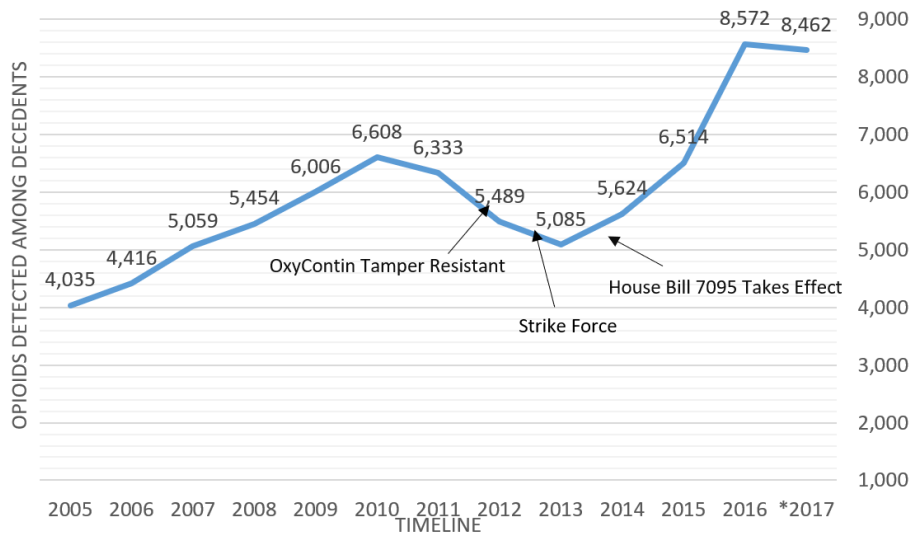


\*These are occurrences where medical examiners consider the substance to be the *cause* of death.

**Figure 4 – Lethal Opioid Occurrences\* Among Deceased Persons in Florida**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2008 - 2017**  
**Interim and Annual Reports**

## Prescription opioids

Figure 5 shows the trajectory of prescription opioids from 2005-2017 (estimated based on first six months of 2017) identified in deceased persons by Florida Medical Examiners. This excludes deaths from substances such as heroin and fentanyl analogs which are never prescribed. Figure 5 shows a leveling-off of deaths from prescription opioids based on a projection of data for the first six months of 2017 to the entire year.

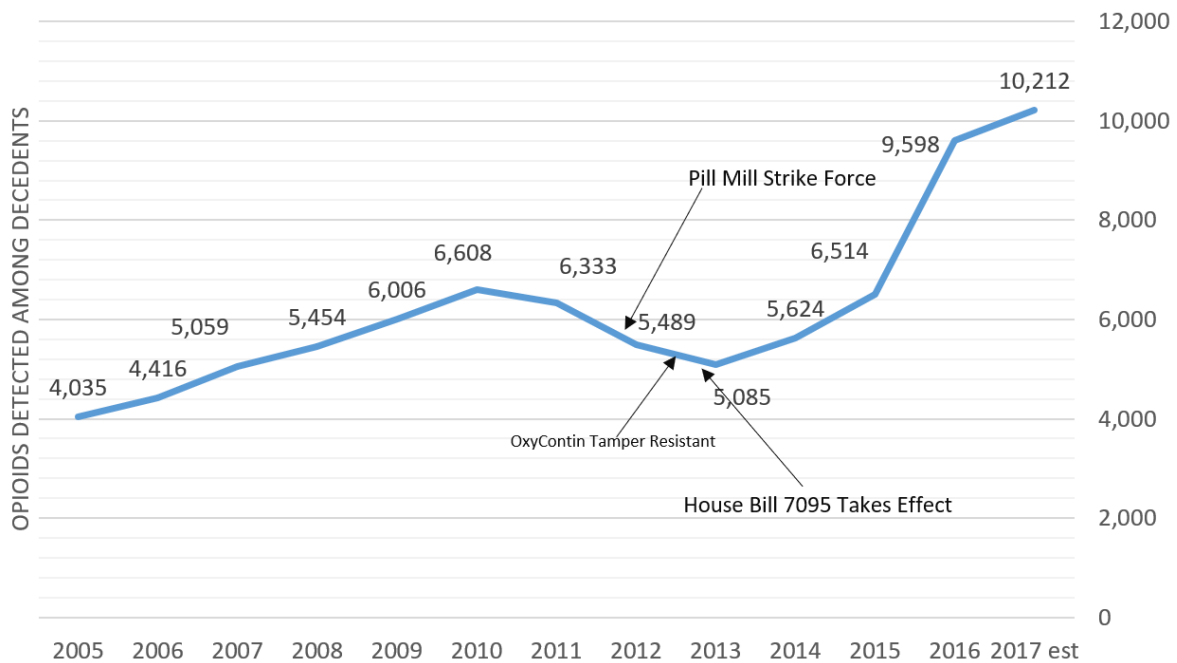


\*Estimated

**Figure 5 – Nonmedical Rx Opioids (excluding Fentanyl Analogs) Occurrences Detected among Florida**  
**Decedents**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2005-2017 Interim**

