PATTERNS OF AND **TRENDS** IN SUBSTANCE USE IN FLORIDA

ANNUAL REPORT 2022

FADAA

FLORIDA DEPARTMENT OF CHILDREN AND FAMILIES
MYFLFAMILIES.COM

Sponsored by the Florida Alcohol and Drug Abuse Association, a subsidiary of the Florida Behavioral Health Association, and the State of Florida, Department of Children and Families

For information about this report, contact:

Benjamin T. Hackworth, MPH
Epidemiologist Consultant
419-769-1927
bthackworth@gmail.com

Suggested citation: Hackworth, B. T. (2022) Patterns of and Trends in Substance Use in Florida 2022 Annual Report.

TABLE OF CONTENTS

Introduction

The 2022 Annual Report presents new information about substance use in Florida and the US since the release of the Annual Report Update, Patterns and Trends of Substance Use Within and Across the Regions of Florida, in February 2022. It is based on information released following the preparation of the 2022 Update Report, including data from the Centers for Disease Control and Prevention (CDC), Florida Department of Health Florida Health Charts, and the Florida Medical Examiners Commission Drugs Identified in Deceased Persons by Florida Medical Examiners: 2020 Annual Report. For purposes of this analysis, data from the National Survey on Drug Use and Health (NSDUH) and the National Center for Health Statistics were also used. For additional data information and sources, please refer to the Patterns of and Trends in Substance Use in Florida Annual Report, 2021. Please note that the COVID-19 pandemic had an impact on data collection efforts during 2020, particularly for the National Survey on Drug Use and Health (NSDUH) from the Substance Abuse and Mental Health Services Administration (SAMHSA). Therefore, it is suggested to use caution when attempting to compare national data from 2020 with prior years.

Managing Entities

The Florida Department of Children and Families (DCF) contracts with seven regional systems of care known as Managing Entities to provide behavioral health services to citizens throughout the state. Because Florida is a large state with a diverse, geographically disparate population, this model allows each Managing Entity to respond to the specific behavioral health needs of its region within Florida. With one exception, each region is comprised of a group of geographically contiguous counties (Figure 1).

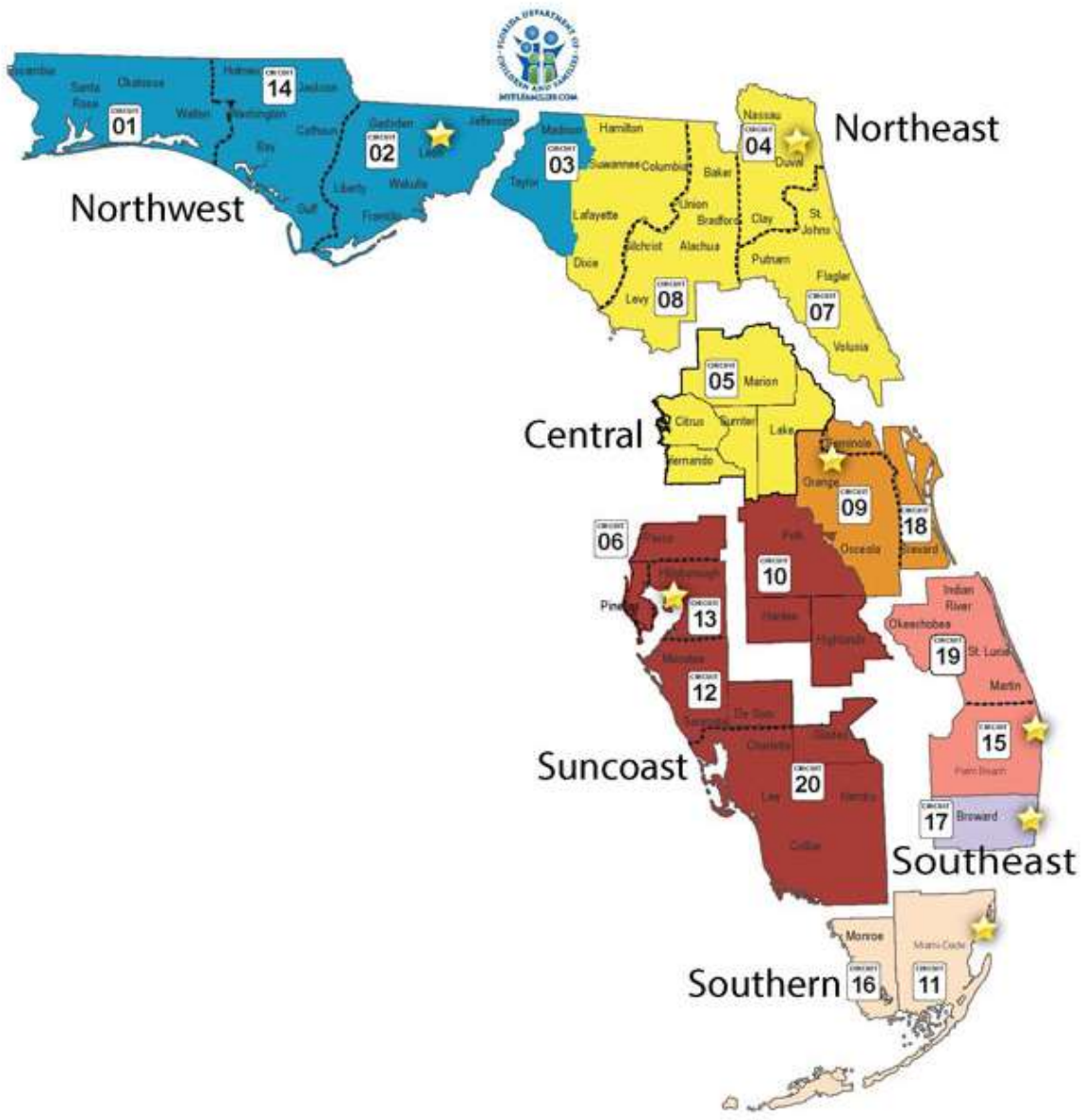

Figure 1. Florida by Department of Children and Families Region, Managing Entity, Circuit, and County. Source: Florida Department of Children and Families.

Two counties located in the northeast and all of the counties located in the northwest region of Florida are served by Northwest Florida Health Network (NWF Health); the eighteen counties in the panhandle of Florida served by NW Health include Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Madison, Okaloosa, Santa Rosa, Taylor, Wakulla, Walton, and Washington. As in Figure 1, the region served by NW Health is represented in graphs throughout the report in the color turquoise.

Twenty-three counties in the Northeast and North Central regions of Florida are served by Lutheran Services Florida (LSF): Alachua, Baker, Bradford, Citrus, Clay, Columbia, Dixie, Duval, Flagler, Gilchrist, Hamilton, Hernando, Lake, Lafayette, Levy, Marion, Nassau, Putnam, St. Johns, Sumter, Suwannee, Union, and Volusia. The region served by LSF is represented in graphs throughout the report in yellow.

The eastern portion of the Central region of Florida is served by Central Florida Cares Health System, Inc. (CFCHS), including Brevard, Orange, Osceola, and Seminole Counties. The region served by CFCHS is represented in graphs throughout the report in orange.

The Suncoast region and the southwestern portion of the Central region of Florida is served by Central Florida Behavioral Health Network, Inc. (CFBHN). The counties served include Charlotte, Collier, DeSoto, Glades, Hardee, Highlands, Hendry, Hillsborough, Lee Manatee, Pasco, Pinellas, Polk, and Sarasota. The region served by CBFHN is represented in graphs throughout the report in rust.

Most of the Southeast region of Florida is served by Southeast Florida Behavioral Health Network (SEFBHN). The counties served include Indian River, Martin, Okeechobee, Palm Beach, and St. Lucie counties. The region served by SEFBHN is represented in graphs throughout the report in salmon.

The remaining county in the Southeast region of Florida, Broward, is the only one-county region, served by Broward Behavioral Health Coalition, Inc. (BBHC). Broward County is represented in graphs throughout the report in lavender.

The Southern region of Florida, comprised of Monroe and Dade counties, is served by Thriving Mind South Florida. The region served by Thriving Mind is represented in graphs throughout the report by the color peach.

Because behavioral health services are administered by a different entity in each of these regions, current patterns and trends in substance abuse are reported for regions served by Managing Entities when possible, i.e., when county-specific data are available to aggregate by region.

Age

Approaches to prevention and treatment as well as funding streams differ for youth and adults. Thus, much of the data presented in this report is presented separately for youth and adults when possible, based on the data source. Because some of the data presented in this report are collected in school-based surveys conducted at middle and high schools, youth are classified as 12-17 years of age, the typical age range for school-aged children enrolled at these institutions. Adults are classified as those aged 18 years and older.

Methodology

Data presented in the 2022 Annual Report were obtained from the following sources.

Florida county population data and estimates from 2000 to 2020 from the Florida Estimates of Population, Population Studies Program, sponsored by the Bureau of Economic and Business Research (BEBR), through the public facing dashboard FL Health Community Health Assessment Resource Tool Set (FLHealthCHARTS).

Data on substance use among adults and youth in the United States and Florida is from the National Survey On Drug Use and Health (NSDUH), sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). This source provides the prevalence of substance use based on survey responses.

The estimated prevalence rates using NSDUH data for the United States and Florida are two-year running averages. Throughout the report, two-year running average rates are plotted at the midpoint of the period. For example, the 2017-2018 average prevalence is plotted at 2017.5.

In 2015, changes were made to NSDUH questionnaires and the data collection process. For prevalence rates affected by these changes, there are gaps in the figures between 2014-2015 and 2015-2016; for some substances, data are available starting in 2015. Additional changes were made to NSDUH questionnaires and the data collection process in 2020. It is suggested to use caution when attempting to compare 2020 and prior years.

Morbidity (hospitalizations and emergency department visits) rates for the United States are age-adjusted data. Florida-specific morbidity rates were obtained through the public-facing dashboard FL Health CHARTS, maintained by the Florida Bureaus of Community Health Assessment and Vital Statistics. Morbidity rates for Florida overall are age-adjusted and obtained directly from FLHealth CHARTS. Morbidity rates for sub-Florida regions are unadjusted and were calculated using counts of hospitalizations and emergency department visits from FLHealth CHARTS and population estimates from the Florida Estimates of Population, Population Studies Program.

Mortality rates for Florida and the United States from 2006 to 2020 are age-adjusted and were obtained from the Centers for Disease Control and Prevention and the National Center for Health Statistics.

Population

The estimated total population in Florida by April 2020 was 21,596,068 (Figure 1).

The estimated total youth population in Florida during 2019 was 4,308,493, about 20.3% of the total Florida population. The estimated total adult population in Florida during 2019 was 16,960,060, about 79.7% of the total Florida population.

Of the seven regions, the Central Florida Behavioral Health Network, Inc., serves the largest population with over 6.1 million people, 28% of Florida's population. NWF Health serves the smallest population, 1.5 million people, 7% of the state's population, dispersed throughout a larger geographic area.

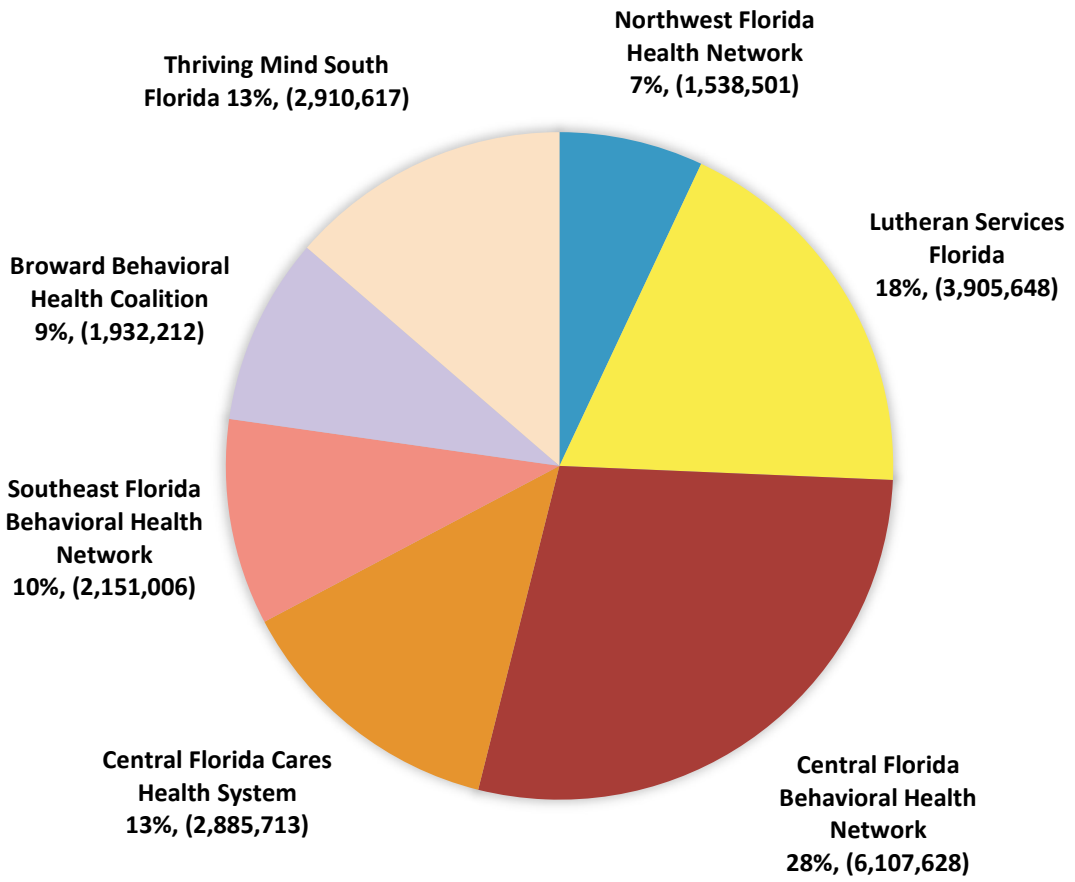

Figure 2. Estimated population by Managing Entity Region, Florida, 2020. Total Population = 21,596,068. Source: FL BEBR.

Substance Use

Substance use is common, though it can lead to negative health consequences. In this section, the prevalence of recent, past-year, and lifetime use is presented for drugs that are commonly abused and/or can result in substance use disorder. The patterns and trends in use for various substances are

shown for Florida, alongside the prevalence in the United States as a whole, for comparison. Patterns and trends of substance use are shown for youth, aged 12 – 17 years, and adults, aged 18 years and older. When sub-state data are available, patterns of and trends in substance use are presented by Managing Entity.

Opioids

Opioids are a class of drugs that includes pain relievers available legally by prescription, such as oxycodone (OxyContin®), hydrocodone (Vicodin®), codeine, and morphine. Like their illicit counterparts, prescription opioids can be misused, increasing the risk of adverse consequences such as overdose and death. Opioids that are produced and sold illicitly include heroin and synthetic fentanyl.

Pain Reliever Misuse among Adults

Based on data collected through the National Survey on Drug Use and Health (NSDUH), results of two-year averages indicate that past year pain reliever misuse among adults in the US and Florida has decreased to 3.6% for 2019-2020 (Figure 3). The 2019-2020 average percentage of pain reliever misuse prevalence rate is the lowest rate the US and Florida has seen since 2015-2016 with past year averages being 4.5% (US) and 4.1% (Florida).

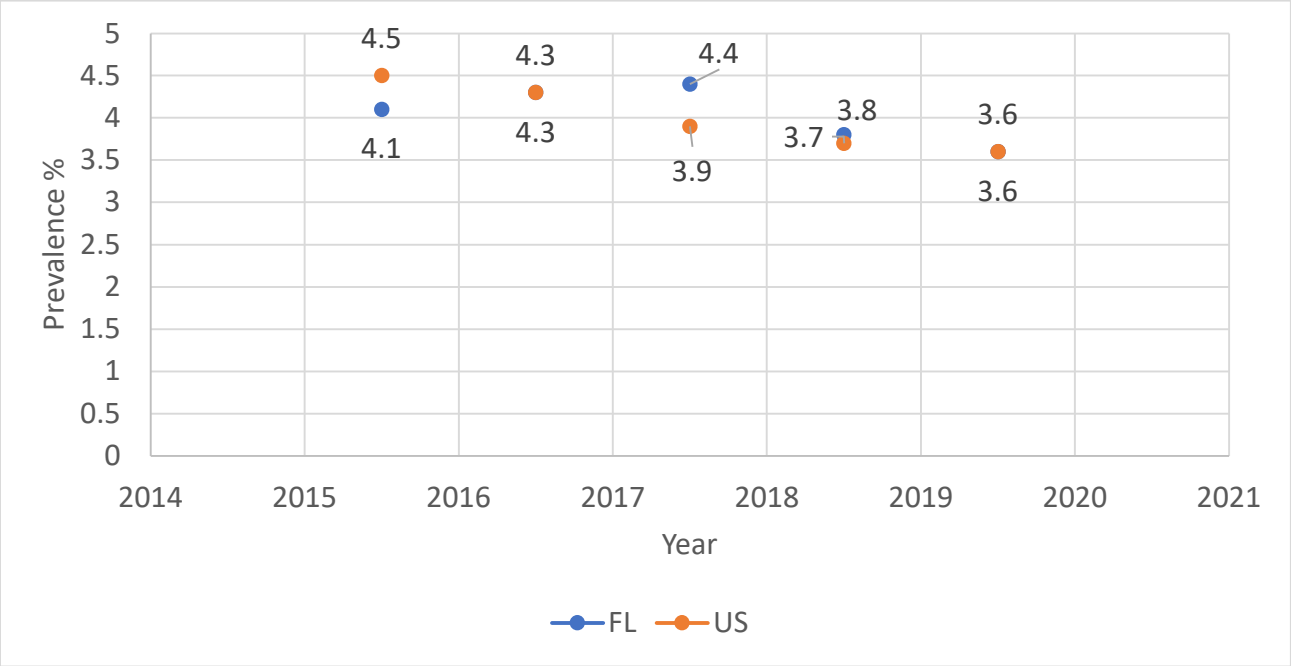

Figure 3. Two-Year Average Past-Year Pain Reliever Misuse among Adults, United States and Florida, 2015–2020. Source: NSDUH.

Pain Reliever Misuse among Youth

The misuse of opioid pain relievers among youth differs from that of adults (Figure 4). With a sharper decline for past year pain reliever misuse, the rate at which youth misuse pain relievers is below the prevalence of misuse among adults. Two-year averages for 2019-2020 indicate that Florida youth have slightly higher rates of past year misuse of pain relievers than US youth at 1.9% versus 1.6% respectively.

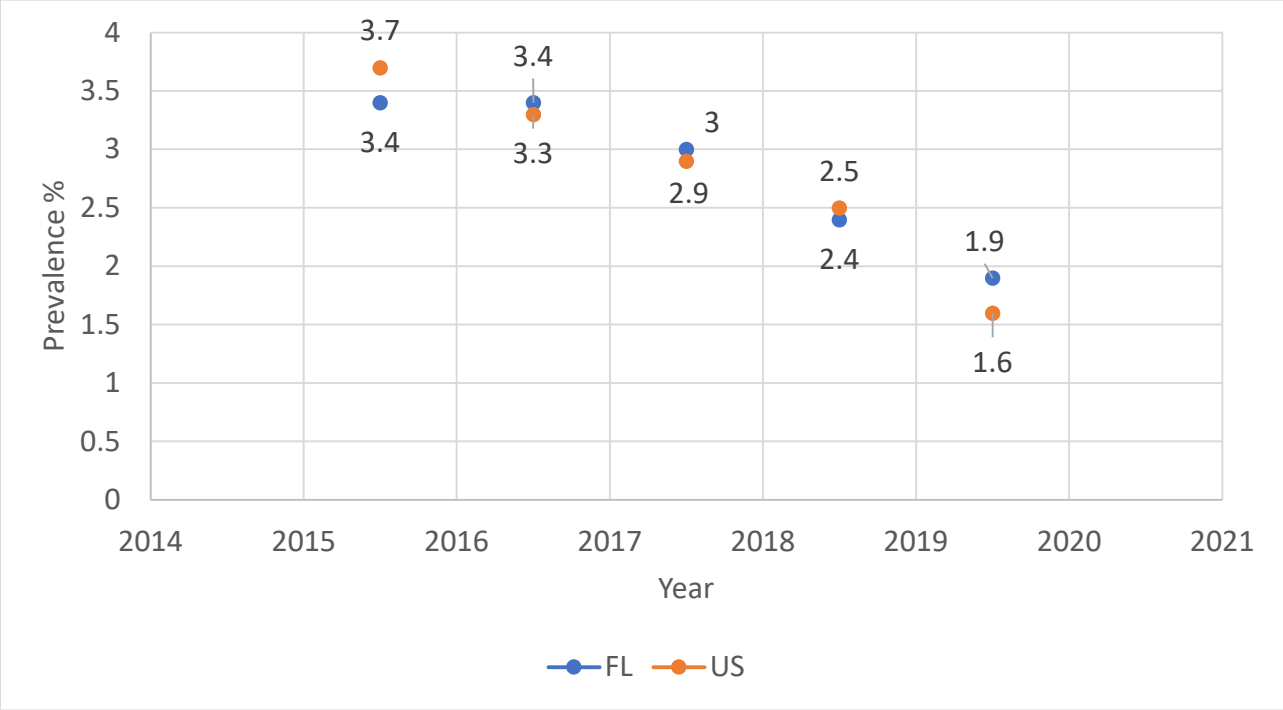

Figure 4. Two-Year Average Past-Year Pain Reliever Misuse among Youth, United States and Florida, 2015–2020. Source: NSDUH.

The Florida Youth Substance Abuse Survey (FYSAS) assesses risk and protective factors for substance abuse in addition to substance abuse prevalence. The most currently available FYSAS data include substance abuse prevalence rates of Florida middle and high school youth for 2021. Both lifetime and past 30-day pain reliever misuse has decreased among Florida youth since 2010. Past 30-day misuse is now under 1% while lifetime misuse has fallen under 3% in 2021, an overall 60% decrease in lifetime misuse of pain relievers among youth since 2010 (Figure 5).