## Fentanyl analogs

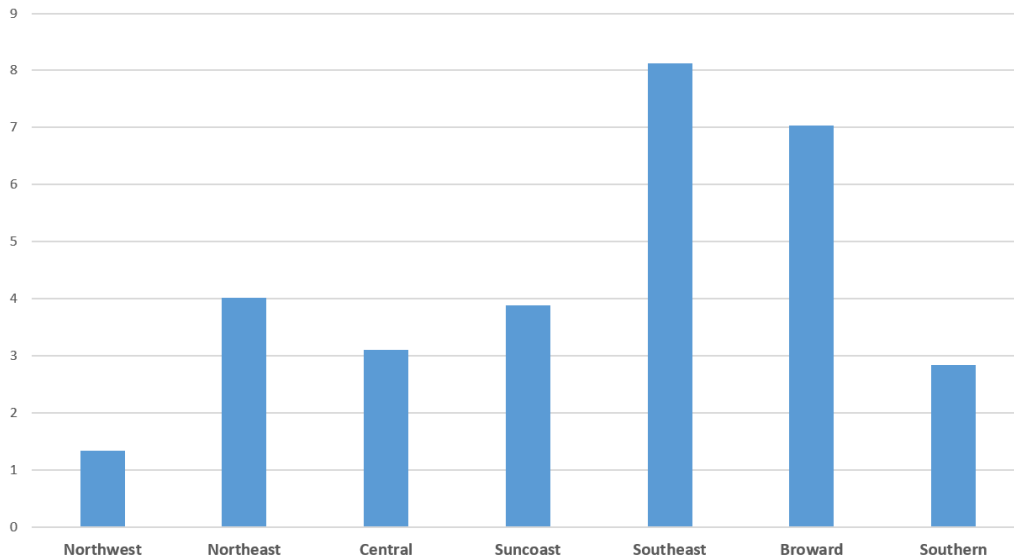
In contrast to Figure 5, Figure 6 includes all opioids (including fentanyl analogs) except heroin. Figure 6 shows that, when fentanyl analogs are included, the current rate of increase in opioid deaths seems to have caught up with the 2011-2013 trajectory that existed prior to Florida’s passage of laws and regulations for opioid misuse and these deaths are increasing at a rapid rate.



**Figure 6 – Nonmedical Rx Opioids (Including Fentanyl Analogs) Occurrences Detected among Florida Decedents**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2005 - 2017**  
**Interim and Annual Reports**

The death rate for fentanyl analogs during the first six months of 2017 was 4.29 per 100,000 population statewide, but, as shown in Figure 7, regional rates varied considerably across the state ranging from a low of 1.34 deaths per 100,000 population in the Northwest region to a high of 8.13 deaths per 100,000 in the Southeast region. Of the state’s 25 Medical Examiner Districts, five reported more than 50 deaths from fentanyl analogs: Jacksonville (77), Miami (79), Sarasota (111), Ft. Lauderdale (132) and West Palm Beach (181).

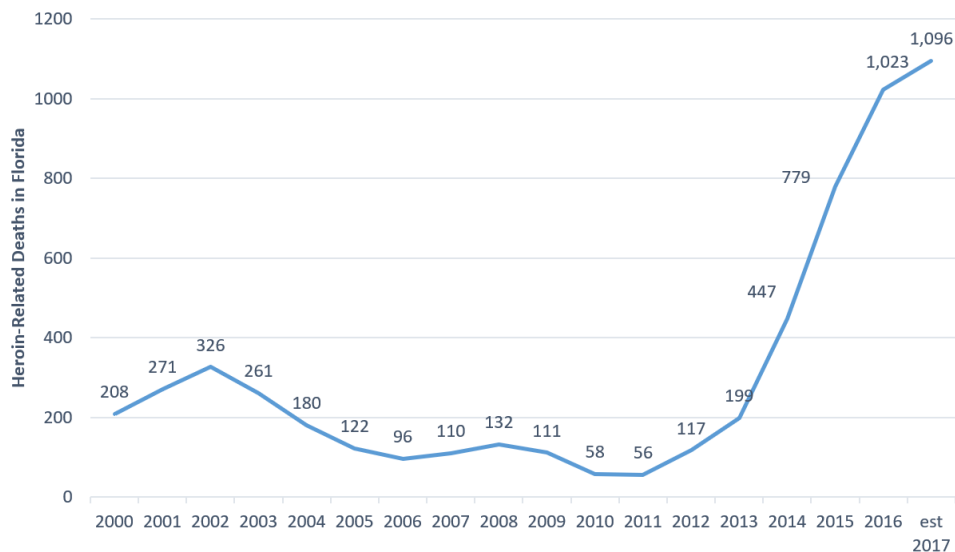




**Figure 7 – Fentanyl Analog Deaths per 100,000 Population in Florida January – June 2017  
FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2017 Interim Report**

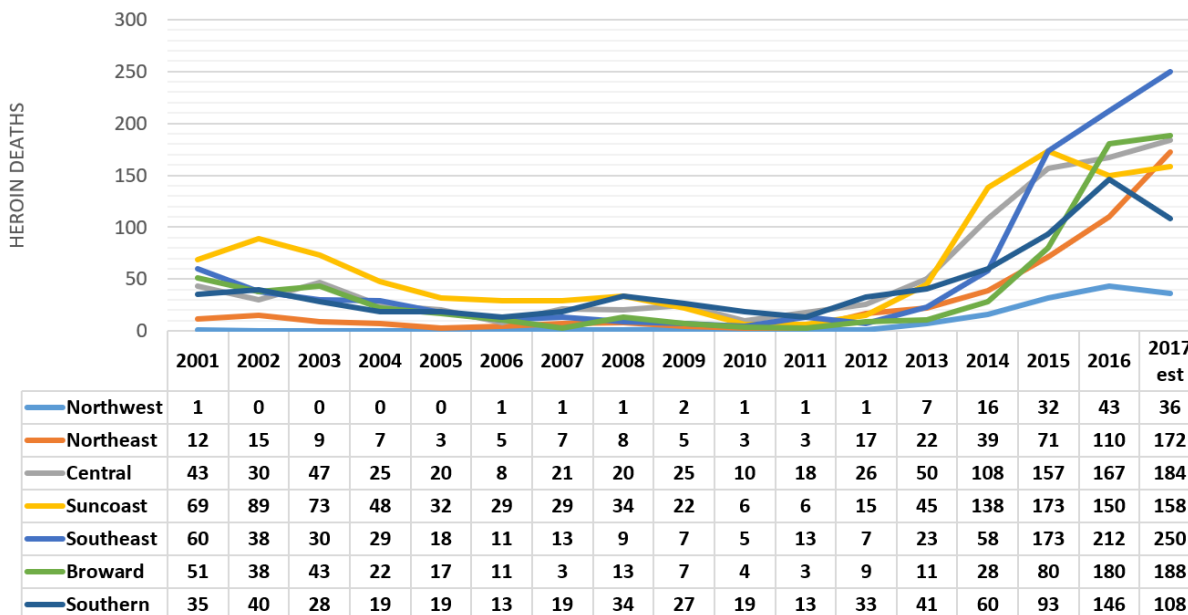
## Heroin

The Florida Medical Examiners Commission reported that there were 1,023 heroin-related deaths across Florida in 2016 representing a 31% increase over the 779 such deaths in 2015 and a 228% increase over the 447 such deaths in 2014. This reflects nearly 18 times as many heroin-related deaths compared to 56 heroin deaths statewide in 2011. This dramatic rate of increase began in 2014 and appears to continue into 2017, but with a slightly lower estimated trajectory based on estimates from the first six months of data. (Figure 8). Heroin was considered a cause of death in 93% of the heroin deaths in 2016 and the first half of 2017 though the vast majority of decedents also had other drugs such as alcohol or stimulants in their system.



**Figure 8 – Number of Heroin-related Deaths**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2005-2017 Interim and Annual Reports**

Increased heroin deaths since 2013 appear to be affecting most regions of the state as shown in Figure 9. However, both the Florida Medical Examiner data and treatment admission data discussed below suggest that the heroin problem has been less severe in the Northwest region despite a recent increase in heroin deaths in that region.



**Figure 8 – Number of Heroin-Related Deaths by FL Management Regions**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2005-2017 Interim and Annual Reports**

Table 1 shows statewide data on opioid deaths for five 6-month periods starting with the first six months of 2015. While many of the opioids included in the table show increases, the most striking increases are for fentanyl and fentanyl analogs. Morphine may be detected as a metabolite of other opioids such as heroin or fentanyl.

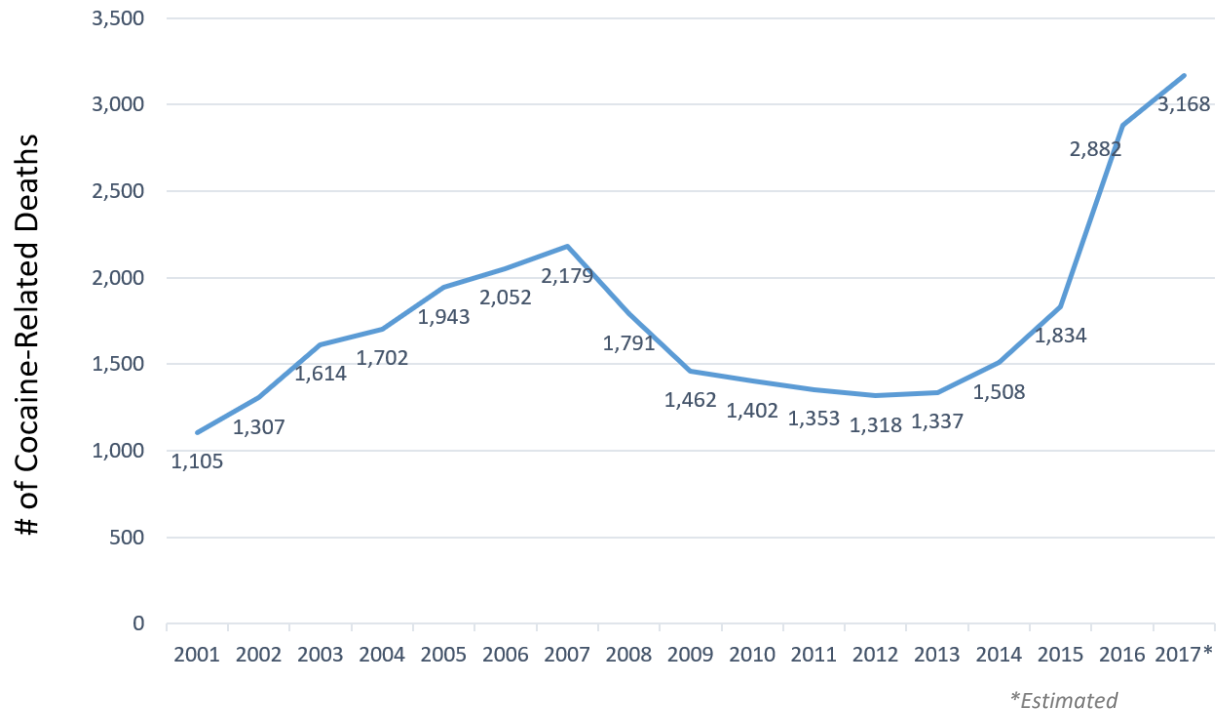
**Table 1. Deaths with Occurrences of Various Opiates**

<b>Opioid</b>	<b>1st H 2015</b>	<b>2nd H 2015</b>	<b>1st H 2016</b>	<b>2nd H 2016</b>	<b>1st H 2017</b>
Fentanyl & Analogues	397	514	988	1,682	<b>1,700</b>
Morphine	670	813	878	1,162	<b>1,032</b>
Oxycodone	525	556	632	750	<b>651</b>
Heroin	343	436	434	589	<b>548</b>
Hydrocodone	353	327	325	367	<b>357</b>
Hydromorphone	240	281	273	322	<b>286</b>
Methadone	239	214	240	259	<b>211</b>
<u>Oxymorphone</u>	171	218	240	322	<b>274</b>
Codeine	209	269	236	271	<b>285</b>
Tramadol	239	200	210	300	<b>230</b>
Buprenorphine	29	42	55	80	<b>66</b>
Meperidine	5	3	4	2	<b>14</b>

Source: FDLE – FL Medical Examiners Commission Reports

## Cocaine

As reflected in Figure 10, [Florida Medical Examiners Commission](#) data reported between 2002 and 2018 indicates that the relatively steady decline in Florida cocaine deaths from 2007 to 2010 stabilized through 2013. However, cocaine deaths have increased since 2013 with a particularly abrupt increase from 2015 to the estimated total for 2017 (more than double the 2013 rate).