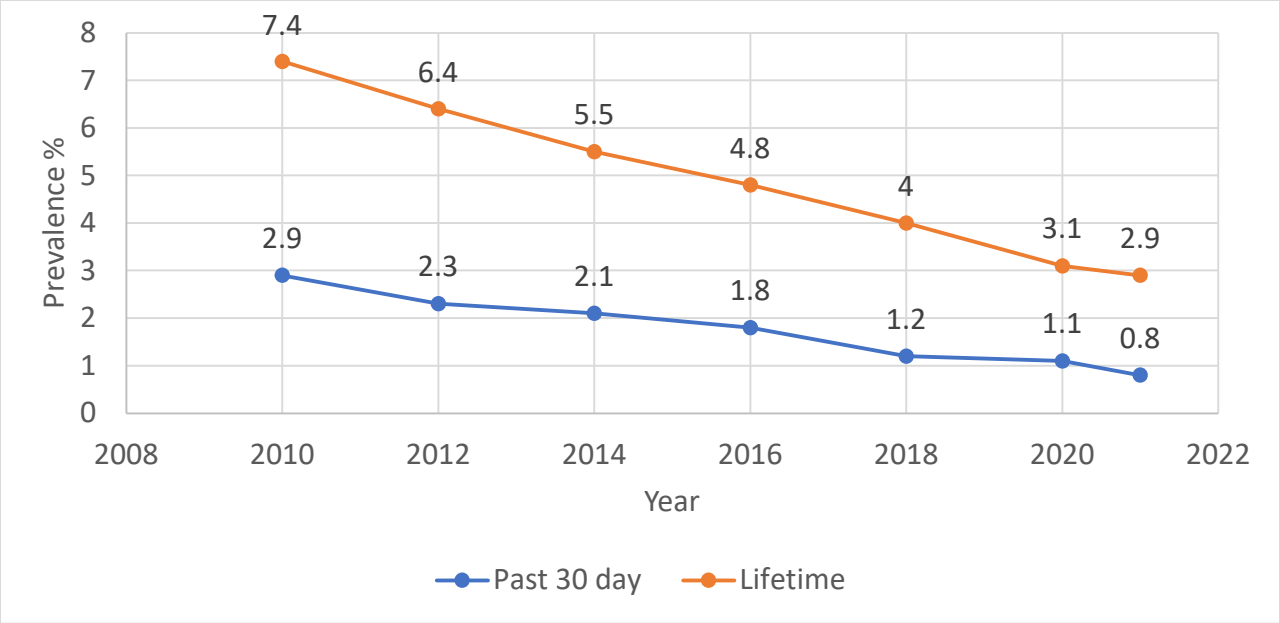

Figure 5. Lifetime and Past 30-day Pain Reliever Misuse among Youth in Florida, 2010–2021.
Source: FYSAS.

Heroin Use among Adults

The prevalence of past-year use of heroin among adults is a fraction of the prevalence of misuse of prescription opioid pain relievers, with less than half of a percentage of Floridians endorsing past-year heroin use (Figure 6). The heroin use prevalence rate among Florida's adults increased in 2016-2017 and remained stable at 0.3% for 2017-2018. However, the rate declined slightly for years 2018-2019 and 2019-2020. The prevalence of heroin use among adults in Florida has been consistently lower than that of the nation. For two-year averages, 2019-2020, the US experienced an increase in heroin misuse from 0.31% to 0.35%.

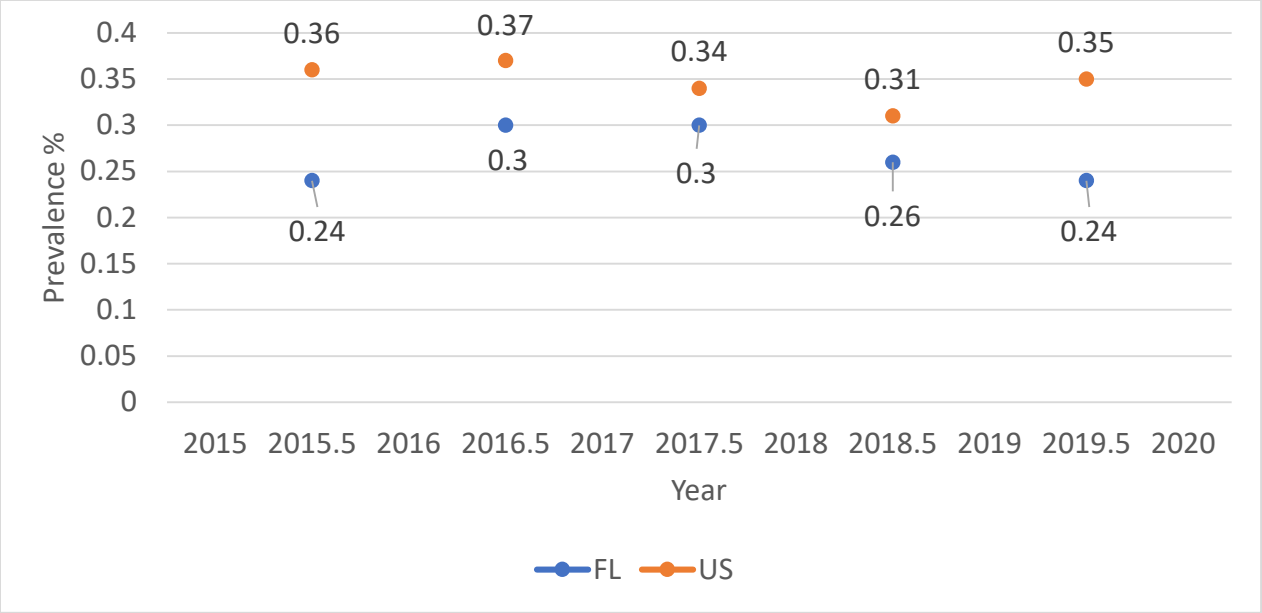

Figure 6. Two-Year Average Past-year Heroin Use among Adults, United States and Florida, 2015 – 2020. Source: NSDUH.

Heroin Use among Youth

According to NSDUH, prevalence rates for heroin use among youth has declined since 2015 with rates in 2018-2019 at 0.02% for both the US and Florida (Figure 7). Note: 2019-2020 prevalence rate estimates for youth 12-17 are not available for past year heroin use because no respondents aged 12 -17 used heroin in the past year.

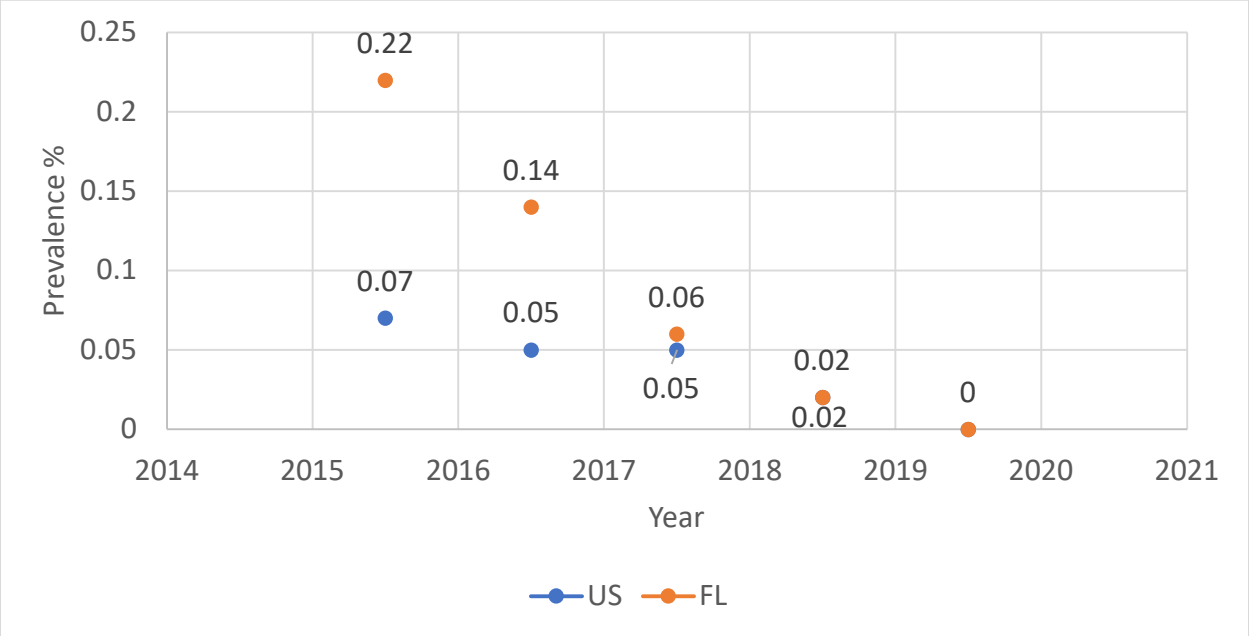

Figure 7. Two-Year Average Past-year Heroin Use among Youth, United States and Florida, 2015 – 2020. Source: NSDUH.

According to the FYSAS, lifetime and past 30-day heroin use among youth in Florida has decreased since 2010 (Figure 8). Although lifetime and past 30-day heroin use increased in 2020, the rates either decreased or remained stable in 2021.

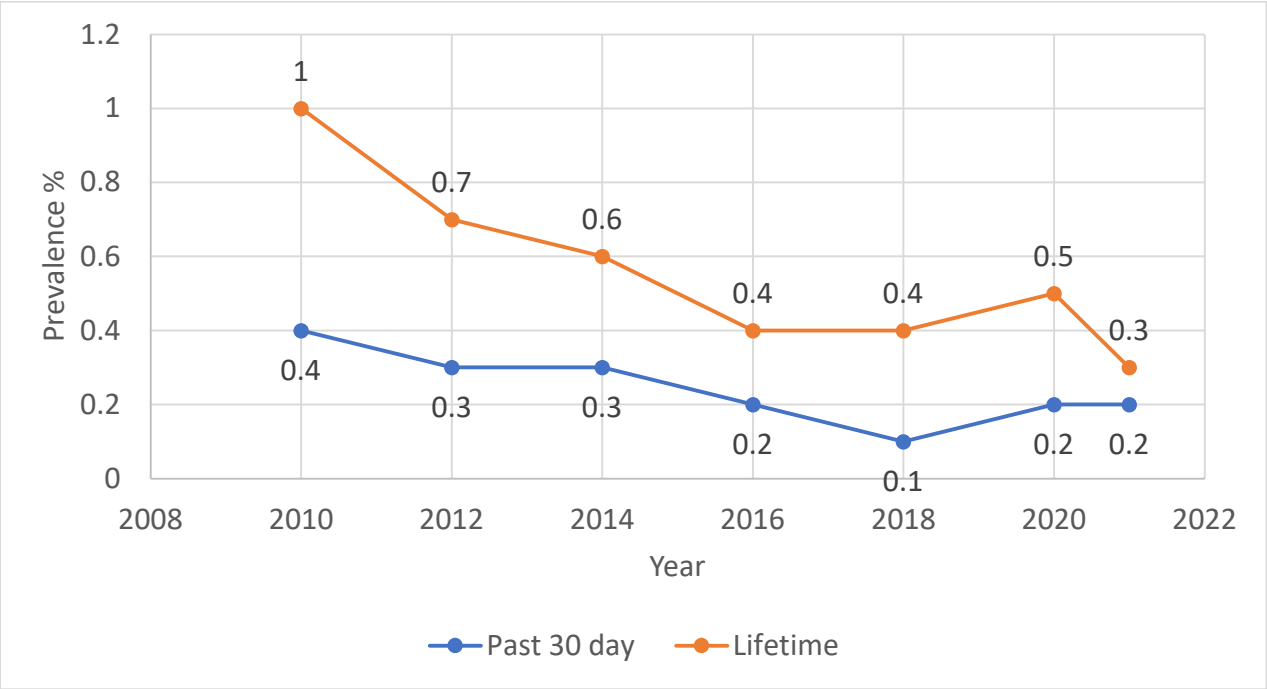

Figure 8. Lifetime and Past 30-day Heroin Use among Youth in Florida, 2010–2021. Source: FYSAS.

Psychostimulant Use

Like opioids, stimulants are medications available by prescription for the treatment of certain conditions such as narcolepsy. Despite their medicinal use, however, stimulants can also be misused. In addition to prescription stimulants, several illicit stimulants are considered drugs of abuse. Cocaine is a highly addictive stimulant that is associated with adverse health effects such as overdose and death (National Institute on Drug Abuse, 2018).

Methamphetamine is another stimulant chemically similar to amphetamines. An overdose of methamphetamine can result in stroke, heart attack, organ problems such as kidney failure, and death.

As both cocaine and methamphetamine are illicit substances, their use has not only the potential for negative health consequences but also criminal justice consequences.

Cocaine Use among Adults

Less common than misuse of prescription opioid pain relievers but more common than use of heroin among adults, two-year averages indicate that 1.7% of adults in Florida endorsed the use of cocaine in the past year, slightly lower than that of the nation at 2.0% (Figure 9).

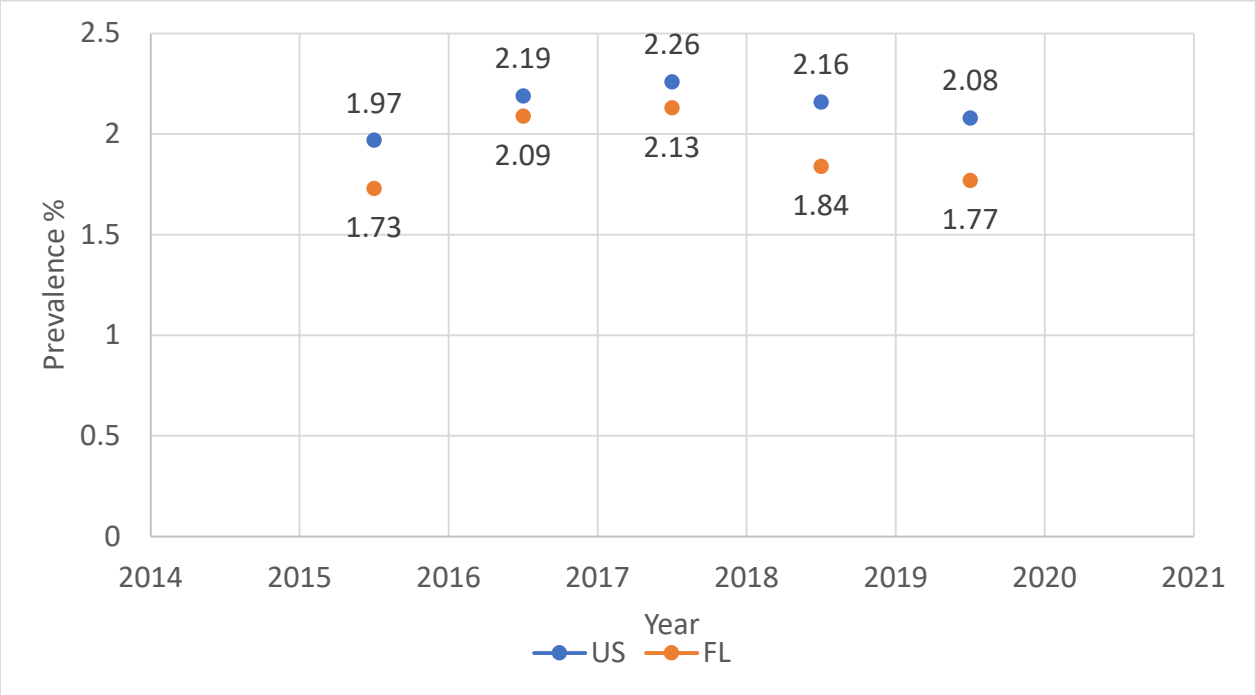

Figure 9. Two-Year Average Past-year Cocaine Use among Adults, United States and Florida, 2015 – 2020. Source: NSDUH.

Cocaine Use Among Youth

The prevalence of past-year cocaine use among Florida's youth decreased at a faster rate than among youth across the nation, especially after rates for cocaine use in Florida and the US were the same in 2017-2018 at 0.48% (Figure 10). Lifetime and past 30-day use has decreased among Florida youth since 2010 and continues to decrease based on 2021 FYSAS data which indicates 1% of youth endorsing cocaine use in the past-year and 0.3% of youth endorsing cocaine in the past 30 days (Figure 11).

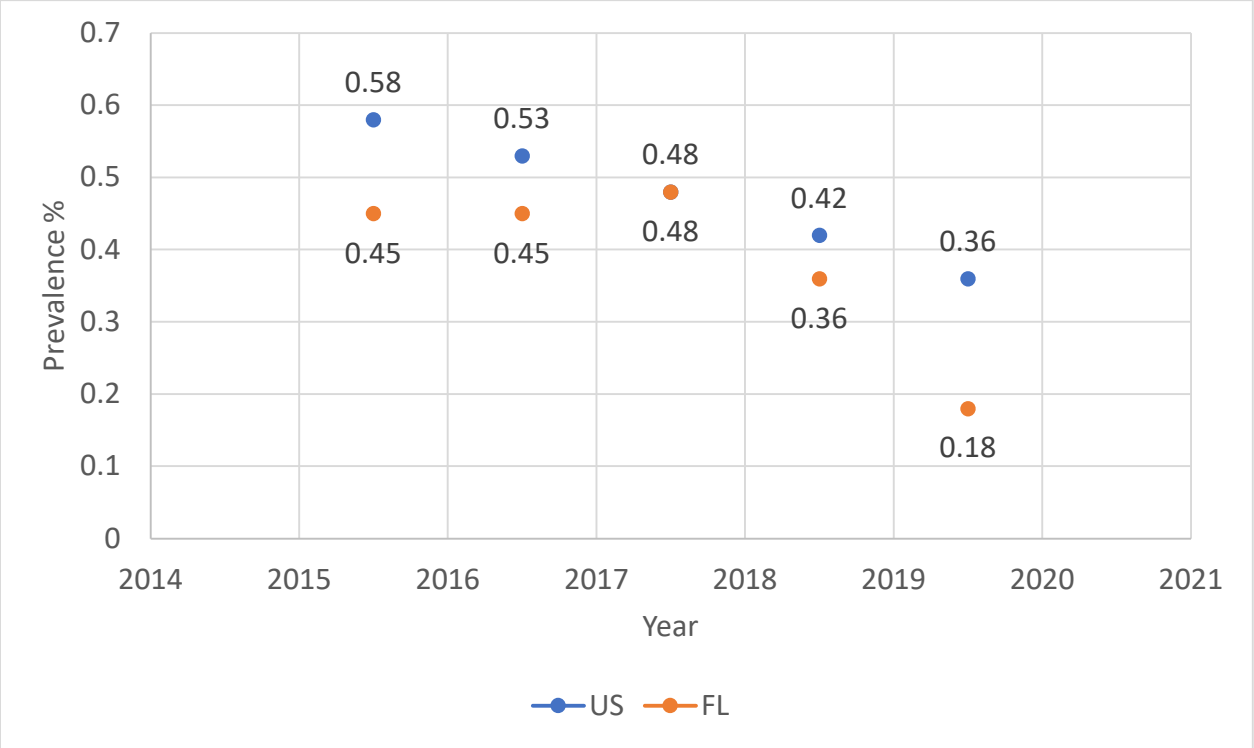

Figure 10. Two-Year Average Past-year Cocaine Use among Youth, United States and Florida, 2015 – 2020. Source: NSDUH.

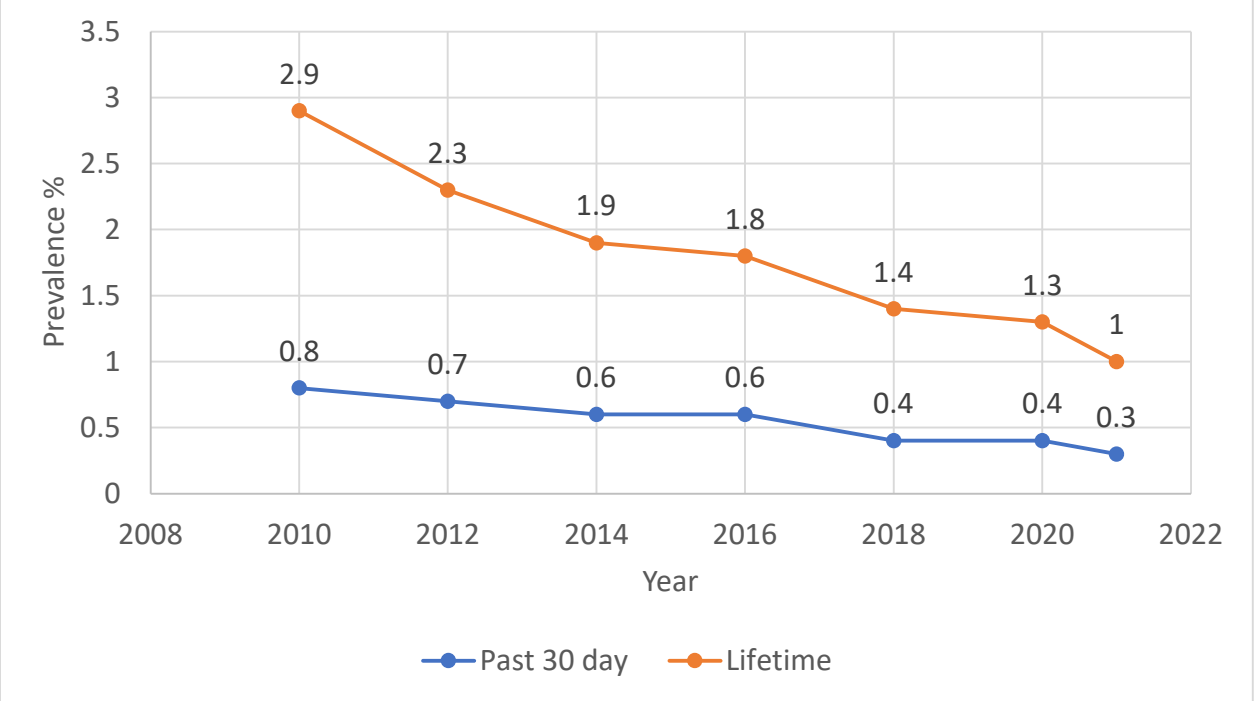

Figure 11. Lifetime and Past-year Cocaine Use among Youth in Florida, 2010–2021. Source: FYSAS.