**Figure 9 – Cocaine Deaths in Florida**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2005-2017**  
**Interim and Annual Reports**

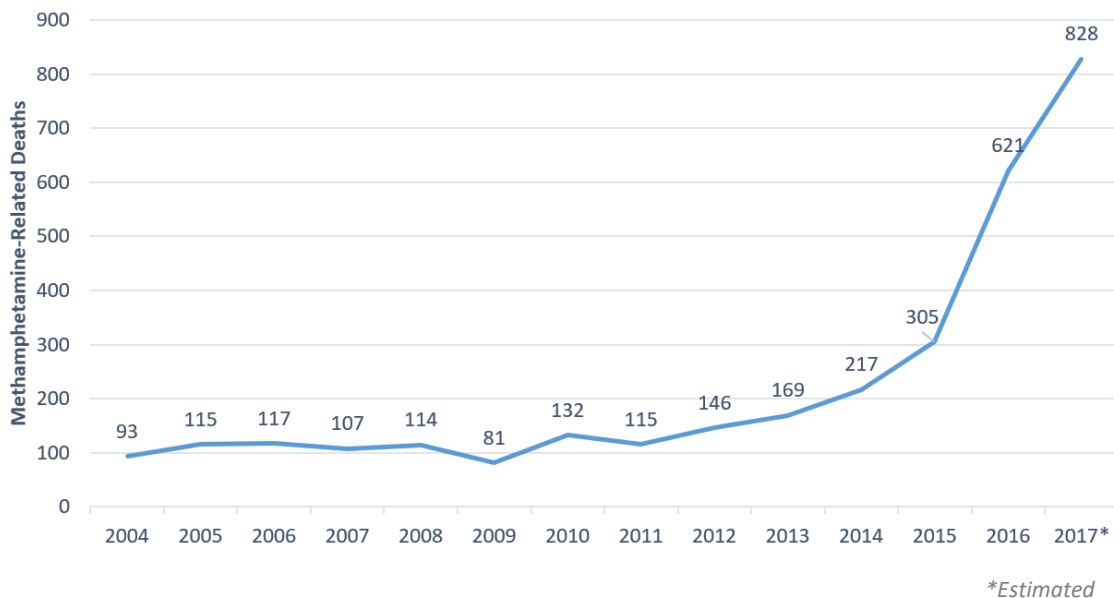
This increase in cocaine deaths may be linked to poly-drug use particularly with opioids. Cocaine laced with deadly fentanyl analogs was identified in Florida in 2016 and has become more prevalent in the past year. There were 2,882 cocaine-related deaths in Florida in 2016, an increase of over 1,000 deaths from the preceding year. Projected 2017 deaths, (based on first six months data published in April 2018) are 3,168 with other drugs present in the decedent’s system 87% of the time.

According to the [Florida Medical Examiners Commission 2017 Interim Report](#), cocaine was considered the cause of death in 65% of the first six-month 2017 cocaine deaths. Nearly two-thirds of the cocaine deaths (64%) occurred among those aged 35 and older; less than 1% (n=10) of the first-half 2017 cocaine decedents were under 18 years of age.

Based upon Fiscal Year 2016-2017 state-funded treatment admissions data from DCF, primary addiction treatment admissions for cocaine (crack or other) totaled 5,286 patients in Florida - accounting for 7% of all publicly funded admissions. Of those admissions, males accounted for 52% of these clients. Crack cocaine was specified by 61% of all the cocaine patients. Fifty-five or 1% of the admissions were for someone under 18 years of age, 12% were 18-25, 28% were 26-34 and 59% were age 35 or older. Smoking cocaine was the route of administration reported by 54% of the cocaine clients with intranasal sniffing cited by 31% and 5% reported injecting cocaine. The remaining 10% reported oral or other or unknown routes of administration. Again, these numbers reflect individuals admitted to DCF-funded treatment facilities only.

## Methamphetamine/Amphetamines

For a decade, the [DEA](#) has reported that most methamphetamine is produced in clandestine laboratories outside the United States, especially in Mexico, and smuggled into the country. In Florida, the Florida Medical Examiners Commission has found that indicators of methamphetamine have been increasing since 2011 with deaths related to the drug escalating more rapidly since 2015. If data for the first six months of 2017 are expanded to the entire year, this number seems likely to increase to 828 deaths for 2017 (Figure 11). Florida Medical Examiners considered methamphetamine the cause of death in 51% (n=213) of the 414 cases in the first six months of 2017. A breakout of methamphetamine-related deaths by counties or state managing entity regions is not available ([Florida Medical Examiners Commission 2017 Interim Report](#)).

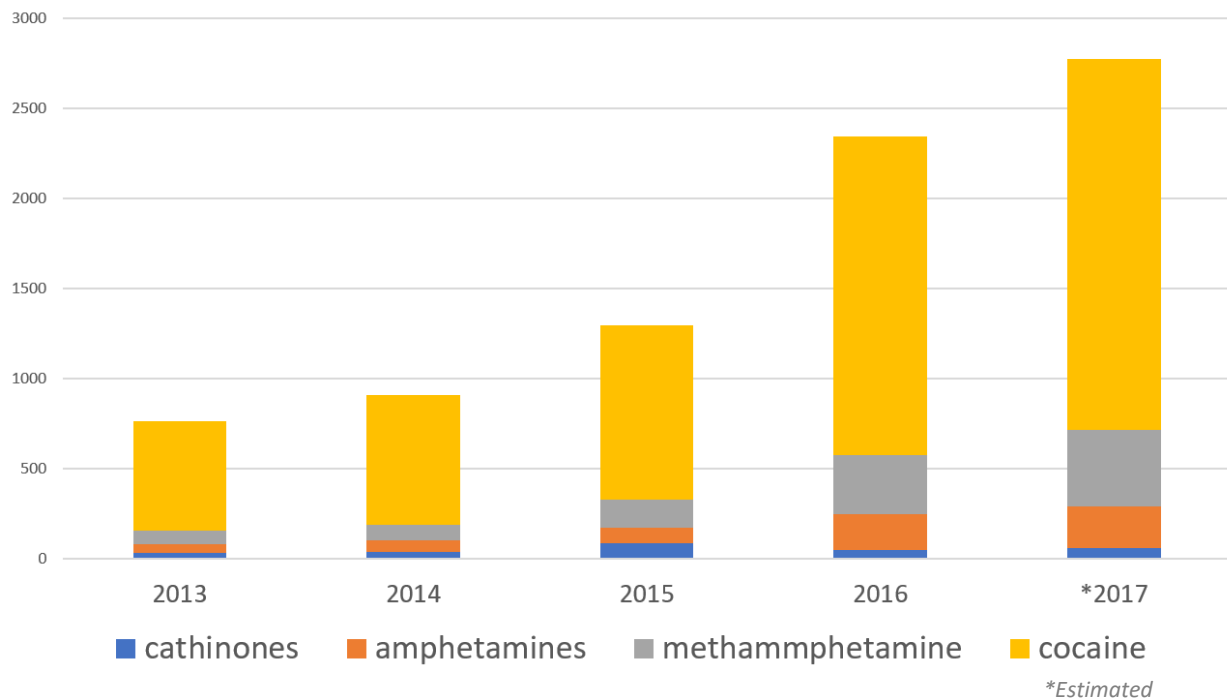


**Figure 10 – Number of Methamphetamine-Related Deaths in Florida: 2000-2017\***  
FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2005-2017 Interim and Annual Reports

The Florida Medical Examiners Commission also reported 640 instances of amphetamines detected among decedents across Florida in 2016 which was a 65% increase from the 387 such occurrences in 2015. Projected deaths for 2017 (based on first six-month data from the Interim report) are 800. Amphetamine was considered the cause of death in 29% of the cases in the first six months of 2017. ([Florida Medical Examiners Commission 2017 Interim Report](#) released in 2018).

[Some](#) have suggested that, viewed collectively, stimulant drugs (cocaine, cathenones, amphetamines and methamphetamine) represent a growing epidemic. Figure 12 combines data on deaths in Florida caused by these classes of stimulants over the past

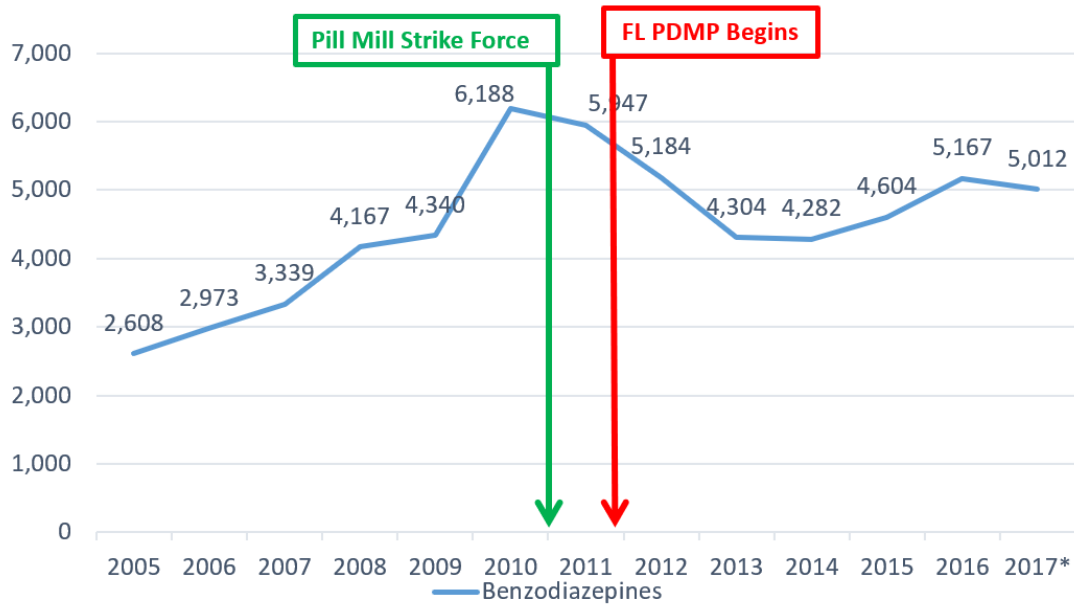
five years. It clearly shows that, with the exception of cathinones, the number of stimulant-caused deaths has increased dramatically.



**Figure 11 – Stimulant-caused Deaths in Florida, 2013-2017\***  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2005-2017 Interim and Annual Reports**

## Benzodiazepines

Benzodiazepines, in general, and specifically alprazolam (Xanax®), continue to pose a substantial problem across Florida, particularly when used non-medically in combination with other pharmaceuticals, alcohol, and illicit drugs. Figure 13, illustrates this growth based on data from Florida Medical Examiners Commission reports covering time periods from 2005 to June 2017. There were 5,167 reports of a benzodiazepine present in deceased persons across Florida in 2016 but projected deaths for 2017 appear to be down slightly. Of the benzodiazepine occurrences in the first half of 2017 reported by [Florida Medical Examiners](#), 26.2% were considered “a cause of death.”



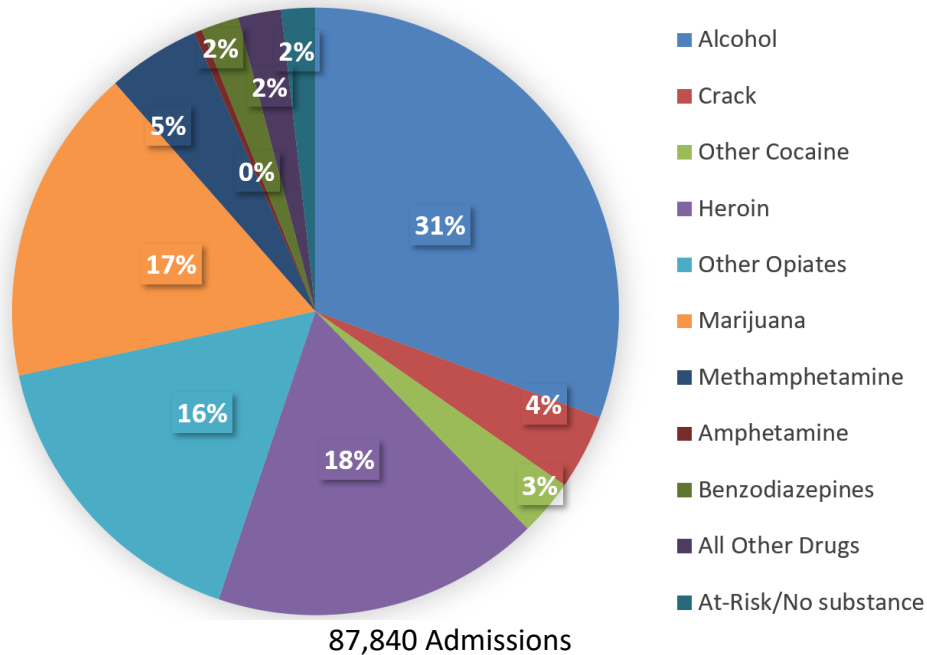
*\*Estimated*

**Figure 12 – Number of Nonmedical Rx Benzodiazepine Reports Detected among Deceased Persons in Florida 2005 – 2017\***  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners 2005-2017 Interim and Annual Reports**