Methamphetamine Use among Adults

Use of methamphetamine among adults across the nation has increased slightly since the 2017-2018 two-year averages of 0.60% to the most current two-year average for 2019-2020 of 0.89% (Figure 12). Methamphetamine use among adults in Florida was declining until 2019-2020 with 0.63% Floridians endorsing methamphetamine use, the highest rate in the past 5 years.

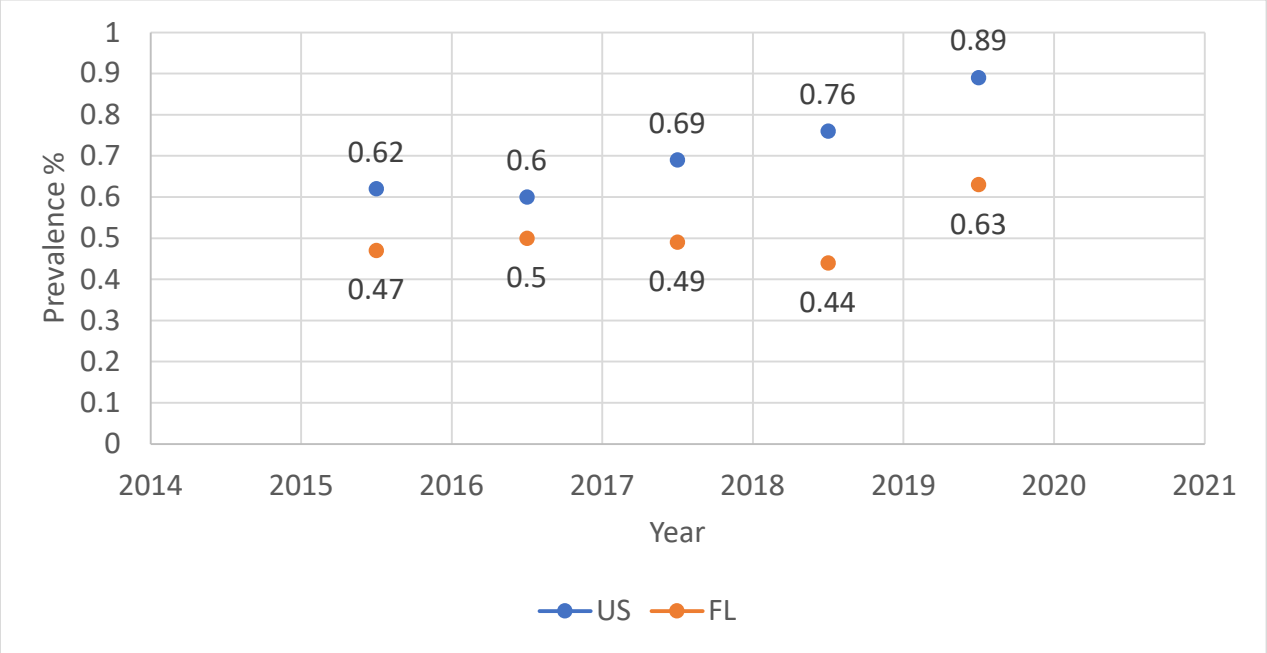

Figure 12. Two-Year Average Past-year Methamphetamine Use among Adults, United States and Florida, 2015–2020. Source: NSDUH.

Methamphetamine Use among Youth

Among youth, a different trend has been observed for use of methamphetamine. An increase in methamphetamine use occurred among youth in Florida and across the nation from 2015-2020. However, after 2017-2018, prevalence has decreased for US and Florida youth (Figure 13). According to the FYSAS, there was a decline in the prevalence of lifetime methamphetamine use among youth in Florida from 2010-2018. A slight increase occurred in 2020 from the previous survey year. From 2010 to 2014, past month use among youth stayed the same at 0.5% prevalence. A decrease in 2016 brought the prevalence rate to 0.4% and has continued to stay at the same rate from 2016 to 2020. Lifetime and past 30-day use indicate a decrease in use for methamphetamine in 2021 (Figure 14).

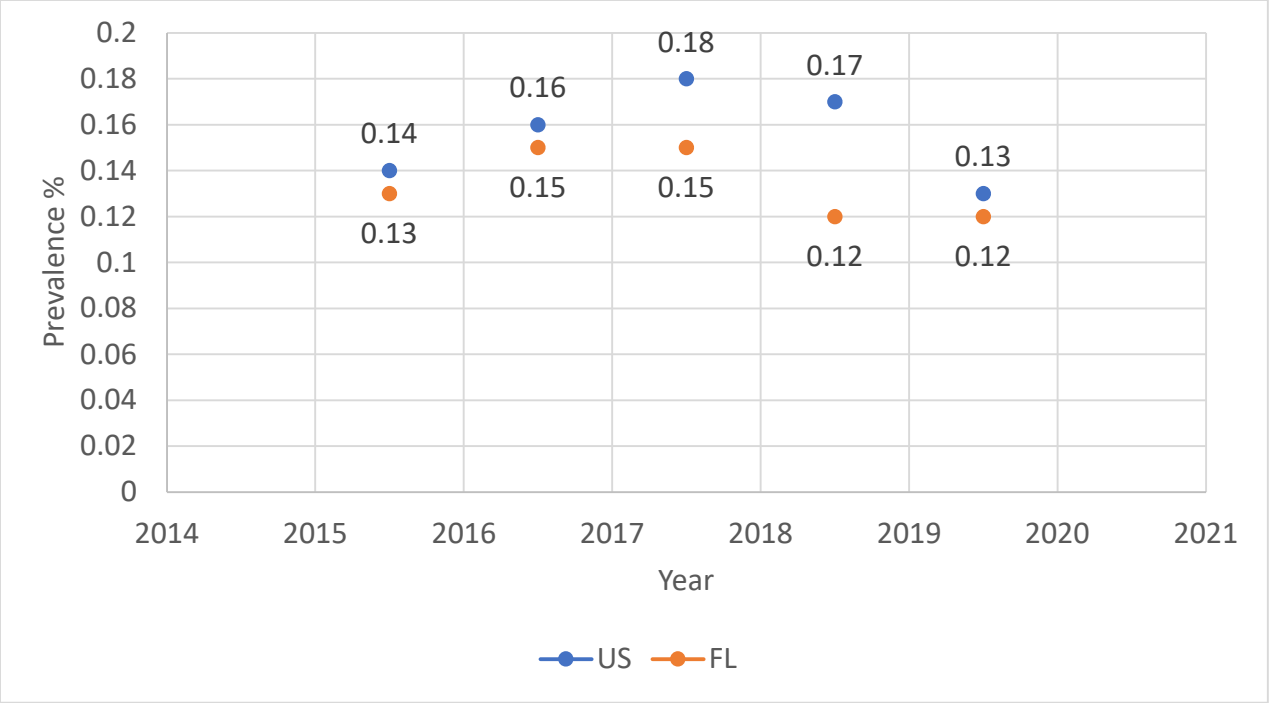

Figure 13. Two-Year Average Past-year Methamphetamine Use among Youth, United States and Florida, 2015–2020. Source: NSDUH.

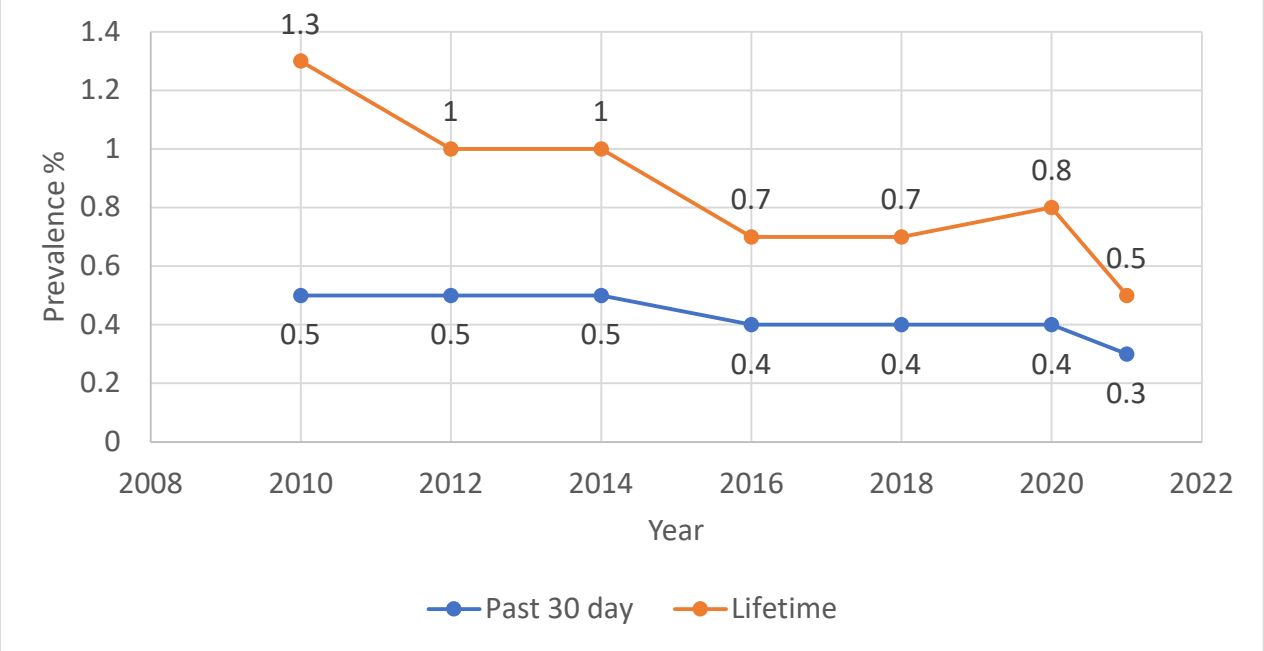

Figure 14. Lifetime and Past-year Methamphetamine Use among Youth in Florida, 2010–2021. Source: FYSAS.

Marijuana Use

While cannabis remains a Schedule 1 drug under federal law, a majority of states have legalized recreational and/or medical use and/or decriminalized use of marijuana. However, use of marijuana is not without consequence. Not only can the use of marijuana lead to marijuana use disorder, but there are also short- and long-term effects of marijuana use on the developing brain (NIDA, 2019).

Marijuana Use among Adults

Marijuana is the only substance to continually increase in past-year and past-month use among adults in Florida and across the nation. Nationally, past-year use of marijuana is nearing 20% while 16.7% of Florida adults endorsed marijuana use in the past year (Figure 15). Second to only alcohol among substances covered in this report, 12% of adults in Florida and across the nation endorsed using marijuana in the past month (Figure 16).

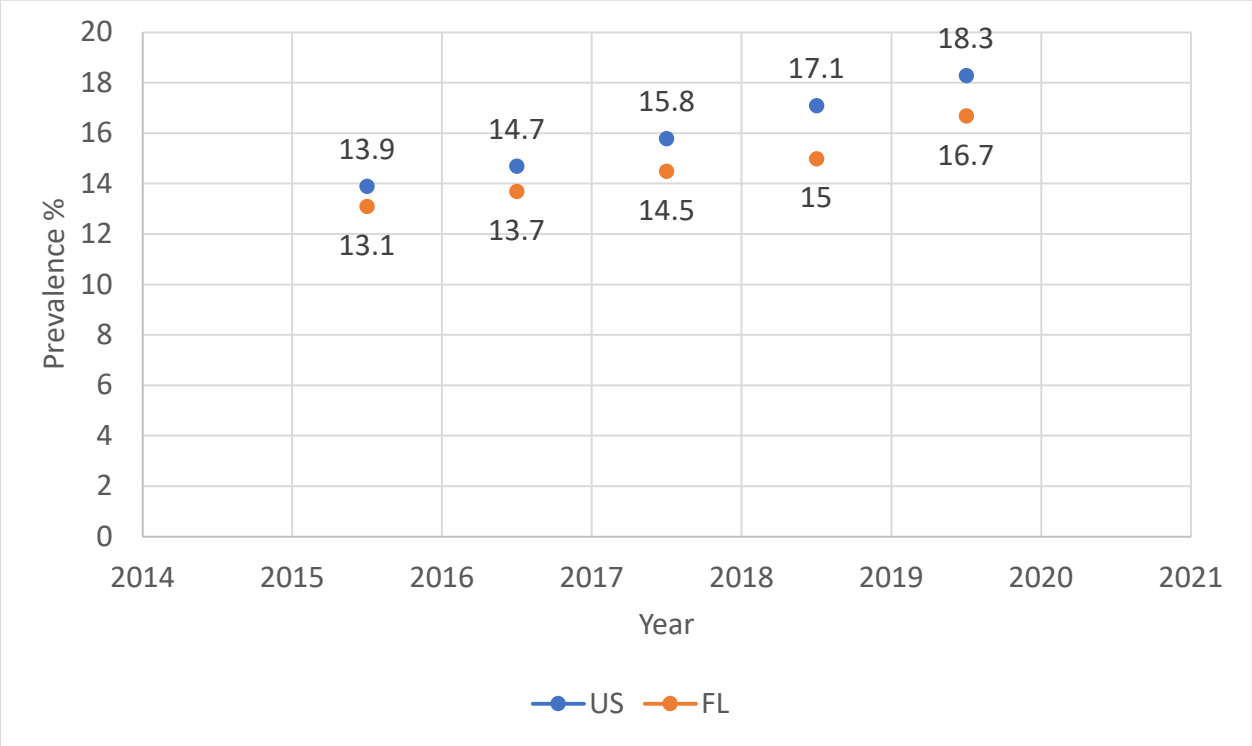

Figure 15. Two-Year Average Marijuana Use among Adults, Past Year, United States and Florida, 2015–2020. Source: NSDUH.

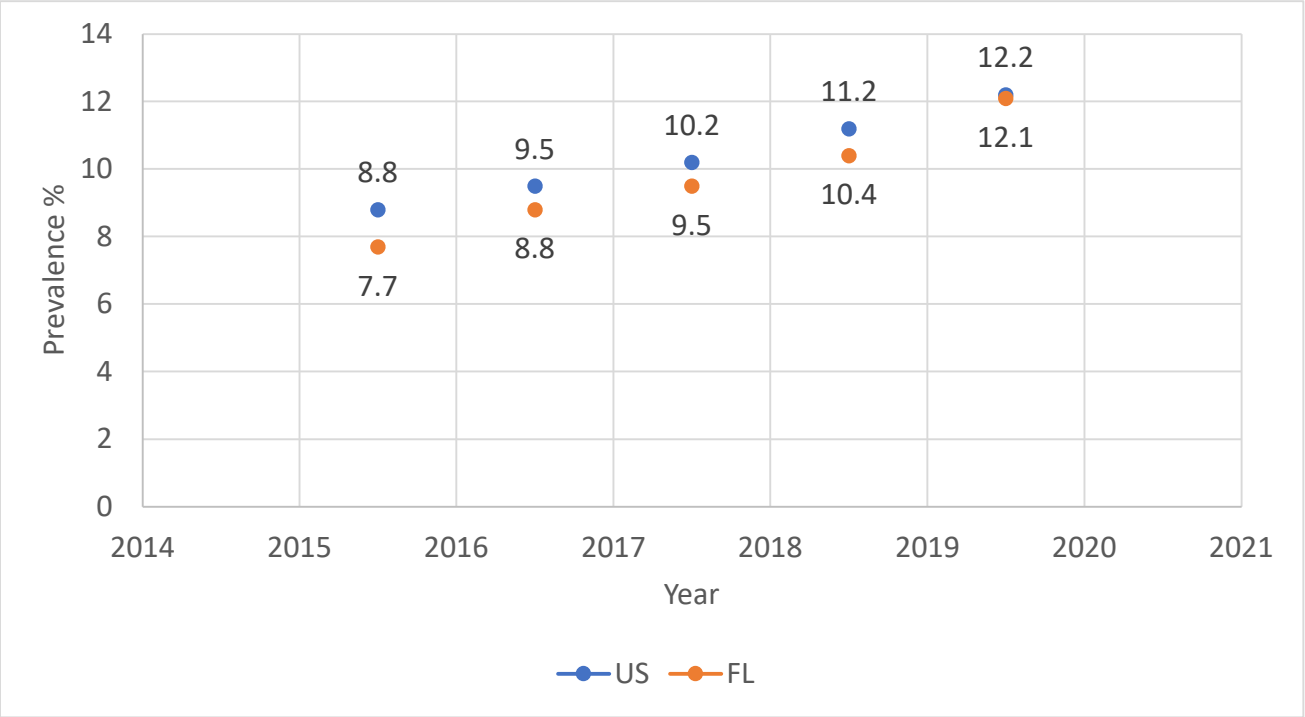

Figure 16. Two-Year Average Marijuana Use among Adults, Past Month, United States and Florida, 2015–2020. Source: NSDUH.

Marijuana Use among Youth

Past-month and past-year marijuana use among youth has been slowly decreasing over time (Figure 17 and Figure 18). Past-year marijuana use among Florida youth has decreased by 1% from the 2015-2016 two-year average to the 2019-2020 two-year average (Figure 17). Similarly, past-month use among Florida youth has decreased by nearly 1% during the same time frame (Figure 18). Based on data from the *Florida Youth Substance Abuse Survey,* (Figure 19) the prevalence of both lifetime and past 30-day use among Florida youth has continually decreased from 2010 to 2021.

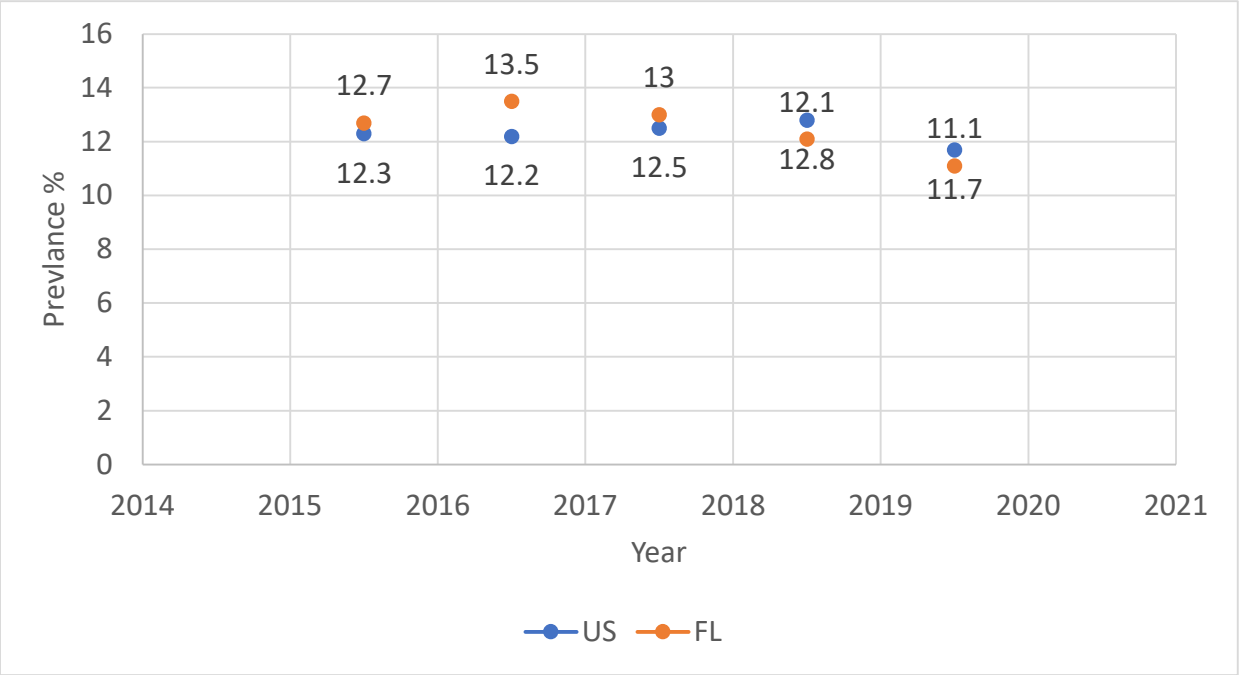

Figure 17. Two-Year Average Marijuana Use among Youth, Past Year, United States and Florida, 2015–2020. Source: NSDUH.

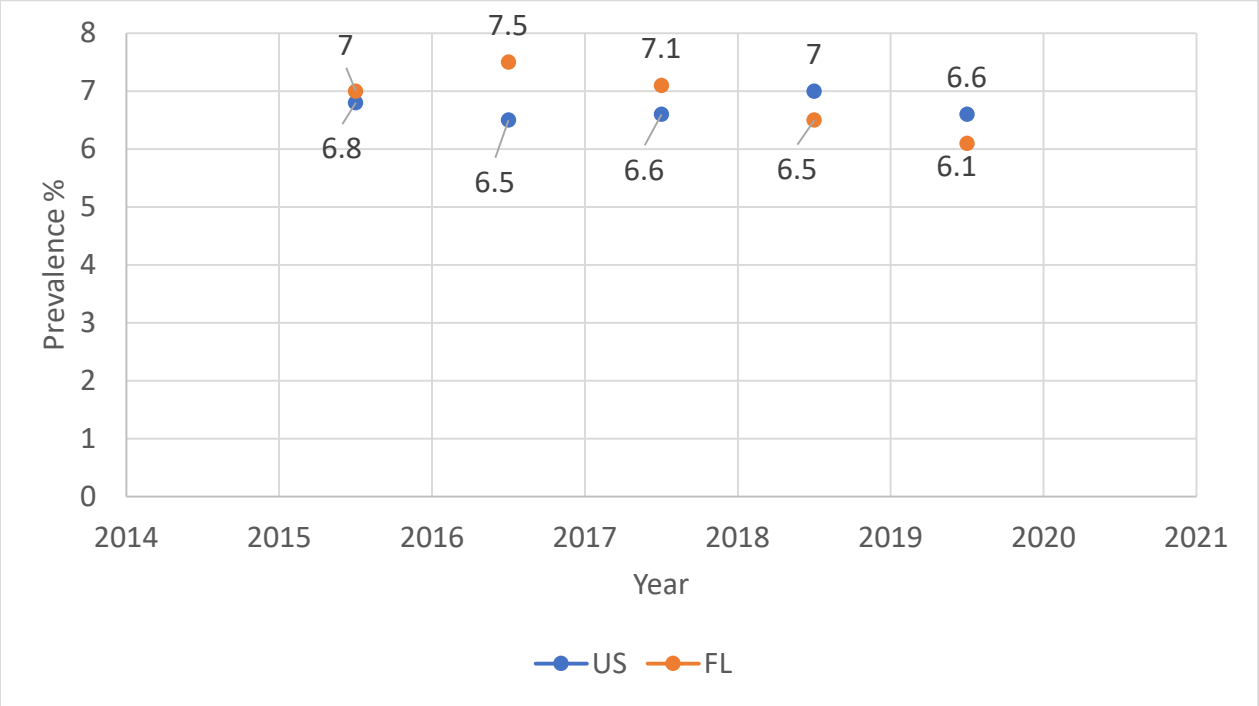

Figure 18. Two-Year Average Marijuana Use among Youth, Past Month, United States and Florida, 2015–2020. Source: NSDUH.