### SECTION III. EPIDEMIOLOGIC INFORMATION FROM PUBLIC TREATMENT DATA

Data on publicly funded treatment for substance abuse can be useful in understanding regional differences in the *relative* not *overall* - prevalence of use of various substances. However, there are *limitations*: (1) these data only represent individuals treated in publicly funded programs, therefore capturing a smaller proportion of all persons seeking treatment in more affluent communities; and (2) the overall availability of spaces in publicly funded treatment may result in numbers that underestimate the severity of substance abuse. Despite these limitations, data on persons in publicly funded treatment may allow comparisons about the *relative demand for treatment* for various substances across regions of the state.

Figure 14 shows the overall distribution of admissions to treatment in publicly funded programs in Florida from July 1, 2016 to June 30, 2017. Treatment for alcohol represents the largest share of admissions with treatment for marijuana, heroin, and other opiates also accounting for large portions of admissions. Treatment for crack cocaine, other cocaine, methamphetamines and other amphetamines accounted for much smaller proportions of statewide admissions.

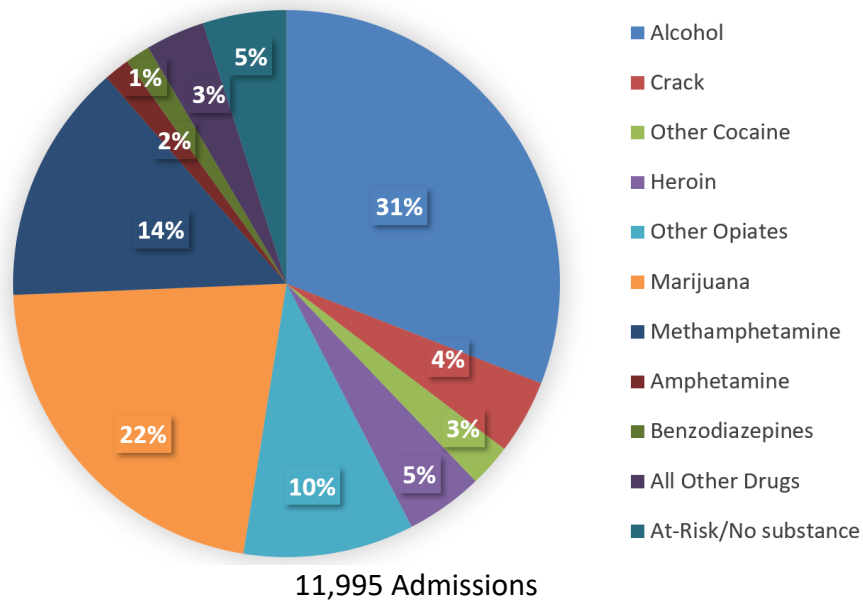


**Figure 13 – Statewide Primary Admissions to Publicly Funded Treatment 2016-17**  
FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners, 2017 Interim Report

The data for the Northwest Region (Figure 15) contrast rather markedly with the statewide data. While alcohol treatment is still the most frequent reason for admission, and marijuana the second most frequent in the Northwest, the proportion admitted for heroin and other opiates is much smaller and the proportions admitted for crack cocaine and methamphetamines are larger than the statewide proportions. This region has by far the largest proportion of treatment admissions from methamphetamines of any region in the

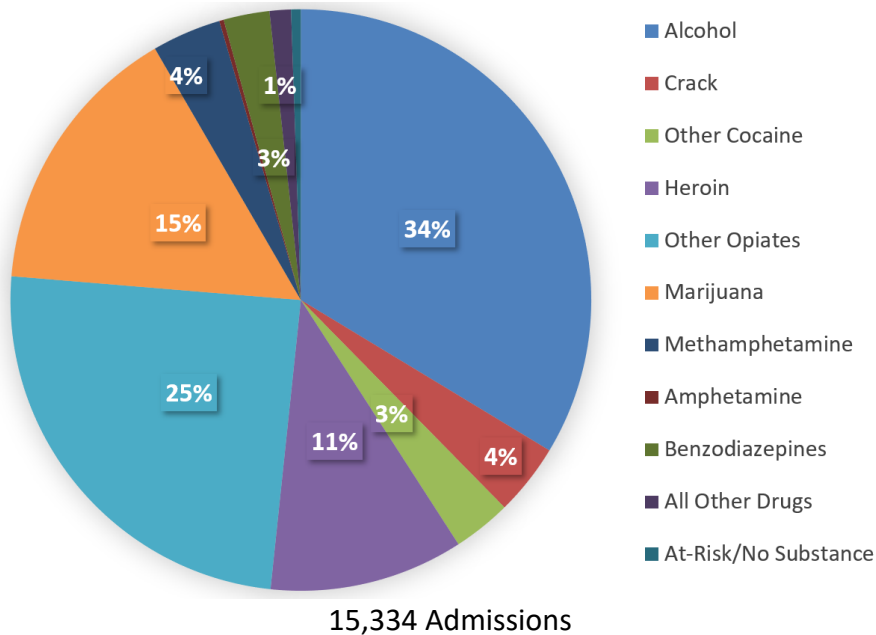


state. Low rates of admission for opioids are consistent with the Medical Examiners data reported in previous sections of this document.



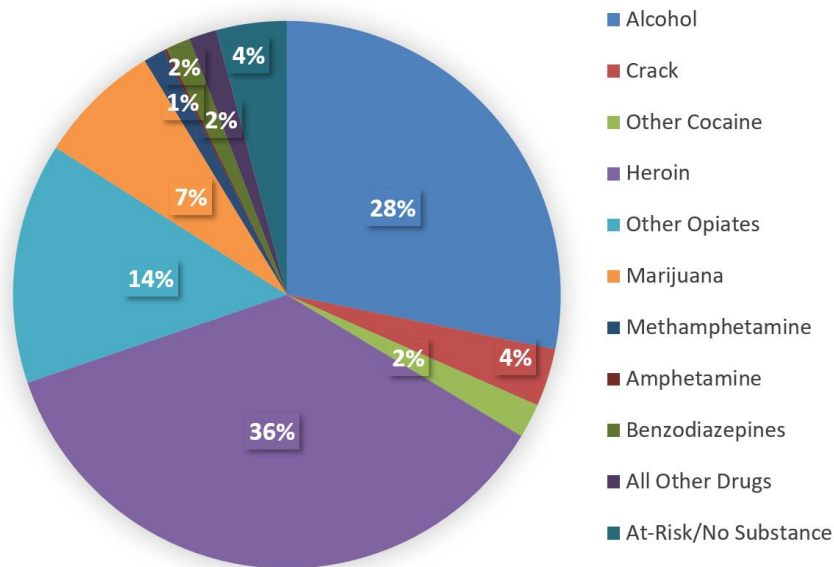
**Figure 14 – Northwest Region Primary Admissions to Publicly Funded Treatment 2016-17**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners, 2017 Interim Report**

The Northeast region more closely approximates the state data. Most notable is a smaller proportion of admissions for heroin relative to the state.



**Figure 156 – Northeast Region Primary Admissions to Publicly Funded Treatment 2016-17**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners, 2017 Interim Report**

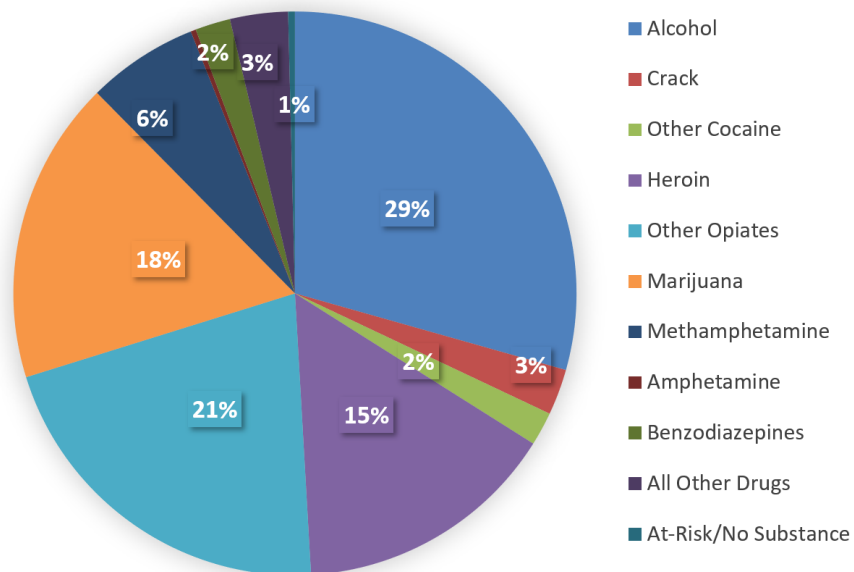
In contrast, the Central region (Figure 17) has a very high proportion of opioid admissions, especially heroin, and a smaller proportion devoted to marijuana than the state or other regions.



12,615 Admissions

**Figure 17 – Central Region Primary Admissions to Publicly Funded Treatment 2016-17**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners, 2017 Interim Report**

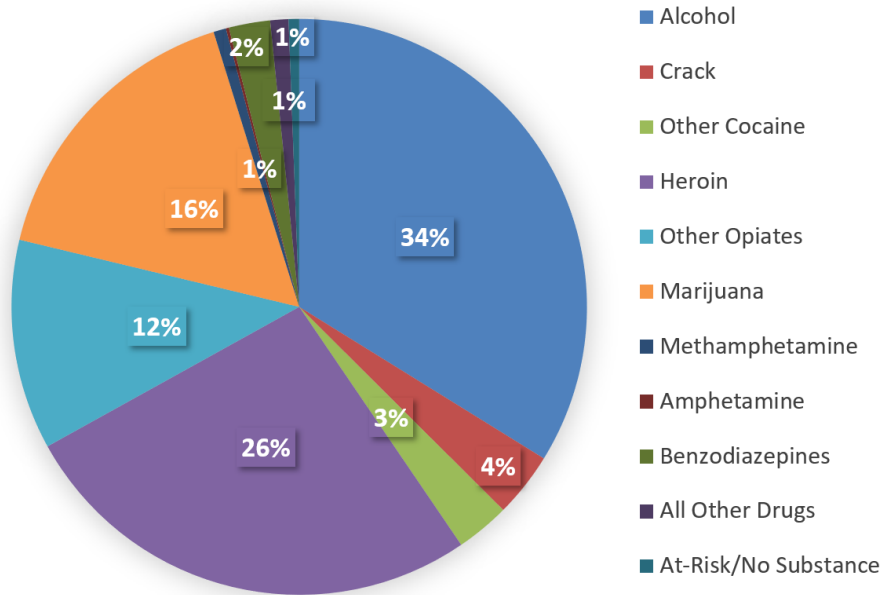
Like the Northeast Region, the substance use treatment admissions by drug type for the Suncoast Region closely approximate the proportion of admissions for the state as a whole.