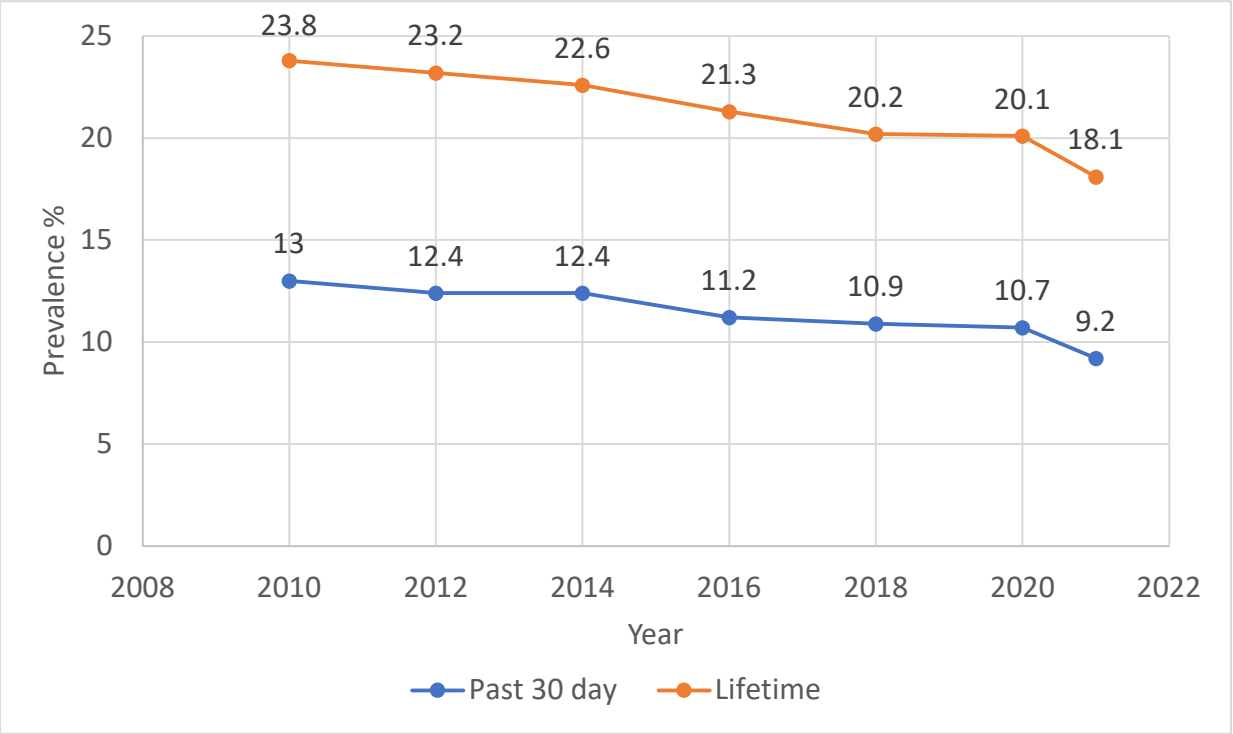

Figure 19. Marijuana Use among Youth, Lifetime and Past Month, Florida, 2010–2021. Source: FYSAS.

Vaping

In 2016, the Florida Youth Substance Abuse Survey (FYSAS) survey questions asked if youth had ever used e-cigarettes and inquired about their current use of e-cigarettes. However, new questions for e-cigarettes were added in 2019. The survey now asks respondents for lifetime and past month use for electronic cigarettes use for nicotine and marijuana separately.

Vaping Nicotine among Youth

Florida youth responded to the new survey questions with 12.5% currently using an electronic cigarette for nicotine in 2019 and 11.2% of high school youth in Florida currently vaping nicotine in 2021 (Figure 20). Lifetime use dropped one percentage point from 23.5% to 22.5% for ever using an electronic cigarette to vape nicotine during the same period.

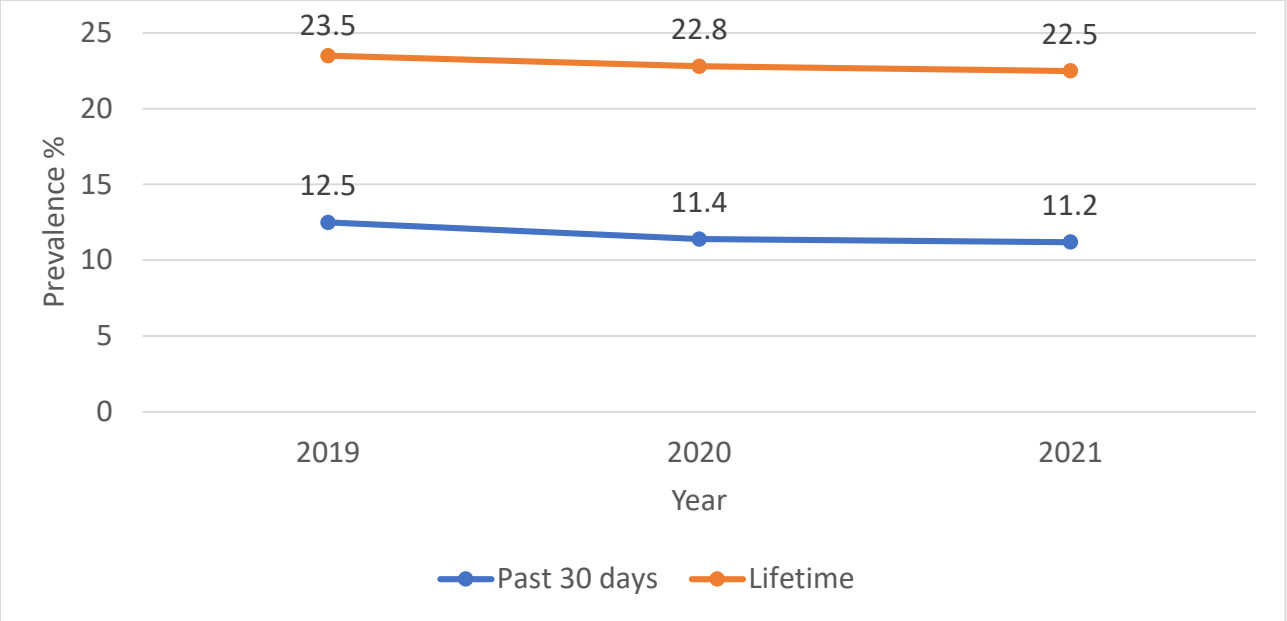

Figure 20. Vaping Nicotine among Youth, Lifetime and Past Month, Florida, 2021. Source: FYSAS.

Vaping Marijuana among Youth

Rates are lower for vaping marijuana in general compared to vaping nicotine with 6.7% vaping marijuana in the past-30 days and lifetime use of vaping marijuana at 14.9% (Figure 21). Rates are slowly decreasing from the point where these questions were added to the survey.

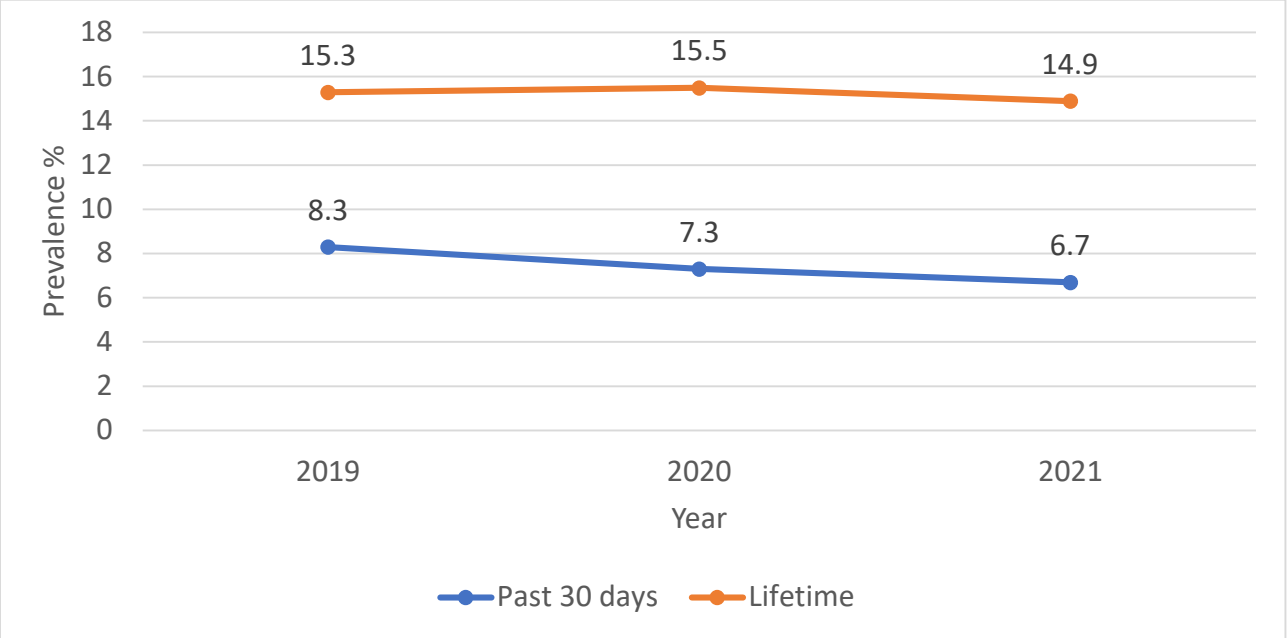

Figure 21. Vaping Marijuana among Youth, Lifetime and Past Month, Florida, 2021. Source: FYSAS.

Alcohol Use

Alcohol use is common in the United States. However, consuming too much alcohol can result in a range of negative health consequences. Risk of negative health impacts such as engagement in risky and/or violent behaviors can result from misuse of alcohol. Other health consequences with misuse of alcohol may result in alcohol use disorder with the possibility of death.

Alcohol Use among Adults

The prevalence of past-month alcohol use among adults in Florida declined sharply from 57.3% from the 2015-2016 two-year average to 54.2% in 2017-2018. However, an increase in past-month alcohol use has occurred since 2018-2019 with the most current past-two average resulting in 55.7% of Florida adults endorsing past-month alcohol use (Figure 22). A similar trend has been observed for binge drinking among adults. The lowest alcohol use rates for Florida adults occurred in 2018-2019 two-year average while a slight uptick in prevalence occurred in 2019-2020 (Figure 23).

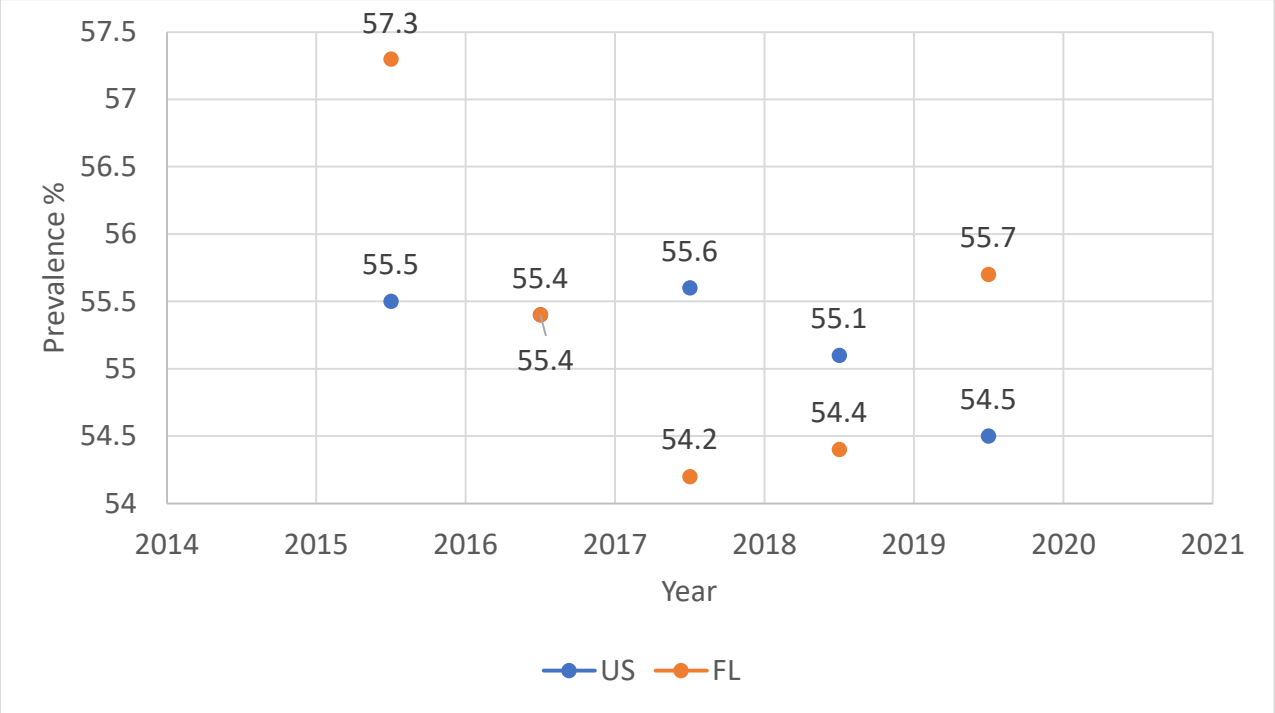

Figure 22. Two-Year Average Past Month Alcohol Use among Adults, United States and Florida, 2015–2020. Source: NSDUH.

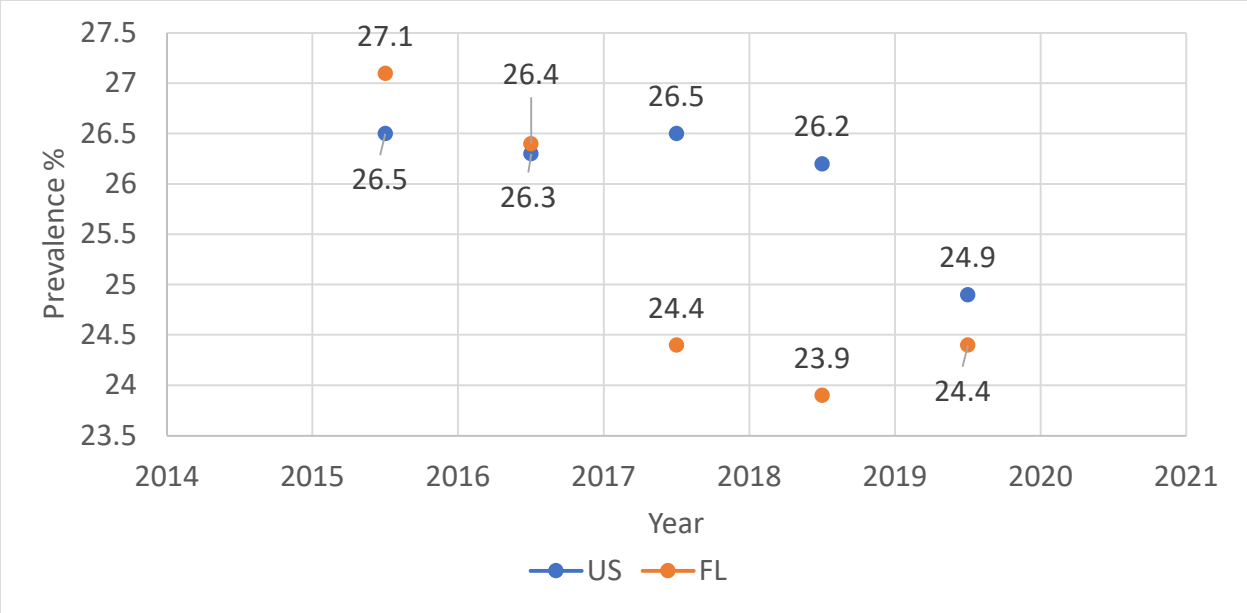

Figure 23. Two-Year Average Past Month Binge Alcohol Use among Adults, United States and Florida, 2015–2020. Source: NSDUH.

Alcohol Use Among Youth

The highest rates of past-month alcohol use among youth in Florida and the U.S. occurred in 2017-2018. Rates then decreased in 2018-2019 but there was a slight upward trend for the 2019-2020 two-year average (Figure 24). Similar trends were observed for Florida youth who binge drank alcohol in the past-30 days with the highest rates occurring in 2017-2018 followed by a continuous decrease in prevalence rates in subsequent years (Figure 26). Since 2010, lifetime and past-30 day use of alcohol continually decreased among Florida youth (Figure 25). Similar patterns occurred for binge drinking with declining prevalence rates among Florida youth since 2010. However, rates between 2018 and 2021 have remained steady around 6.7% (Figure 27).

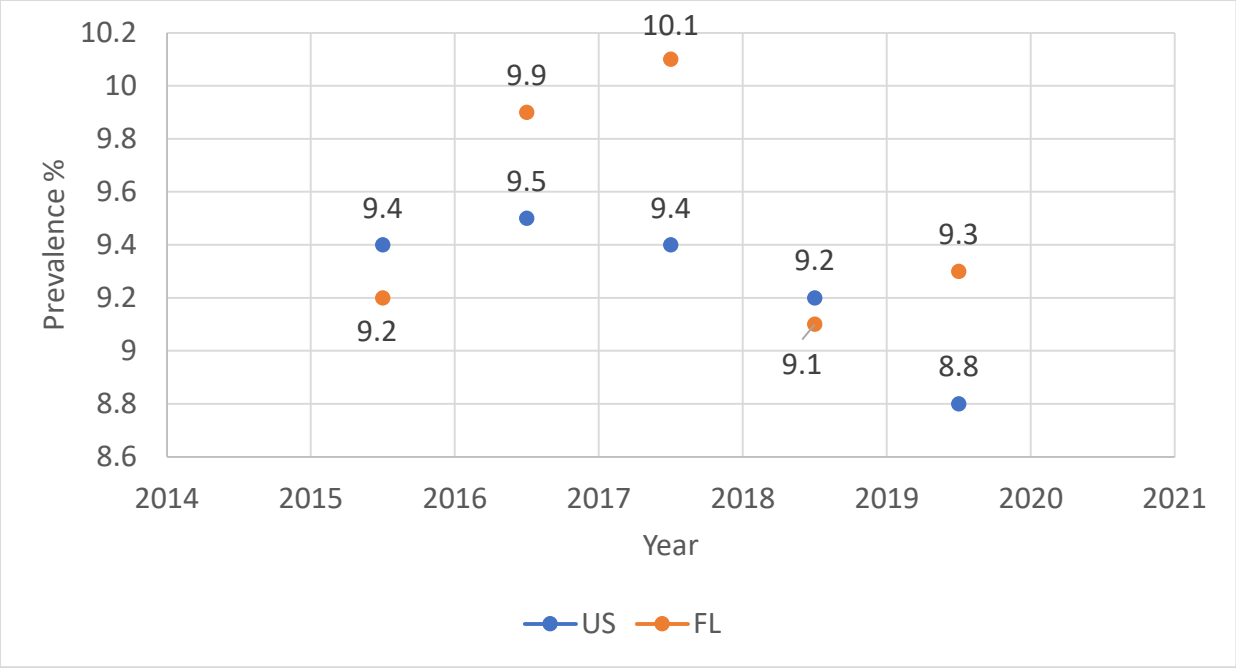

Figure 24. Alcohol Use among Youth, Past Month, United States and Florida, 2015–2020. Source: NSDUH.

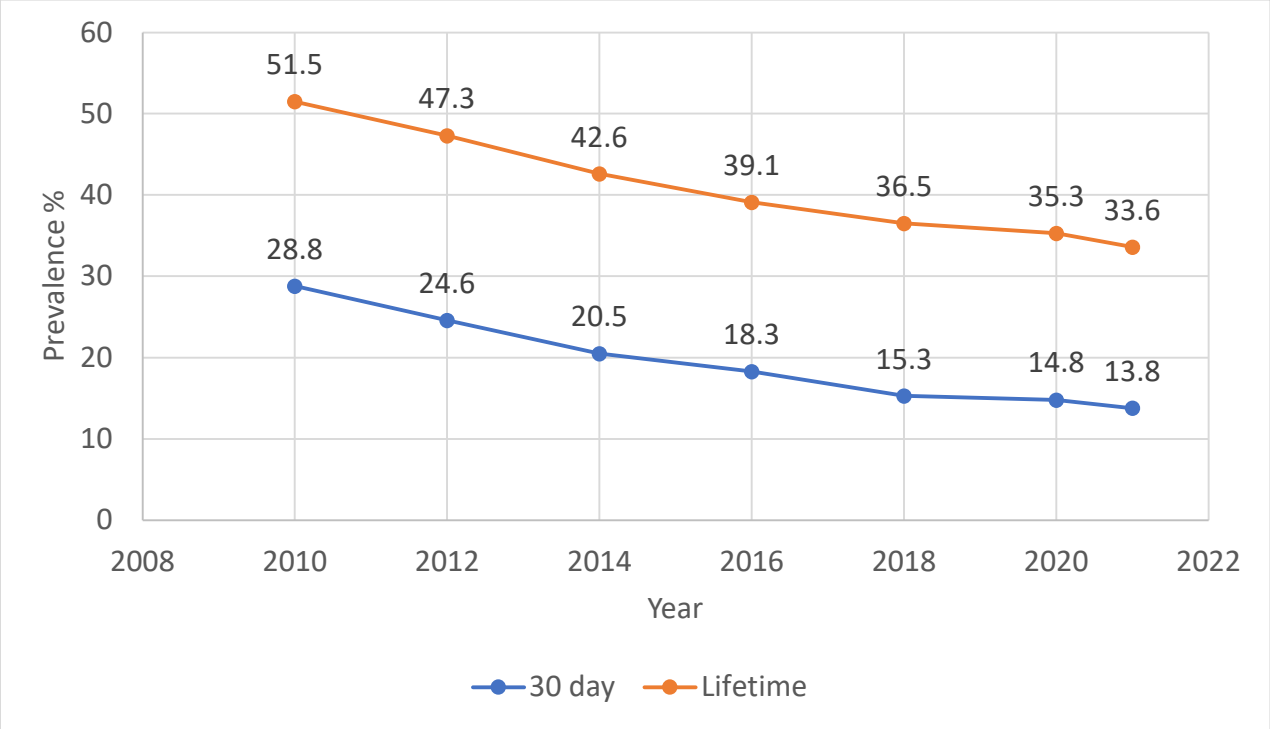

Figure 25. Alcohol Use among Youth, Lifetime and Past Month, Florida, 2010–2021. Source: FYSAS.

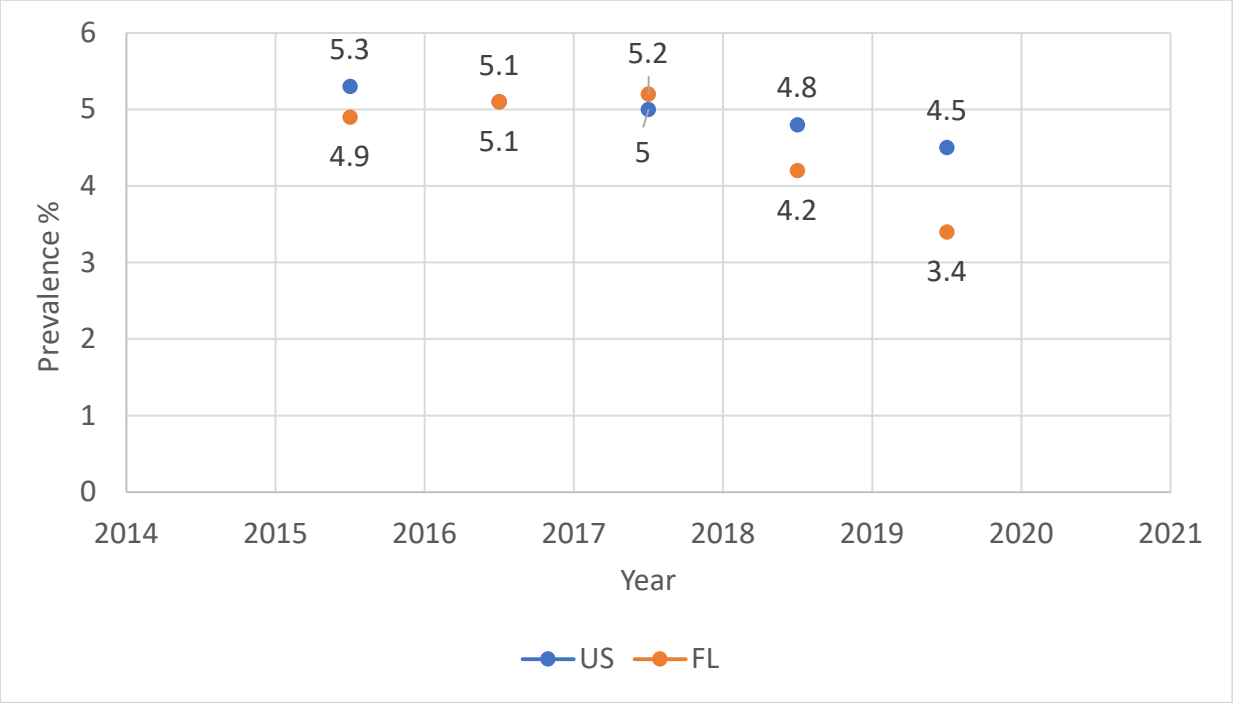

Figure 26. Binge Alcohol Use among Youth, US and Florida, 2015–2020. Source: NSDUH.

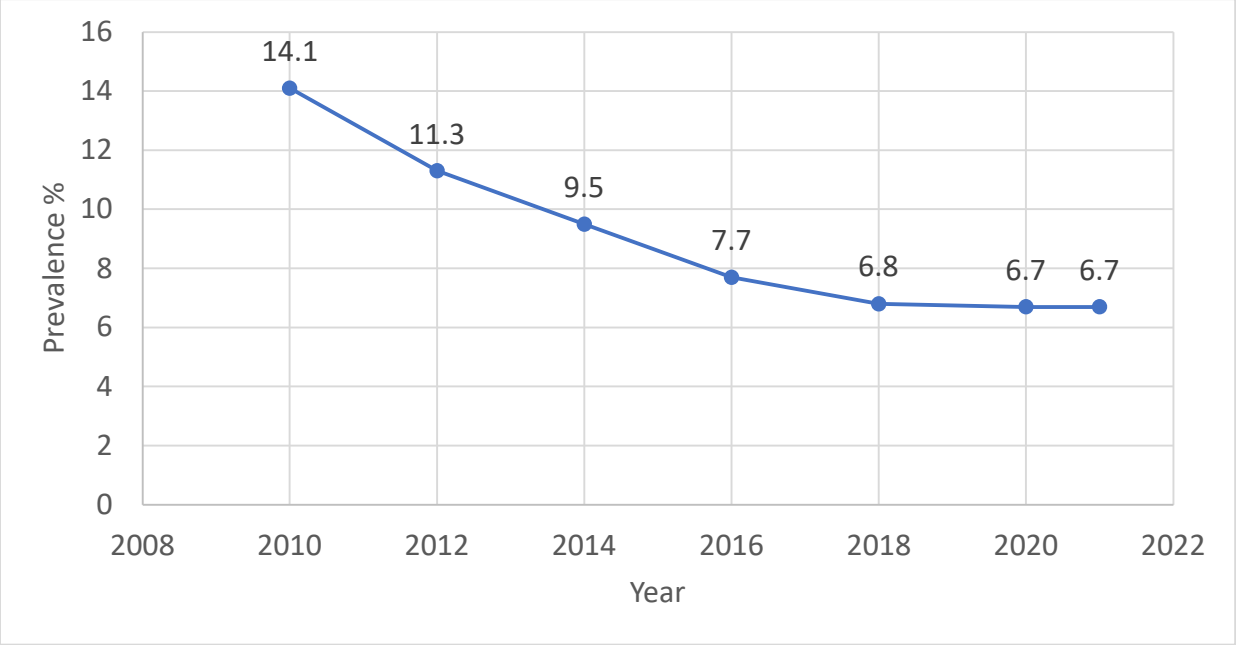

Figure 27. Binge Alcohol Use among Youth, Florida, 2010–2021. Source: FYSAS.

Inhalant Use

Inhalants refer to various household products such as solvents and aerosol sprays that are only used through inhalation. Used principally by children and youth, inhalants are the only substance used more often by children than adults. Thus, only inhalant use data among youth are reported here.

Inhalant Use among Youth

Lifetime and past-month use of inhalants among Florida youth has decreased from 2010-2016 (Figure 28). However, an upward trend has been observed for inhalant use since 2016 with a slight decrease in only past-month use according to 2021 FYSAS results.

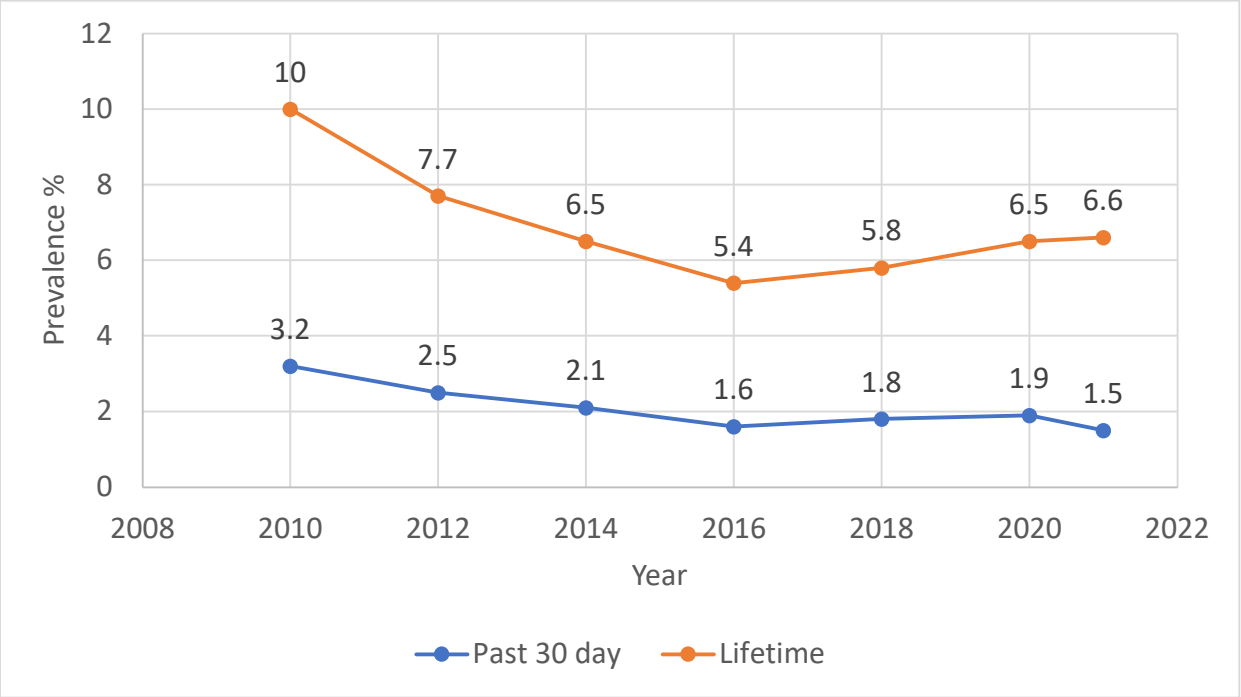

Figure 28. Lifetime and Past 30-day Use of Inhalants among Youth in the US, 2010–2021. Source: FYSAS.

Club Drug Use

Club drugs earned their name for being a group of substances commonly used by youth and young adults at parties and in entertainment venues, such as nightclubs and concert venues. Club drugs are a mix of drugs from various classes, including gamma-hydroxybutyrate (GHB), ketamine, LSD (also known as acid), MDMA (also known as ecstasy), methamphetamine, and Rohypnol.

Club Drug Use among Youth

Club drug use among Florida youth has been a decreasing trend since 2010 for lifetime and past month use (Figure 29). However, a sudden increase in prevalence occurred for both past-month and lifetime use in 2019 and 2020 respectively. The 2021 FYSAS survey results show that club drug use among youth decreased in Florida.

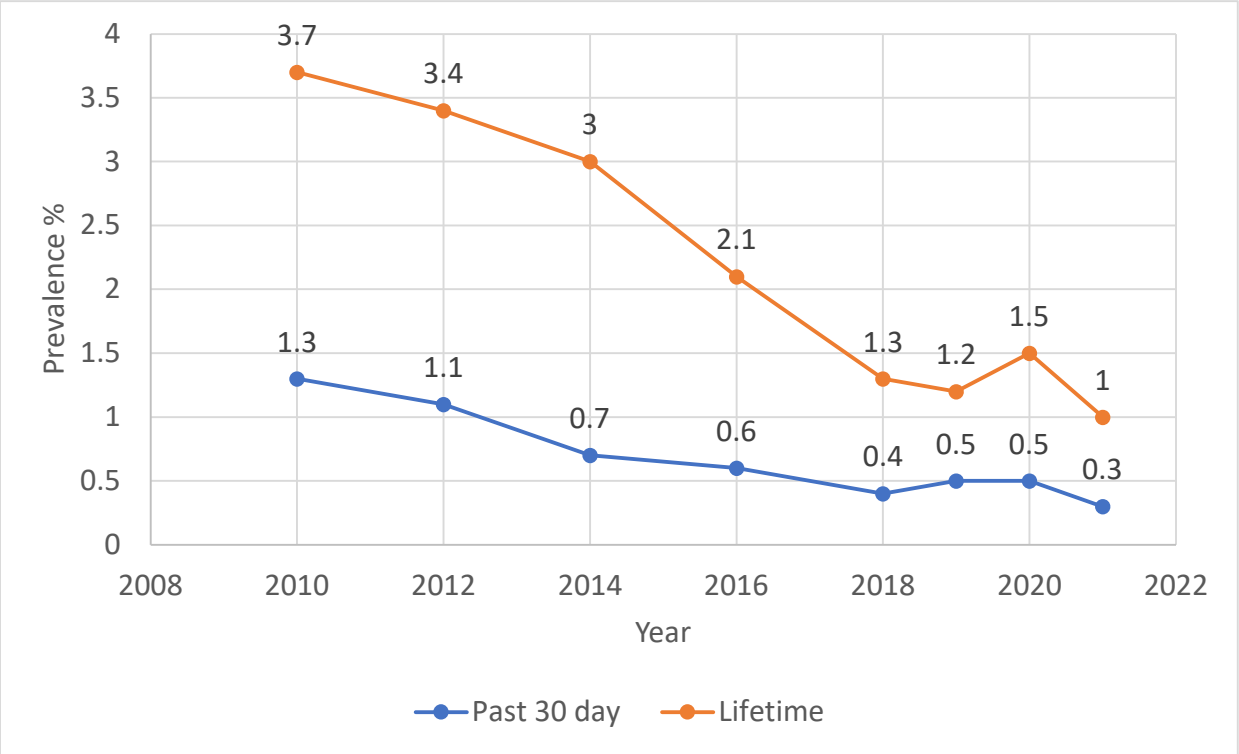

Figure 29. Lifetime and Past 30-day Club Drug Use among Youth, Florida 2010–2021. Source: FYSAS.

Select Consequences of Substance Use

While prescribed medications may result in positive outcomes, there are negative consequences that can result from substance use. Some of those consequences include drug-related arrests and citations, a portion of which co-occur with poor health outcomes. For some, only a portion of those who use substances will experience these negative consequences, which can both directly and indirectly contribute to poor health outcomes, potentially resulting in long-term health disparities.

Drug Arrests

A total count of annual Florida drug arrests shows an increase in 2017 and 2018, a decrease in total drug arrests in 2019 and a continued decrease in 2020 (Figure 30). Note: The total number of drug arrests should be interpreted with caution due to the COVID-19 Pandemic which may explain much lower counts in 2020. The total number of adult drug arrests in Florida follows a similar trend during this period (Figure 31). The total number of juvenile drug arrests have been decreasing since 2015 with the biggest decrease in the number of juvenile drug arrests occurring in 2018 and continuing to decrease (Figure 32).

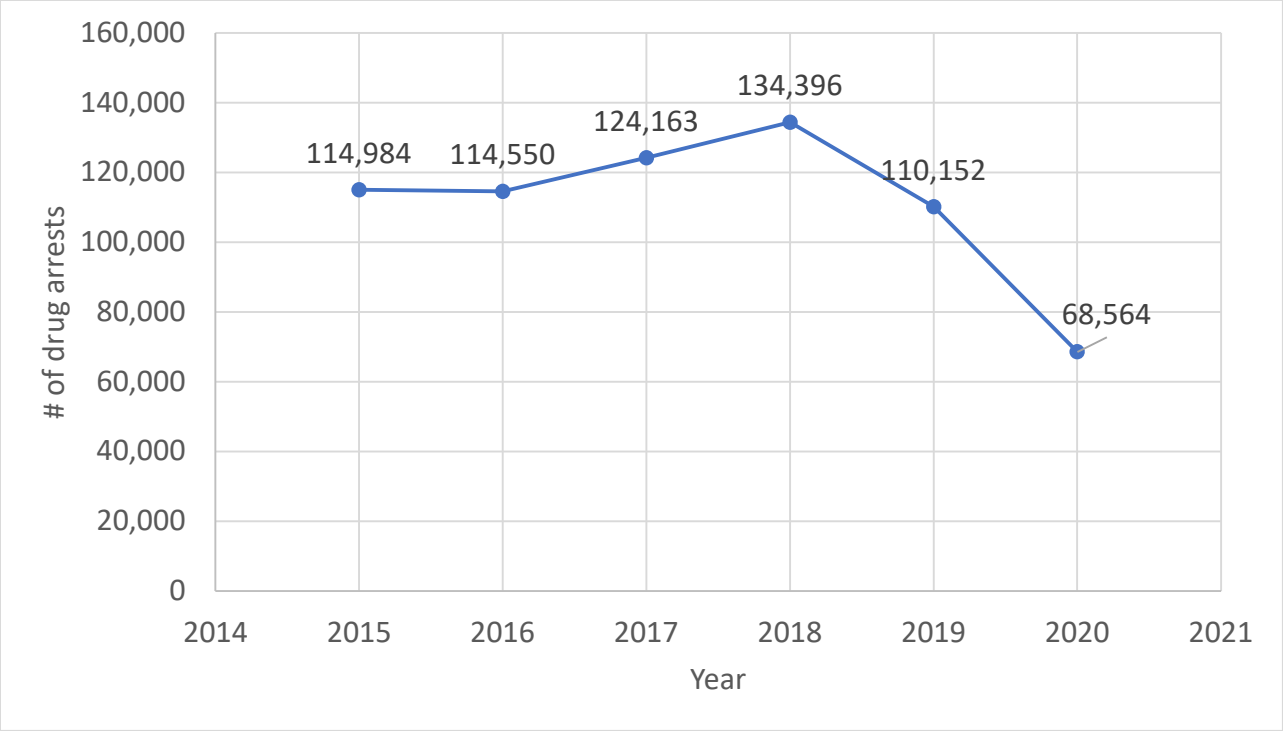

Figure 30. Total Drug Arrests, Florida, 2015–2020. Source: FLHealthCharts

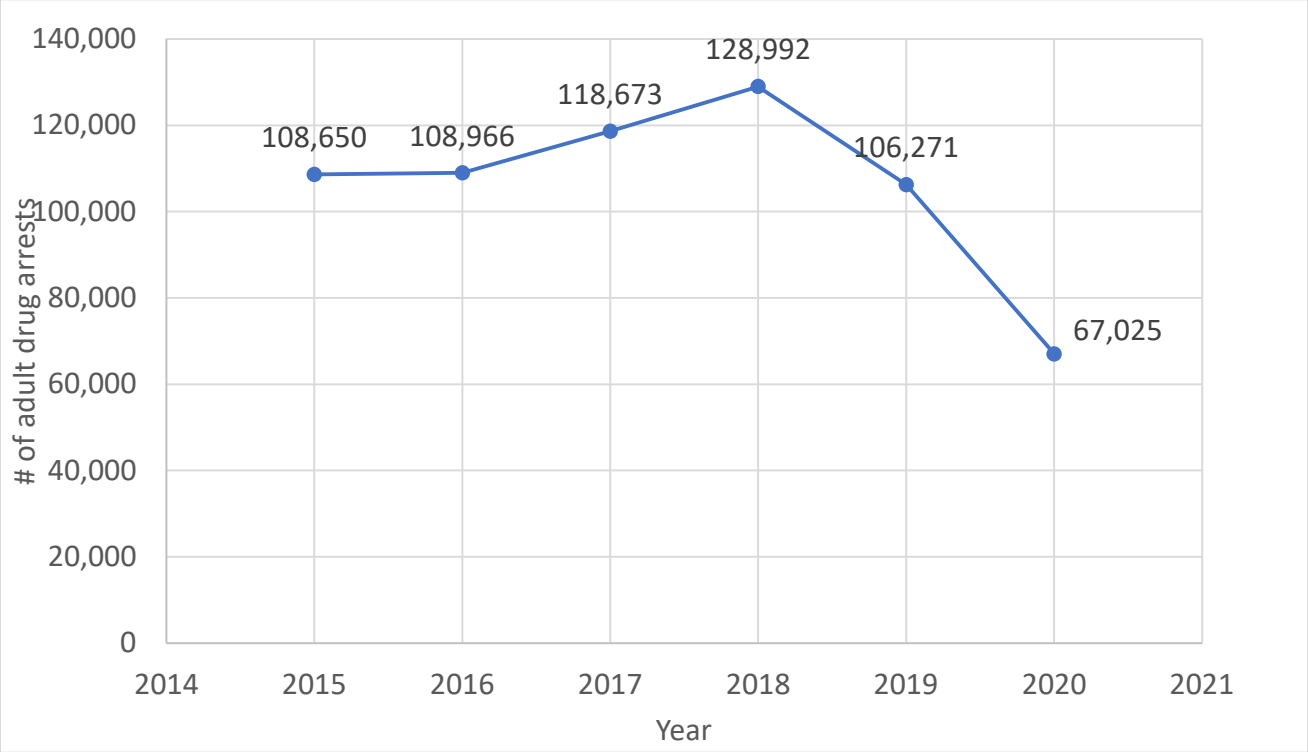

Figure 31. Total Adult Drug Arrests, Florida, 2015–2020. Source: FLHealthCharts

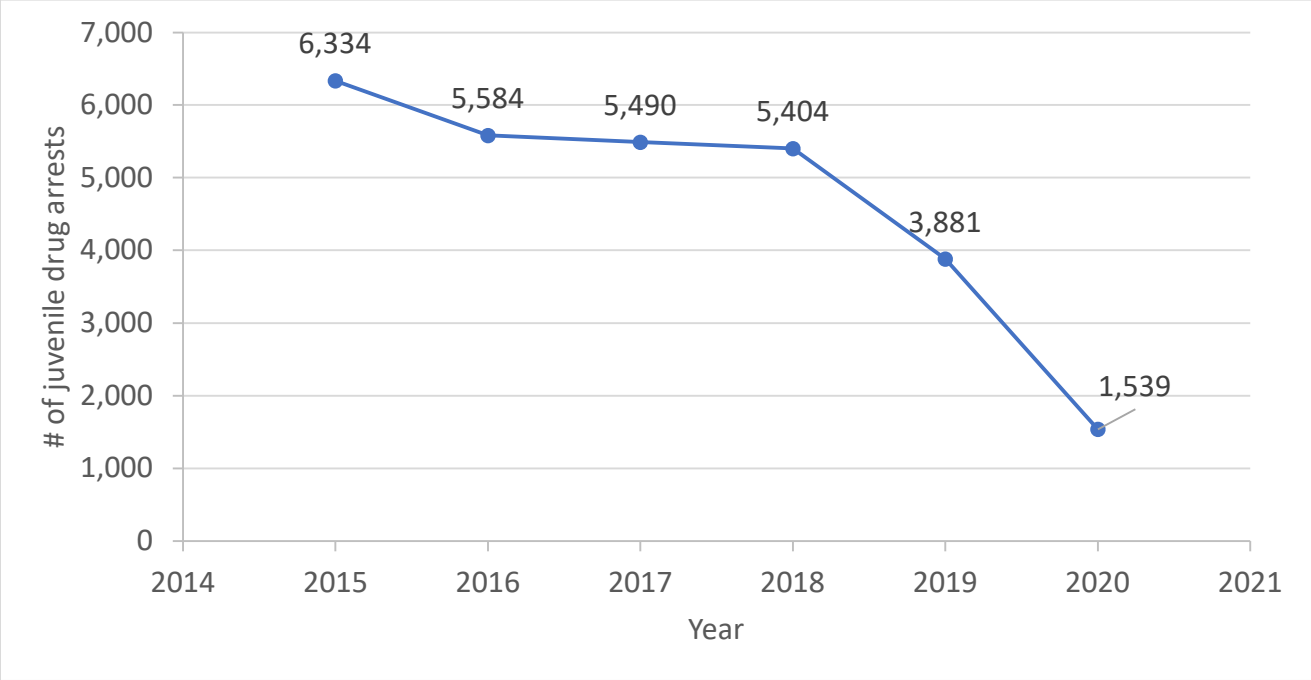

Figure 32. Juvenile Drug Arrests, Florida, 2015–2020. Source: FLHealthCharts

Florida Alcohol- and Drug-related Motor Vehicle Crashes, Injuries, and Fatalities

Driving under the influence of alcohol and other substances increases the risk of motor vehicle crash (MVC). Fewer crashes involving substances occur than citations for driving under the influence of alcohol, but a portion of these events result directly in traumatic injury that at times is fatal. Data for motor vehicle crashes involving alcohol alone, drugs alone, and alcohol and drugs are presented in the next three sections of the report.