26,615 Admissions

**Figure 16 – Suncoast Region Primary Admissions to Publicly Funded Treatment 2016-17 \***  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners, 2017 Interim Report**

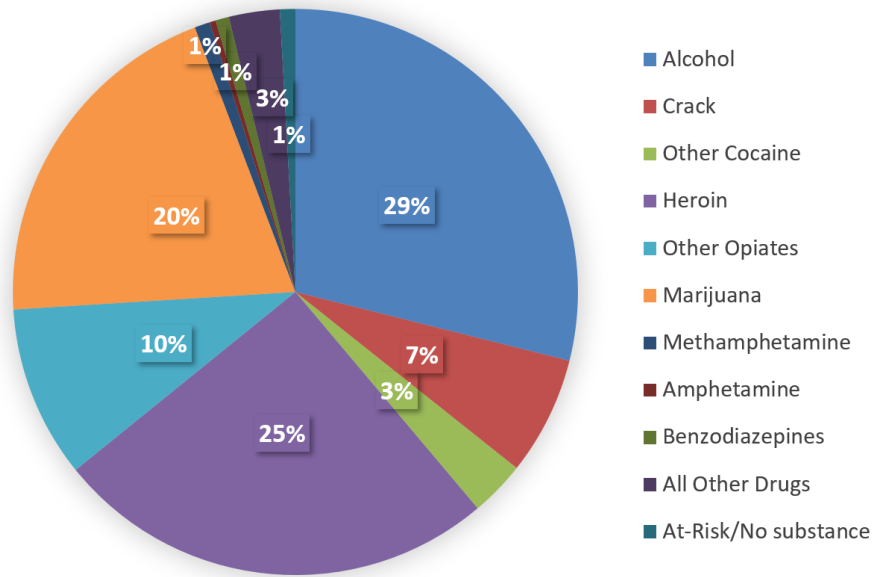
The Southeast region is notably dominated by treatment for alcohol, opioids, heroin and marijuana, with only a tiny proportion of admissions relating to users of amphetamines (see Figure 19). The contrast between this region and the Northwest Region depicted in Figure 15 is notable.



9,842 Admissions

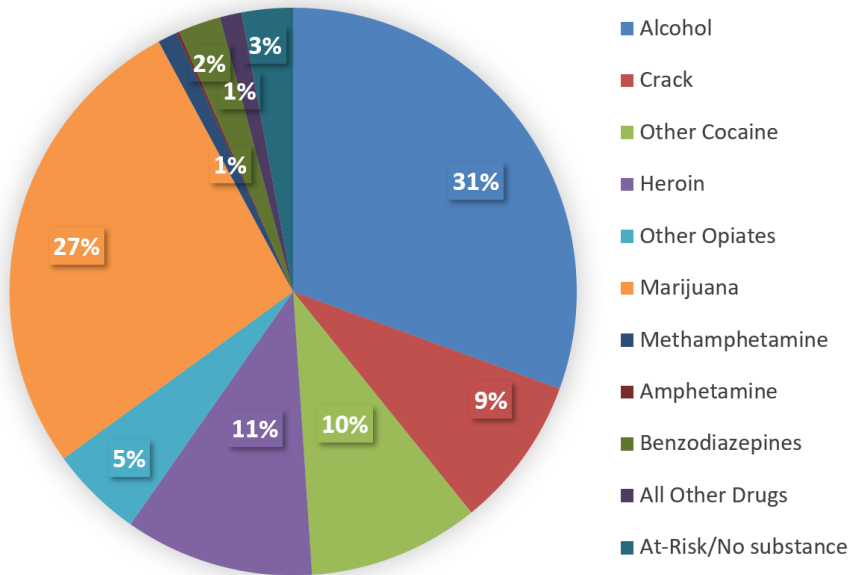
**Figure 17 – Southeast Region Primary Admissions to Publicly Funded Treatment 2016-17**  
**FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners, 2017 Interim Report**

The Broward district has a larger than typical proportion of admissions related to crack cocaine compared to the state or most other regions. However, the Southern region reports the largest proportion of admissions related to this substance. This region also has the largest proportion of admissions related to other cocaine, but a very small proportion related to heroin or other opiates.



5,153 Admissions

**Figure 18 – Broward Region Primary Admissions to Publicly Funded Treatment 2016-17  
FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners, 2017 Interim Report**



6,286 Admissions

**Figure 21– Southern Region Primary Admissions to Publicly Funded Treatment 2016-17 \*  
FDLE – Drugs Identified in Deceased Persons by Florida Medical Examiners, 2017 Interim Report**

In summary, treatment admission data support the notion that some drugs impact different regions differentially, with crack and cocaine more prevalent in the southern parts of the peninsula and methamphetamines a larger problem in the western Panhandle. Other drugs such as alcohol and marijuana account for a large proportion of admissions everywhere in the state.

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## SECTION IV. SUMMARY

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In summary, population survey data on youth alcohol and tobacco use and initiation continued to show long-term declines in self-reported lifetime use and current use. However, the most recent data from Monitoring the Future shows a slight increase in “any alcohol use” among the 8<sup>th</sup> graders that they studied. As 2018 FYSAS data become available in the autumn of 2018 it will be important to assess whether this age group in Florida maintains past reductions in alcohol use.

Cigarette smoking is at an all-time low among Florida youth. However, nearly three times as many students reported e-cigarettes/vaping in 2017 versus cigarette smoking. Future data can help to assess whether this habit is a substitute for cigarette smoking or a prelude to adult smoking as a result of nicotine in vaping products.

Adult alcohol use is a persistent problem statewide as shown in autopsy data and treatment admissions data. Poly-drug use is prevalent in Florida as demonstrated by the much higher number of drug occurrences versus total drug deaths in the first half of 2017. It is important to note that alcohol-related deaths often include alcohol and other drugs of abuse.

Florida’s serious opioid problem continued through the middle of 2017 with fentanyl analogs and heroin particularly lethal. According to data trends, some shifting has occurred from prescription opiates to heroin and illicit opioids as the cause of opioid deaths as prescribing practices restrict medical access to opioids. It will be important to continue to monitor these changes to understand the effects of recent laws and regulations passed in response to this crisis.

Cocaine deaths are again on the rise in Florida and, nationally, concerns have been expressed about rising harms from the broad class of stimulant drugs including cocaine, amphetamines and methamphetamine. This concern appears accurate given Florida’s recent trends in stimulant-caused deaths

Benzodiazepines continue as a cause of accidental deaths in Florida, particularly among adults who may be using them in combination with other drugs.

Monitoring of substance use with survey data from the FYSAS, FYTS, NSDUH and BRFSS, and continued examination of data on treatment admissions and drug-related deaths is crucial to understanding the changing impact of substance use on the state and its regions.

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