Motor Vehicle Crashes Confirmed to Involve Alcohol

The number of alcohol-confirmed motor vehicle crashes totaled 5,216 in 2016 and decreased to 4,554 motor vehicle crashes in 2020. The rate per 100,000 population in 2016 was at 25.8 while in 2020 the rate of alcohol confirmed motor vehicle crashes decreased to 21 (Figure 33).

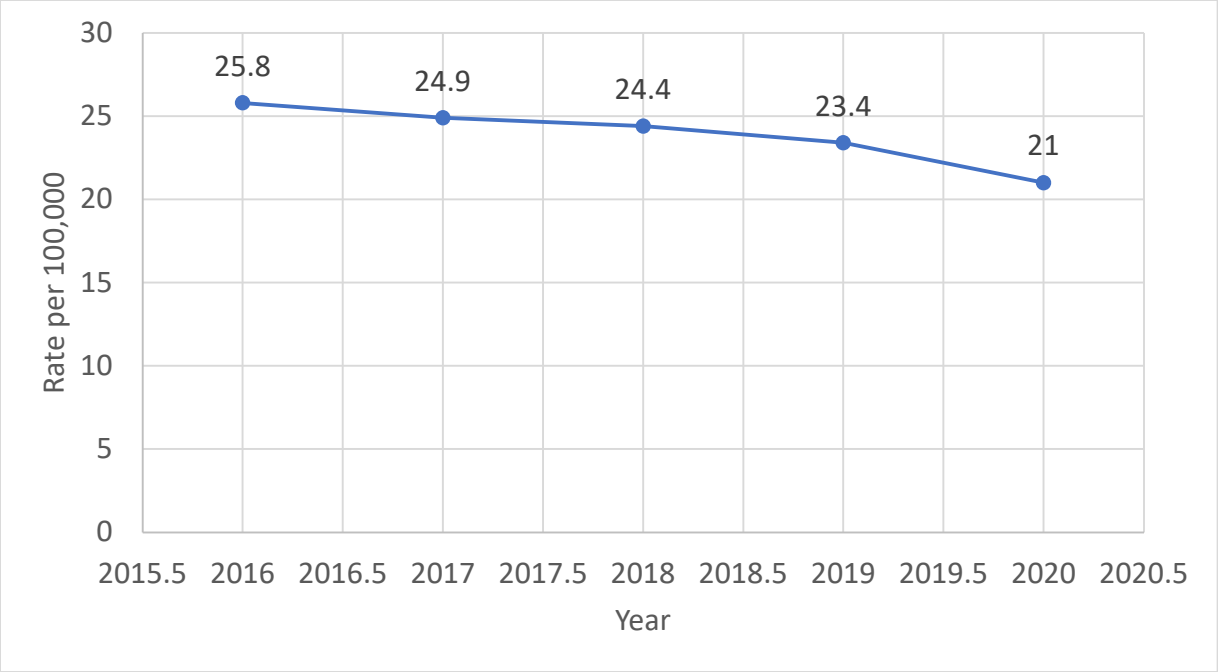

Figure 33. Alcohol Confirmed Motor Vehicle Crashes, Rate per 100,000 Population in Florida, 2016 – 2020. Source: FLHealthCHARTS

Motor Vehicle Crashes Confirmed to Involve Drugs Other than Alcohol

There were 619 drug confirmed motor vehicle traffic crashes in 2016 which increased each year until 2019 with 730 drug confirmed crashes. In 2020, there was a decrease to 708 crashes. The rate per 100,000 for drug confirmed motor vehicles indicates that 2019 had the highest rate at 3.4 while in 2020 the rate decreased slightly to 3.3 (Figure 34).

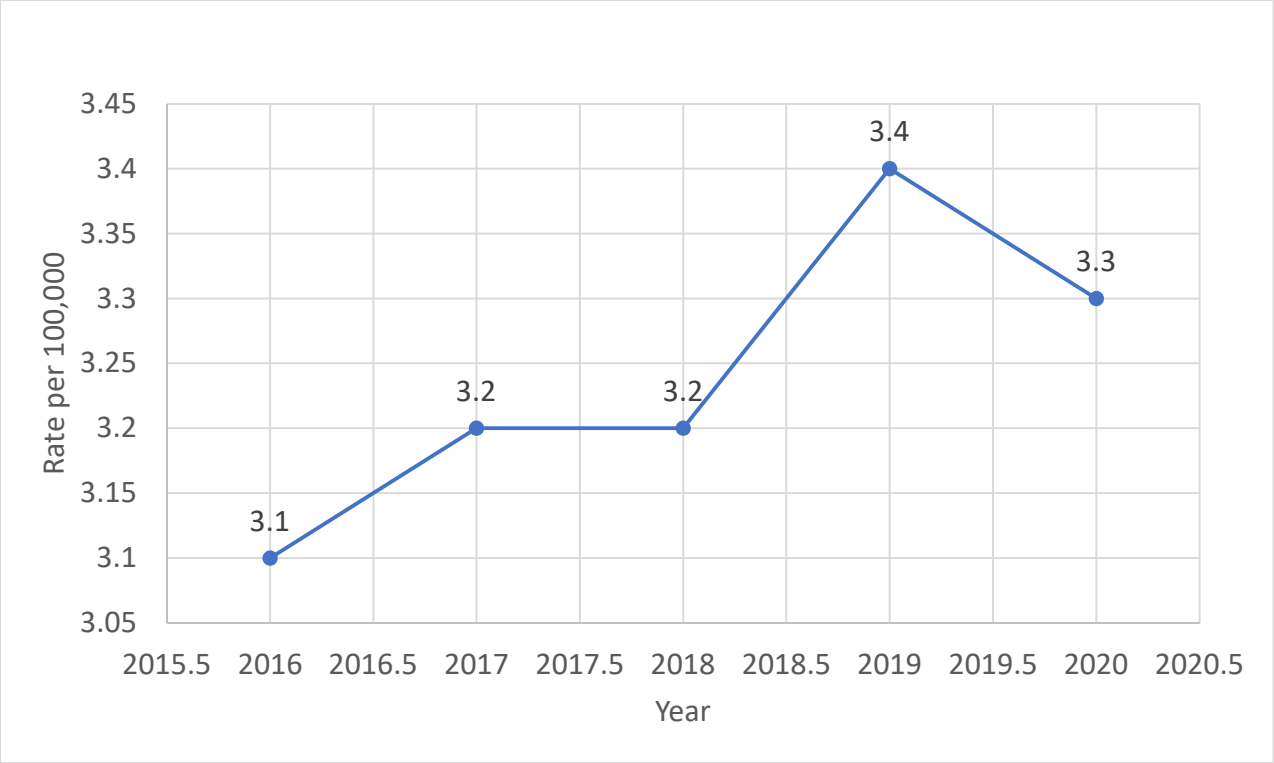

Figure 34. Drug Confirmed Motor Vehicle Crashes, Rate per 100,000 Population in Florida, 2016 – 2020. Source: FLHealthCHARTS

Motor Vehicle Crashes Confirmed to Involve Both Drugs and Alcohol

Motor vehicle crashes involving both drug and alcohol increased per 100,000 population from 1.7 in 2016 to 2.0 in 2019 (Figure 35). There was a total count of 349 drug and alcohol confirmed motor vehicle crashes in 2016 and 379 in 2020.

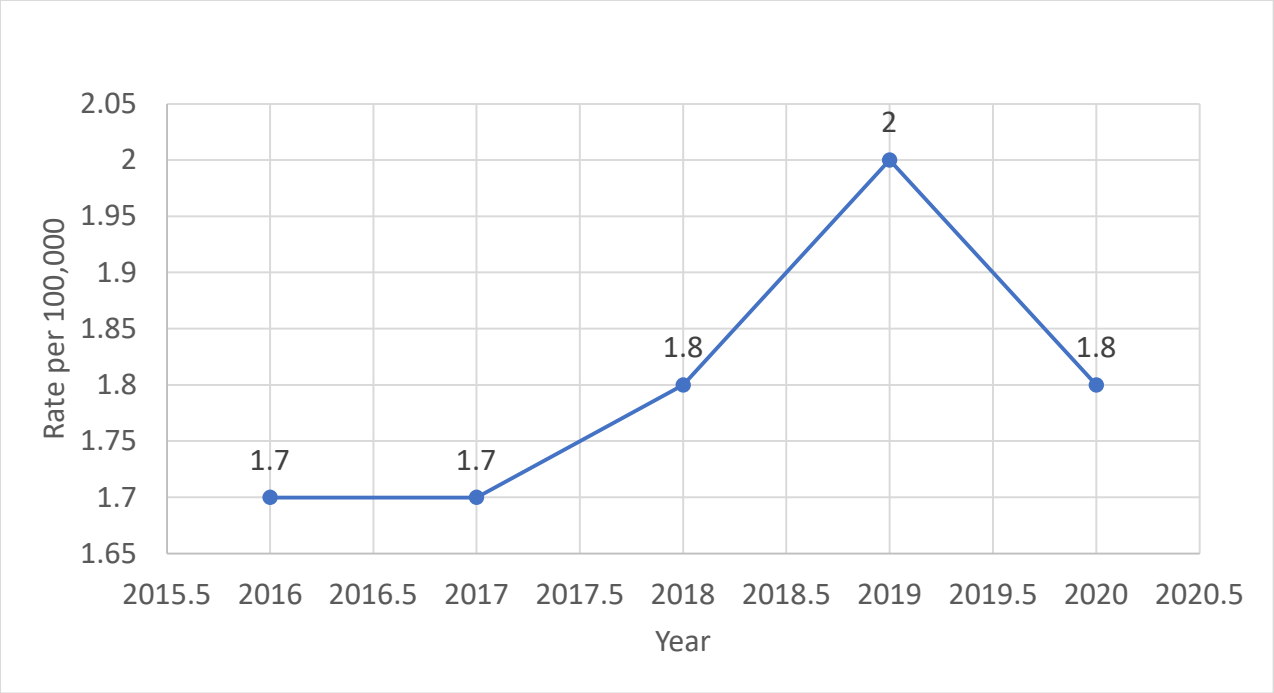

Figure 35. Drug and Alcohol Confirmed Motor Vehicle Crashes, Rate per 100,000 Population in Florida, 2016–2020. Source: FLHealthCHARTS

Morbidity

Although prescribed substances, such as opioids and stimulants, may be used to treat conditions such as acute pain and attention deficit disorder, the illicit use of substances is associated with an increased risk of poor health outcomes or even death. One of these outcomes, overdose, is a direct result of substance misuse. Morbidity may also result directly from substance misuse. To characterize morbidity by escalating severity of consequence, emergency department (ED) visits due to a non-fatal overdose are characterized first. Hospitalizations resulting from more severe non-fatal overdoses are characterized subsequently.

Emergency Room Visits

Florida experienced a decline in emergency department visits due to non-fatal drug poisonings from 2017 to 2018. This decline followed a previous four-year rise in emergency department visits in Florida. In 2019, the number of emergency room visits for non-fatal drug poisonings increased to over 40,000 and continued to increase for 2020 with over 45,500 visits (Figure 36). About half of the emergency department visits have been due to opioid-involved non-fatal overdoses (Figure 37). In 2017, the highest number of non-fatal opioid overdose visits were recorded at over 18,000. However, the number of non-fatal opioid overdose emergency department visits surpassed this number in 2020 with 21,277 visits.

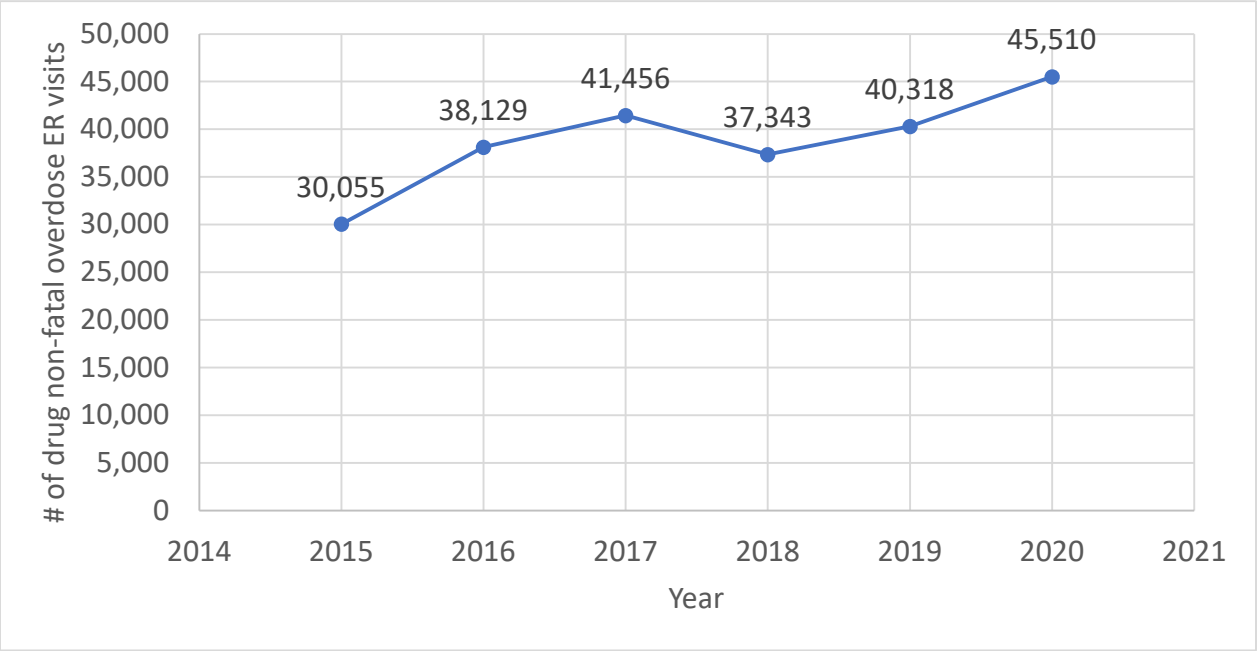

Figure 36. All Drug Non-fatal Overdose Emergency Department Visits, Florida, 2015–2020. Source: FLHealthCharts

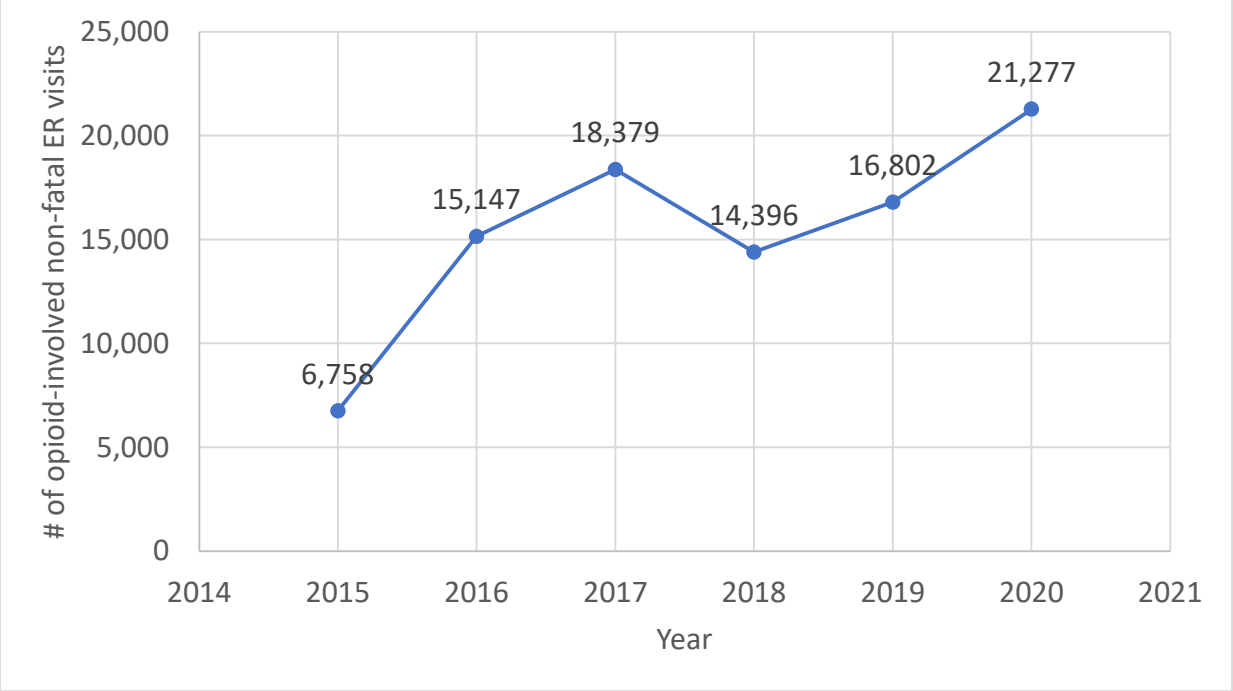

Figure 37. Opioid-involved Non-fatal Overdose Emergency Department Visits, Florida, 2015–2020. Source: FLHealthCharts

Mortality: Fatal Poisoning

Fatal drug overdose is the most severe consequence of substance use. In the US, drug overdose deaths increased 30% from 2019 to 2020. The Center for Disease Control and Prevention estimates a 15% increase in drug overdose deaths from 2020 to 2021 with over 100,000 total deaths. Total drug overdose deaths in Florida began increasing in 2015 and continued to increase through 2017 until a decrease was observed in 2018. Once again, however, drug overdose deaths increased in 2019 and 2020 with over 7,000 drug overdose deaths in Florida (Figure 38). This indicates a 37% increase in drug overdose deaths while provisional data from 2020 to 2021 indicates a 7% increase in overdose deaths in Florida. Drug overdose death rates per 100,000 population shows that in 2015, the nation and Florida had the same drug overdose death rate at 16, but Florida has stayed at a higher rate from 2016 to 2020, ending calendar year 2020 with a death rate at 35 and the US at 28 (Figure 39).

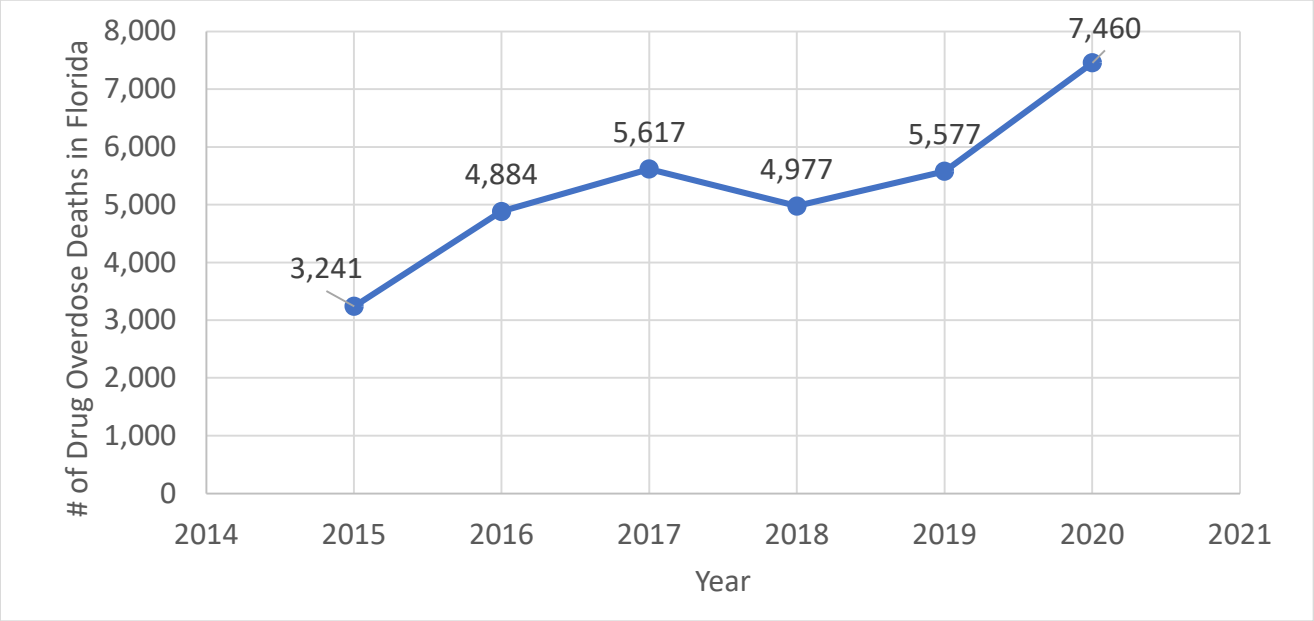

Figure 38. Fatal Drug Overdose Deaths in Florida. 2015–2020. Source: FLHealthCharts

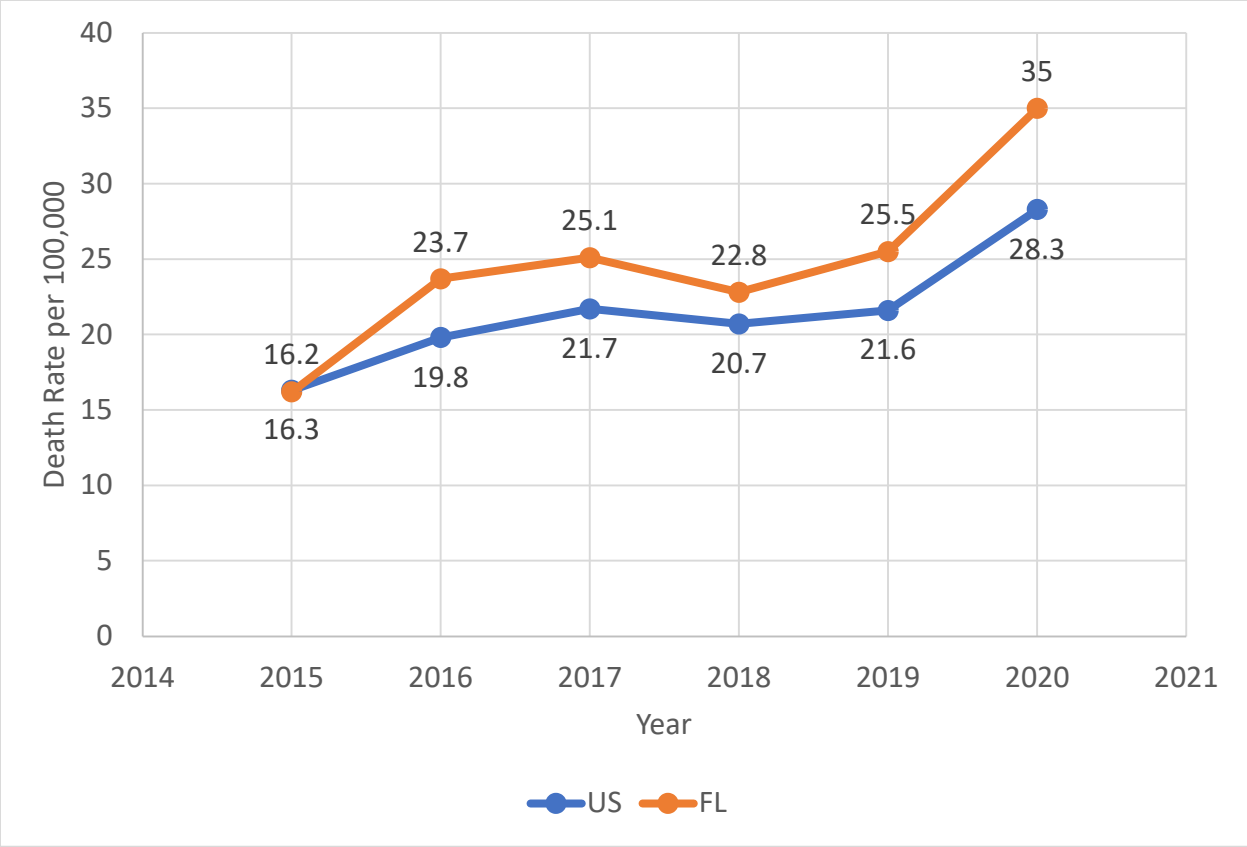

Figure 39. Fatal Drug Overdose Death Rate in the US and Florida. 2015–2020. Source: CDC

Opioids

Opioids remain the most common cause of death among fatal drug poisonings across the state and the nation, and the patterns and trends in overall drug poisoning rates are largely driven by opioids. The number of fatal opioid overdose deaths mirror drug overdose deaths trends in Florida (Figure 40). Over 4,000 fatal opioid overdose deaths were observed in 2017 and 2019 but 2020 saw the highest number of fatal opioid deaths with over 6,000 deaths. In 2020, Florida almost reached a death rate of 30 for fatal opioid overdoses (Figure 41). Specific opioid(s) driving the trends has changed over time. The epidemic has been described as having three waves: prescription opioids, heroin, and synthetic opioids (primarily illicitly produced fentanyl) (Ciccarone, 2019).

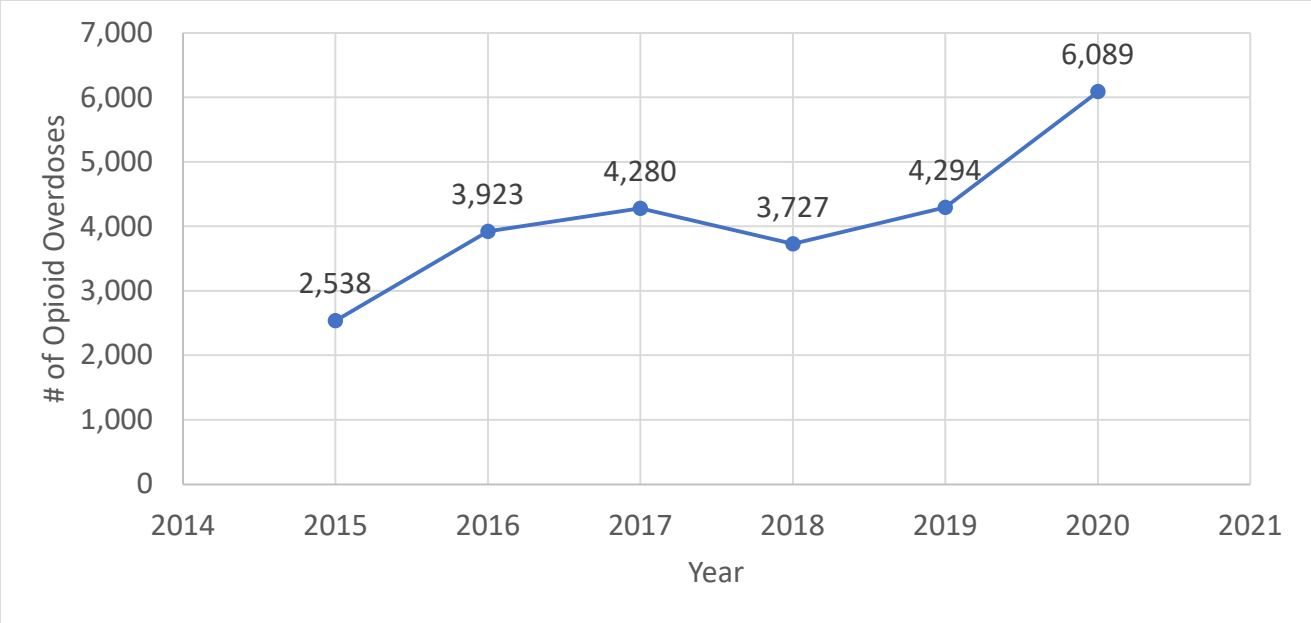

Figure 40. Fatal Opioid Overdose Deaths in Florida. 2015–2020. Source: FLHealthCharts

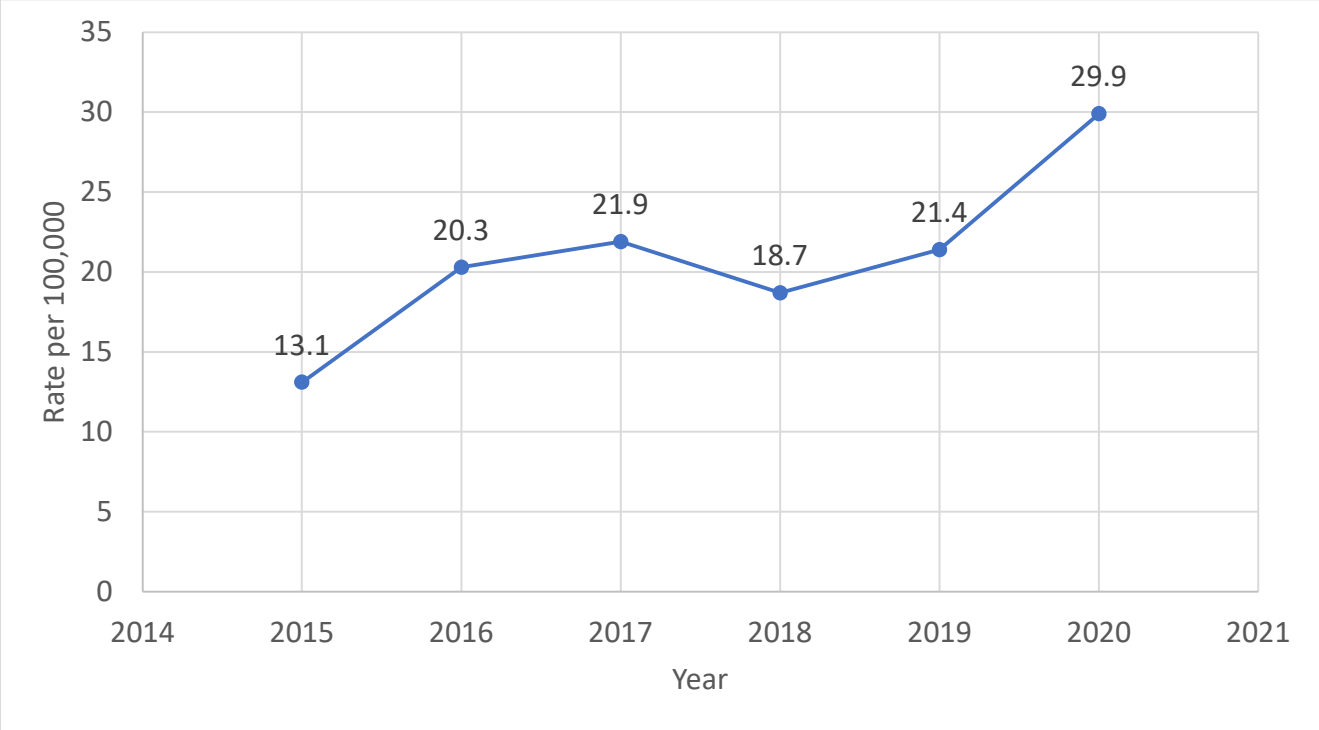

Figure 41. Fatal Opioid Overdose Death Rate in Florida. 2015–2020. Source: FLHealthCharts

The first wave of the opioid epidemic began with overprescribing, misuse, and, in turn, abuse of prescription opioids. Three prescription opioids, oxycodone, hydrocodone, and methadone are outlined in the Florida Medical Examiners Reports. Combining the prescription opioids outlined in the reports and

comparing the number of occurrences among the Managing Entities is shown below for 2020 (Figure 42).

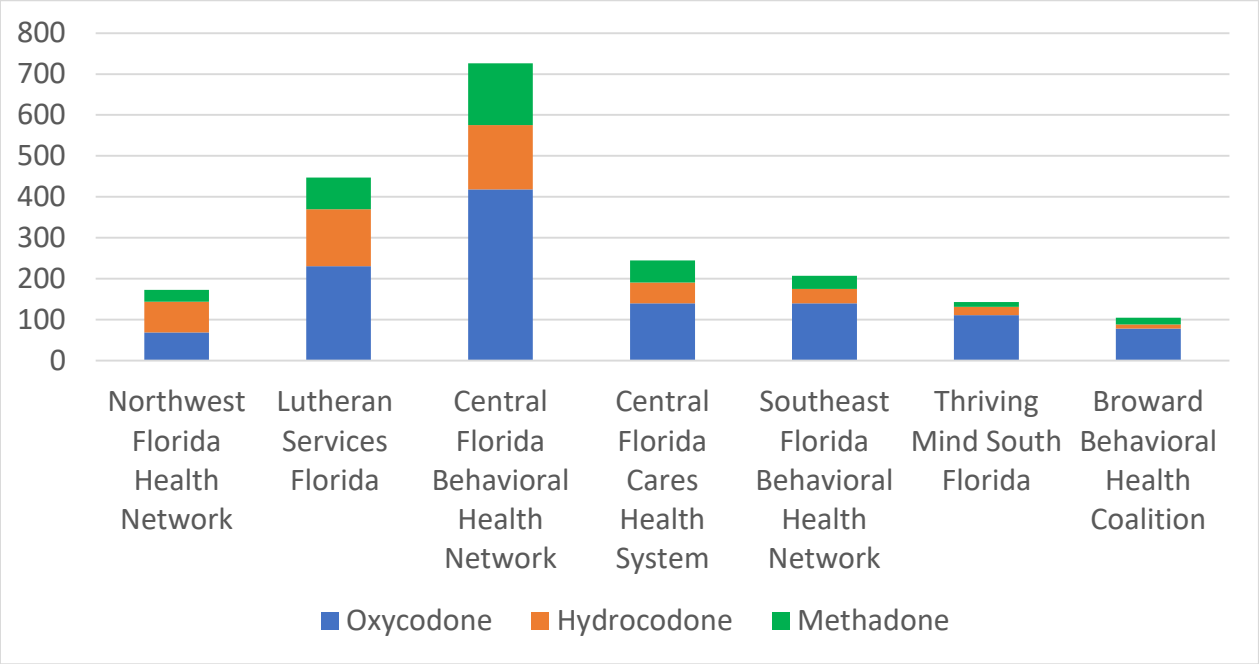

Figure 42. Oxycodone, Hydrocodone, and Methadone Occurrences among Decedents in Florida and the Managing Entities, 2020. Source: FDLE.

Heroin contributed to the second wave of the opioid epidemic. Heroin-related deaths in Florida have increased since 2012 and reached an all-time high in 2017 with 1,057 heroin-related deaths. The first decrease in heroin-related deaths occurred in 2018 and has since remained stable. However, another decrease was observed for heroin-related deaths for 2020 in Florida (Figure 43). The number of occurrences for heroin-related deaths are distributed by Managing Entity for 2020 in Figure 44.

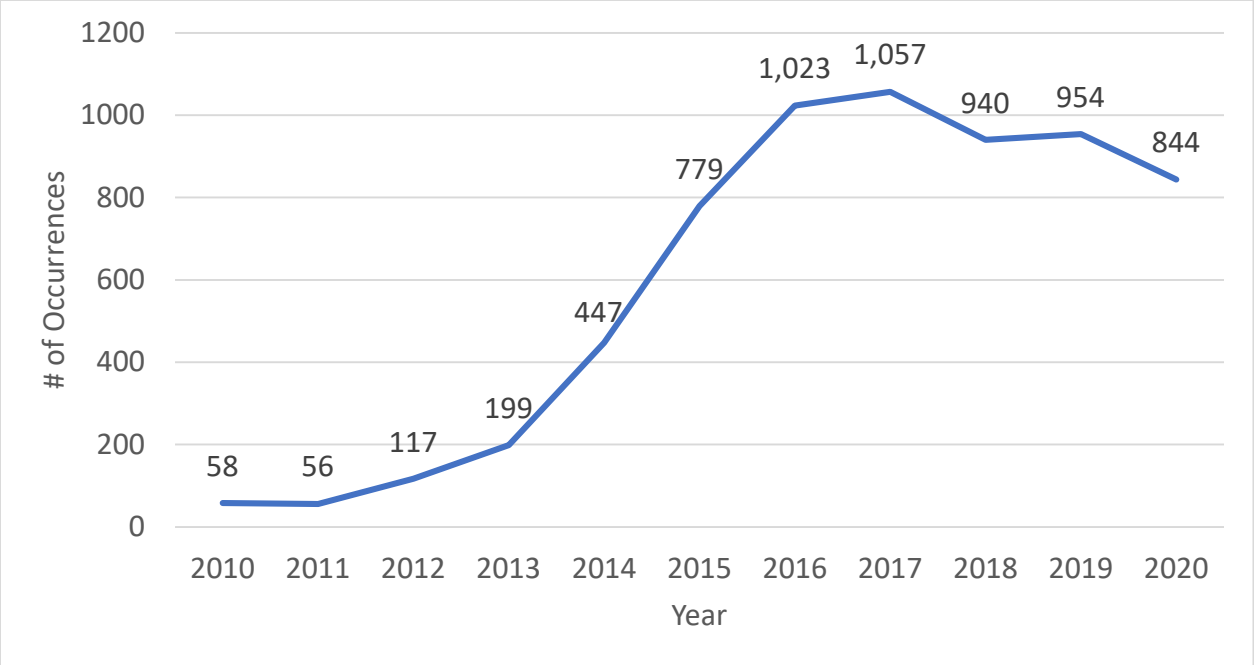

Figure 43. Heroin-related deaths among decedents in Florida, 2010-2020. Source: FDLE.

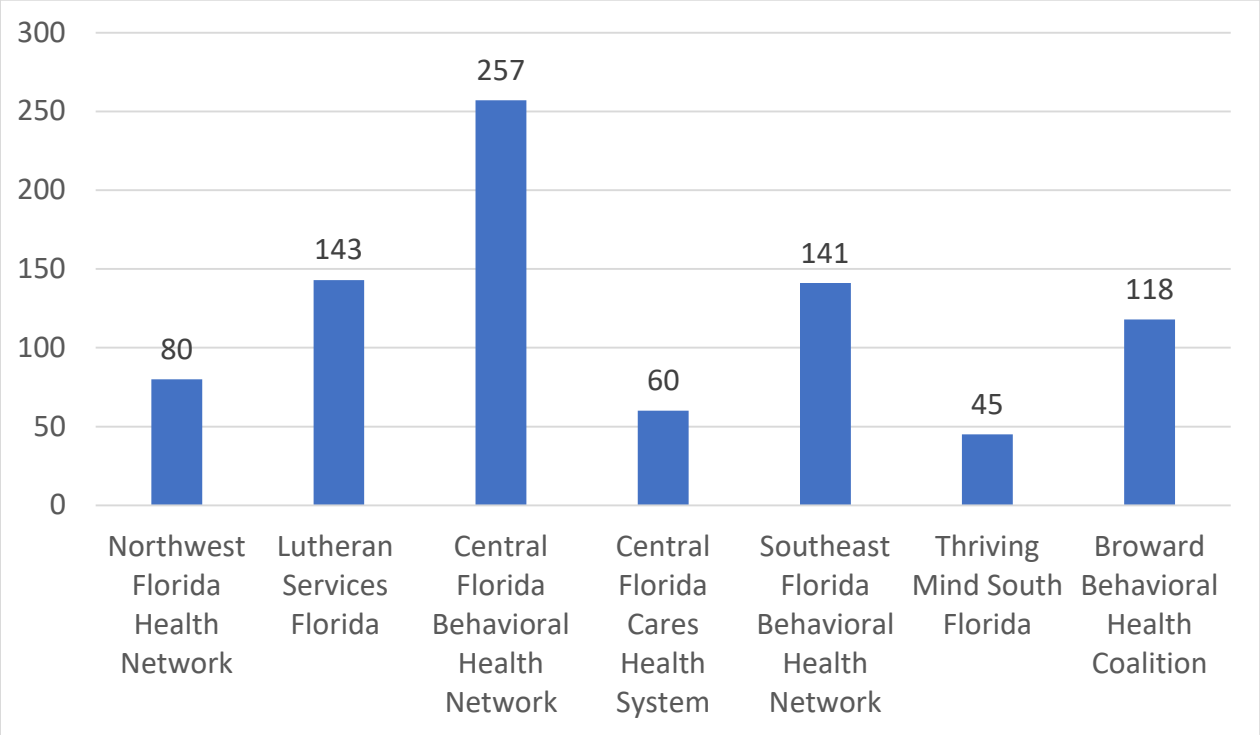

Figure 44. Heroin-related Deaths among Decedents for Managing Entities, 2020 Source: FDLE.

Increases in deaths due to synthetic opioids, mostly synthetic fentanyl, began the third wave of the opioid epidemic (Figure 45). Fentanyl and fentanyl analogue-related deaths increased dramatically starting in 2015. For 2020, there were 7,785 fentanyl and fentanyl analogue-related deaths in Florida. Fentanyl and fentanyl analogue-related deaths are shown among the Managing Entities (Figure 46).

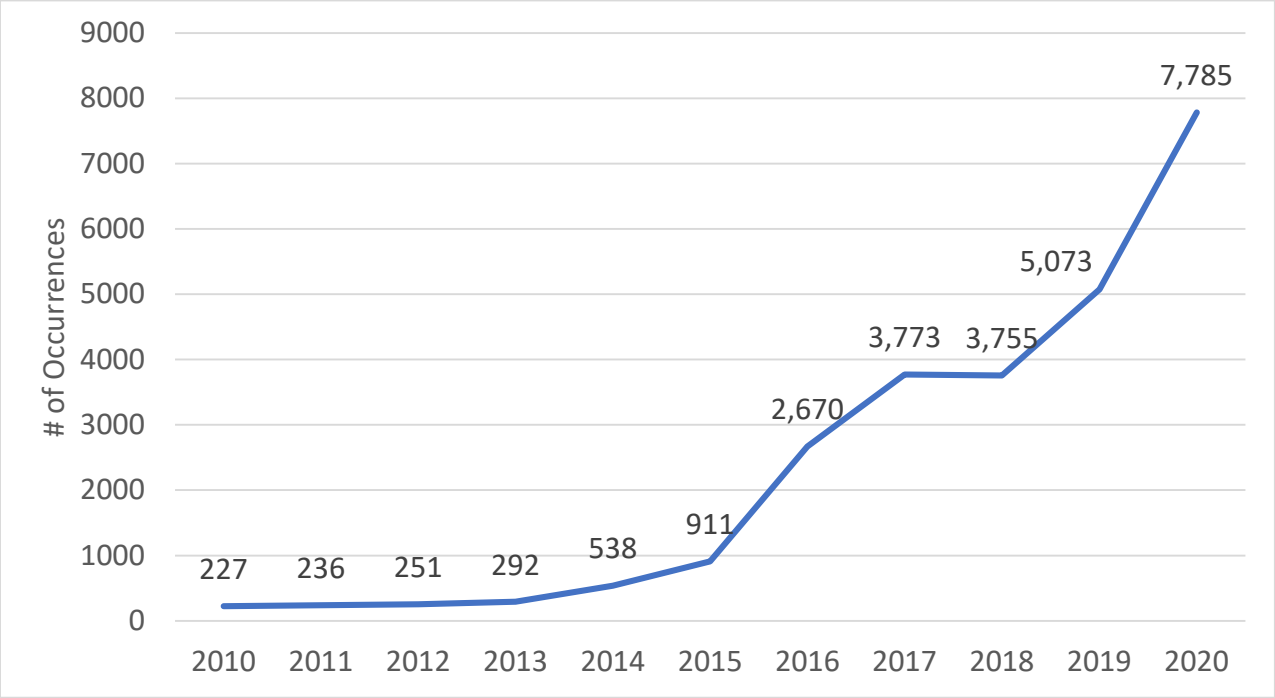

Figure 45. Fentanyl and Fentanyl Analogue-related Deaths among Decedents in Florida, 2010- 2020.
Source: FDLE.

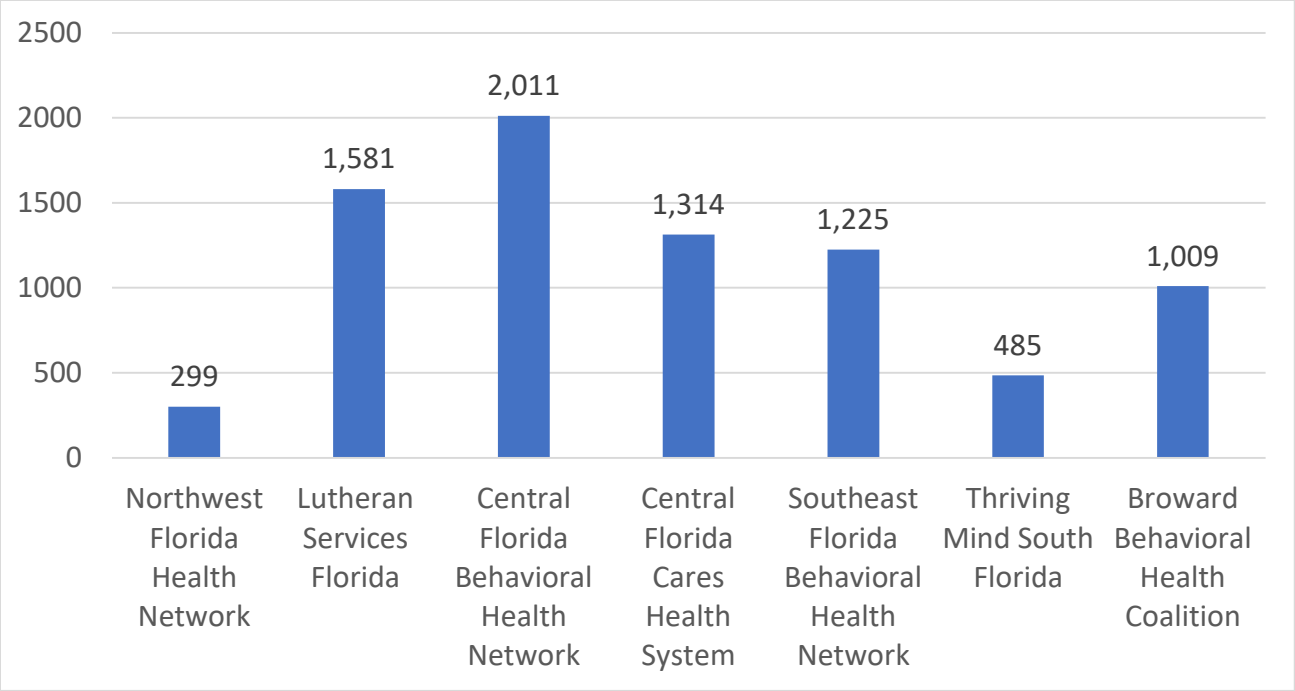

Figure 46. Fentanyl and Fentanyl Analogue-related Deaths among Decedents for Managing Entities, 2020. Source: FDLE.

Stimulants

Fatal drug poisonings due to stimulants are also increasing. Florida is experiencing a nearly parallel rise with the US, experiencing similar death rates for both cocaine and psychostimulants (methamphetamine). Rates of cocaine-caused deaths in Florida have been consistently higher than in the US, although Florida did see a decline in these deaths from 2017 to 2018 that did not occur nationally. Cocaine-related deaths in Florida slightly increased in 2019 but sharply increased following 2020 (Figure 47). Additionally, cocaine-related deaths are also distributed by Managing Entity (Figure 48).

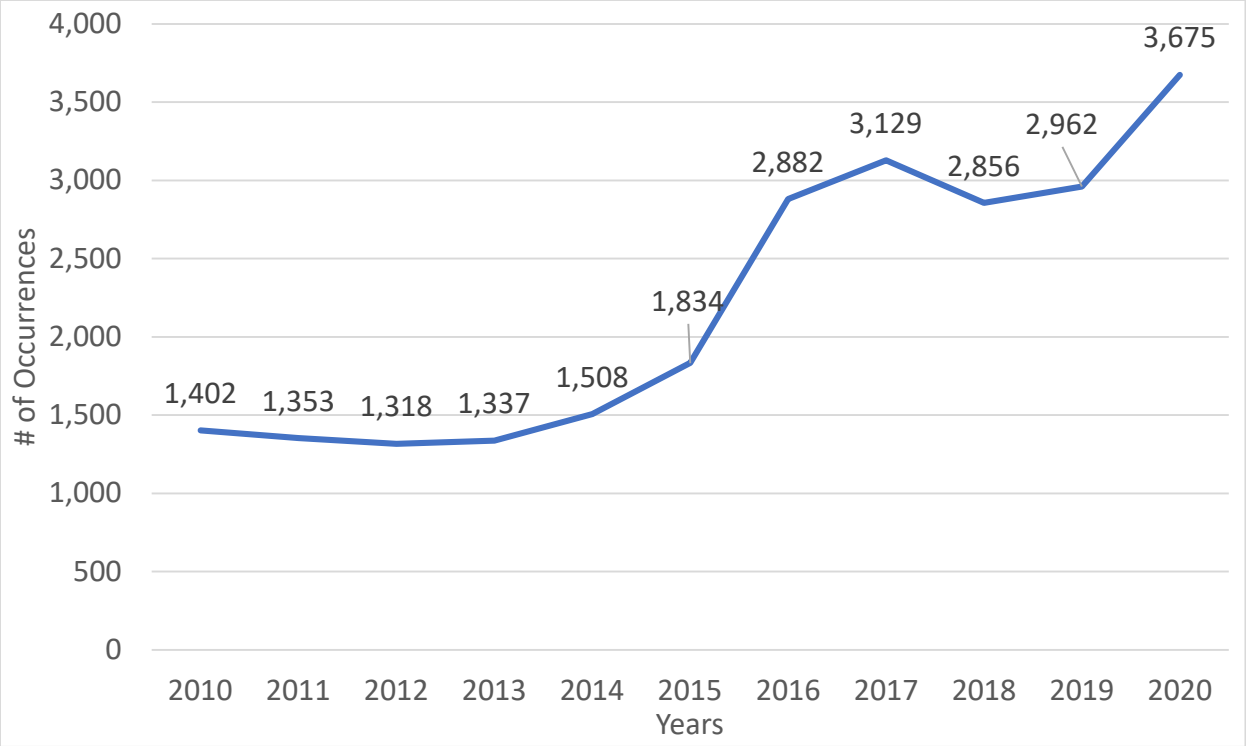

Figure 47. Cocaine-related Deaths among Decedents in Florida, 2010-2020. Source: FDLE.

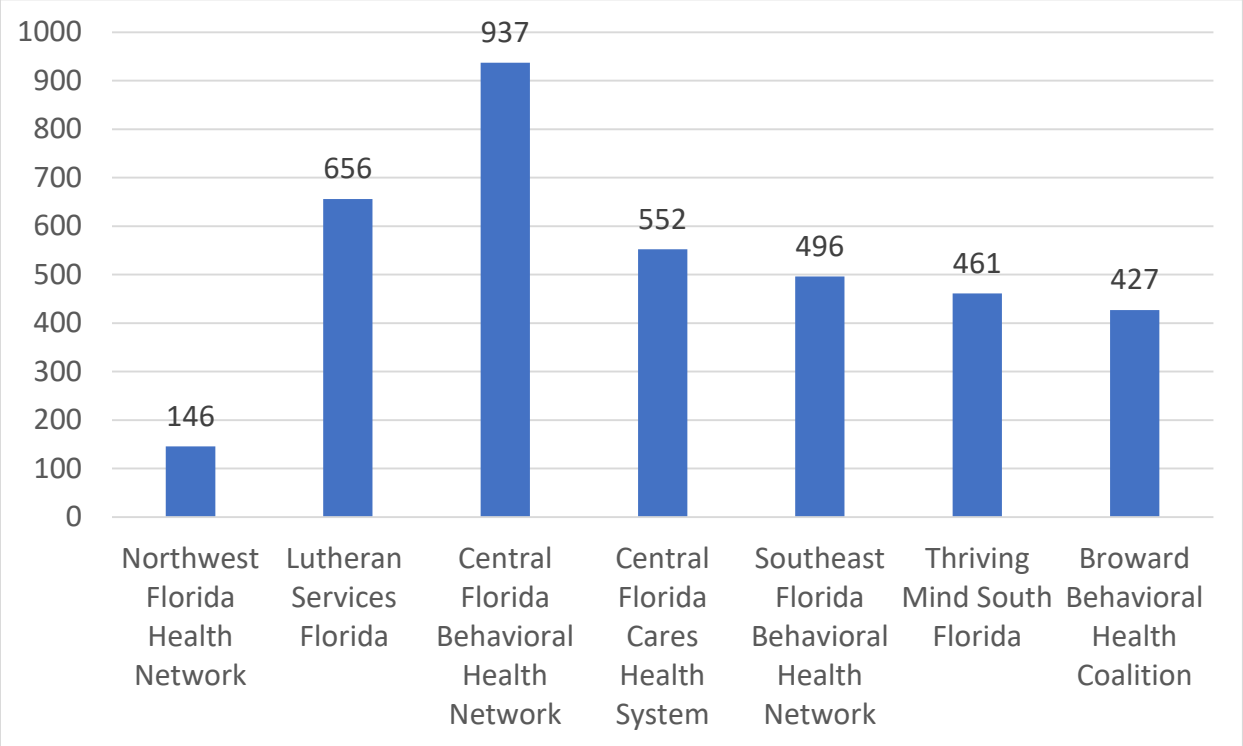

Figure 48. Cocaine-related Deaths among Decedents for Managing Entities, 2020. Source: FDLE.

Deaths from psychostimulants, like methamphetamine, have also increased in Florida. Methamphetamine ranked ninth in the top ten drug-caused deaths in 2016. As of 2020, methamphetamine is now the third most drug-caused death in Florida. The number of occurrences has dramatically increased every single year since 2016 with the biggest increase in the number of methamphetamine-related deaths occurring in 2020 (Figure 49). The number of methamphetamine-related deaths is distributed among the Managing Entities in Figure 50.

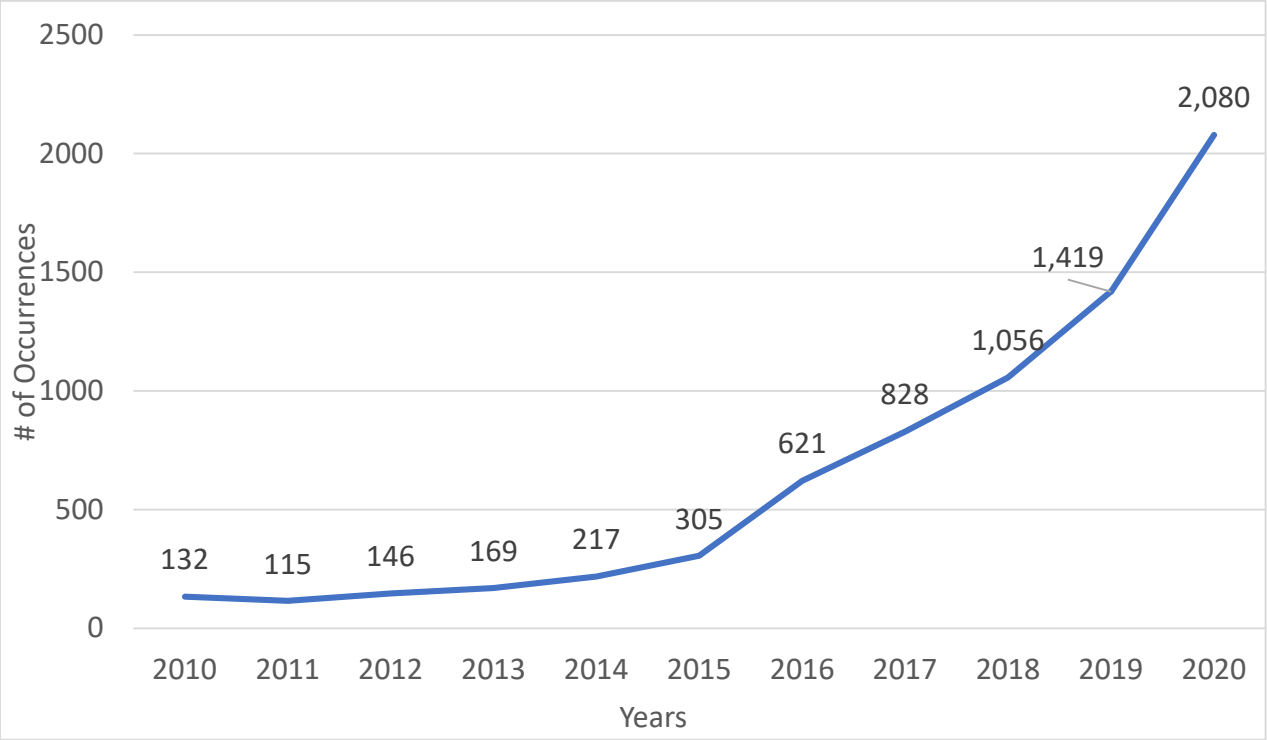

Figure 49. Methamphetamine-related Deaths among Decedents in Florida, 2010-2020. Source: FDLE.

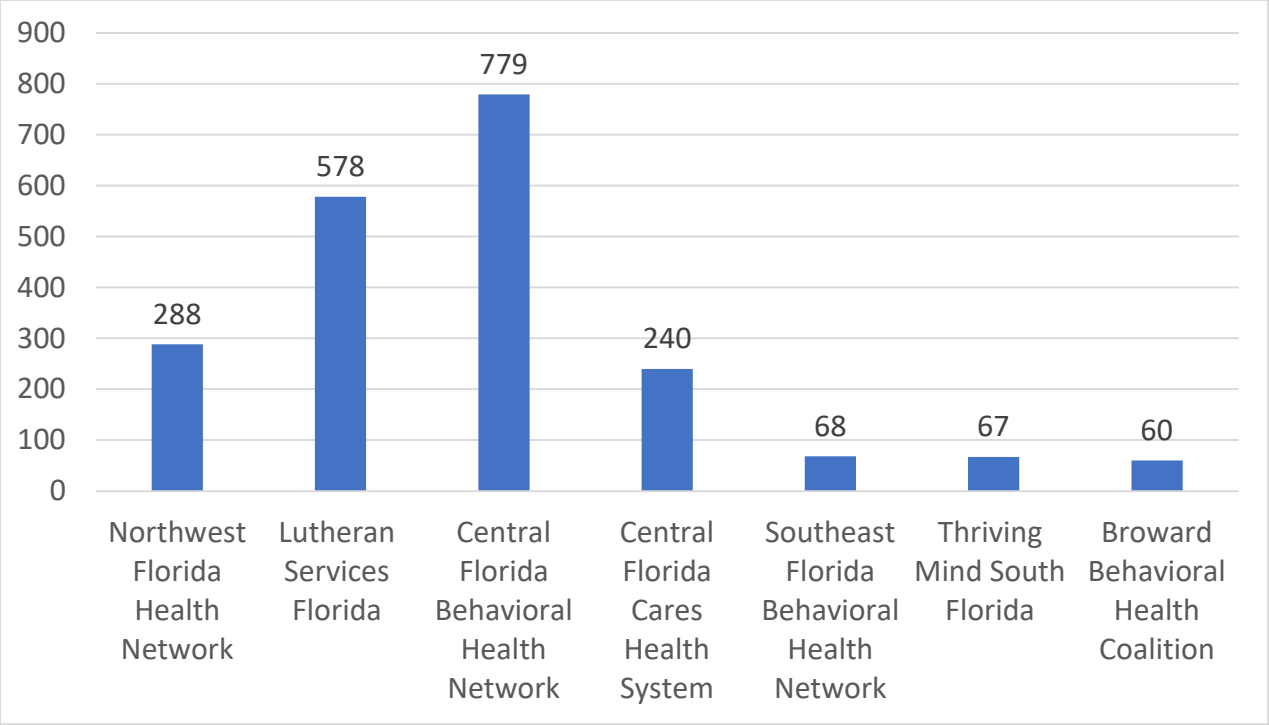

Figure 50. Methamphetamine-related Deaths among Decedents for Managing Entities, 2020.
Source: FDLE.

Conclusions

Adult Substance Use

Misuse of prescription opioids slowly and steadily declined from 2015 to 2020. Small increases in use of heroin occurred in 2020 across the US. Rates of alcohol use have remained largely unchanged in Florida until 2020, with an increase in past year use. Although rates of cocaine use were also on the decline during this period, increases in methamphetamine have been observed in the latest years. Marijuana is the one substance used by adults for which the pattern has been consistent over time: both past-month and past-year use among adults has been steadily increasing over time throughout the period of observation. These increases in Florida have paralleled those observed for the nation as a whole.

Youth Substance Use

Generally, the prevalence of substance use among Florida youth has been stable over time. However, lifetime use has declined over time for most substances reported here, with a few notable exceptions in the last year for which data are available. Differences in prevalence rates by data source are consistent across substances. Past-year misuse of pain relievers has been steadily declining among Florida youth. The trend for heroin use has been downward for Florida youth overall. Use of psychostimulants by Florida youth has generally declined. Lifetime, past-year, and past-month use of cocaine has steadily declined among Florida youth throughout the period of observation from 2015-2020. The trend for methamphetamine use has also been downward. Rates of lifetime, past-year, and past-month use of

marijuana among Florida youth have been fairly stable over time, with a slight downward trend. In the same period, lifetime, past-year, and past-month rates of alcohol use have been declining more quickly among Florida youth. Lifetime use of club drugs among Florida youth, however, declined throughout the entire period from 2010-2021.

Arrests

Florida drug arrests increased to their highest peak in 2018 but continue to decline with a dramatic decrease occurring in 2020.

Motor Vehicle Crashes

Florida motor vehicle crashes involving alcohol have consistently been decreasing since 2015. However, that is not the case with drug-involved crashes. An increase in motor vehicle crashes involving drugs occurred in 2019, with its highest rate, while a decrease occurred in 2020.

Non-Fatal Poisonings

Following a four-year increase in non-fatal poisonings treated in the emergency department (ED), the rate of emergency department visits for non-fatal poisoning declined from 2017 to 2018 in Florida. The majority of these poisonings were drug poisonings. Non-fatal poisonings in Florida progressively increased throughout 2020 resulting in more emergency department (ED) visits in 2020 than in 2019.

Fatal Poisonings

While Florida fatal drug poisonings declined in 2018 for the first time since 2013, an increase in fatal drug deaths in 2019 and 2020 was observed. In addition, death due to fentanyl and fentanyl analogues increased in 2020 from the previous year. Polysubstance continue to be involved in an increasing number of drug poisoning deaths, particularly related to opioids with cocaine and methamphetamine. stimulants.

Data Sources

Bureau of Economic and Business Research. Population Studies Program. Florida Estimates of Population. (2000 – 2020)

Center for Disease Control and Prevention (CDC). National Center for Health Statistics. (1999 - 2020)

Florida Department of Children and Families (DCF). Florida Youth Substance Abuse Survey (FYSAS). (2000 – 2021)

Florida Department of Health. Opioid Use Dashboard. FL Health Charts (2015 -2020)

Florida Department of Law Enforcement (FDLE). Drugs Identified in Deceased Persons by Florida Medical Examiners Commission (MEC). (2003 – 2020)

Substance Abuse and Mental Health Services Administration (SAMHSA). (2002 – 2020). National Survey on Drug Use and Health (NSDUH).

References

NIDA. 2019, December 24. Marijuana DrugFacts. Retrieved from https://www.drugabuse.gov/publications/drugfacts/marijuana on 2020, December 22

NIDA. 2018, Prescription Stimulants DrugFacts. Retrieved from https://nida.nih.gov/publications/drugfacts/prescription-stimulants

Ciccarone, D. (2019). The triple wave epidemic: Supply and demand drivers of the US opioid overdose crisis. *Int J Drug Policy, 71*, 183-188. doi:10.1016/j.drugpo.2019.01.010

O'Donnell, J., Gladden, R. M., Mattson, C. L., Hunter, C. T., & Davis, N. L. (2020). Vital Signs: Characteristics of Drug Overdose Deaths Involving Opioids and Stimulants - 24 States and the District of Columbia, January-June 2019. *MMWR Morb Mortal Wkly Rep, 69*(35), 1189-1197. doi:10.15585/mmwr.mm6935a1